



**Australian Government**  
**Anti-Dumping Commission**

**Steel Reinforcing Bar**  
**exported from**  
**Republic of Korea, Malaysia,**  
**Singapore, Spain, Taiwan, Thailand**  
**and Turkey**

**Application for the publication of**  
**dumping duty notices**

**4 August 2014**

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APPLICATION UNDER SECTION 269TB OF THE *CUSTOMS ACT 1901* FOR THE PUBLICATION OF DUMPING AND/OR COUNTERVAILING DUTY NOTICES

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**DECLARATION**

I request, in accordance with Section 269TB of the Customs Act 1901, that the Minister publish in respect of goods the subject of this application:

- a dumping duty notice, or
- a countervailing duty notice, or
- a dumping and a countervailing duty notice

This application is made on behalf of the Australian industry producing like goods to the imported goods the subject of this application. The application is supported by Australian producers whose collective output comprises:

- 25% or more of the total Australian production of the like goods; and
- more than 50% of the total production of like goods by those Australian producers that have expressed either support for, or opposition to, this application.

I believe that the information contained in this application:

- provides reasonable grounds for the publication of the notice(s) requested; and
- is complete and correct.

Signature:

Name:

Position:

Company:

ABN:

Date:

# IMPORTANT INFORMATION

## Signature requirements

Where the application is made:

*By a company* - the application must be signed by a director, servant or agent acting with the authority of the body corporate.

*By a joint venture* - a director, servant, agent of each joint venturer must sign the application. Where a joint venturer is not a company, the principal of that joint venturer must sign the application form.

*On behalf of a trust* - a trustee of the trust must sign the application.

*By a sole trader* - the sole trader must sign the application.

*In any other case* - contact the Commission's Client support section for advice.

## Assistance with the application

The Anti-Dumping Commission has published guidelines to assist applicants with the completion of this application. Please refer to the following guidelines for additional information on completing this application:

- *Instructions and Guidelines for applicants: Application for the publication of dumping and or countervailing duty notices*
- *Instructions and Guidelines for applicants: Examination of a formally lodged application*

The Commission's client support section can provide information about dumping and countervailing procedures and the information required by the application form. Contact the team on:

**Phone:** 1300 884 159

**Fax:** 1300 882 506

**Email:** [clientsupport@adcommission.gov.au](mailto:clientsupport@adcommission.gov.au)

Other information is available from the Commission's website at [www.adcommission.gov.au](http://www.adcommission.gov.au).

Small and medium enterprises (i.e., those with up to 200 employees) may obtain assistance, at no charge, from the International Trade Remedies Adviser, employed by Australian Industry Group and funded by the Australian government. To access this service, visit [www.aigroup.com.au/traderemedies](http://www.aigroup.com.au/traderemedies) or telephone (03) 9867 0267.

## Important information

To initiate an investigation into dumping and/or subsidisation, the Commission must comply with Australia's international obligations and statutory standards. This form provides an applicant industry with a framework to present its case and will be used by the Commission to establish whether there are reasonable grounds to initiate an investigation. To assist consideration of the application it is therefore important that:

- all relevant questions (particularly in Parts A and B) are answered; and
- information that is reasonably available be supplied.

The Commission does not require conclusive evidence to initiate an investigation, but any claims made should be reasonably based. An application will be improved by including supporting evidence and where the sources of evidence are identified. Simple assertion is inadequate to substantiate an application.

To facilitate compilation and analysis, the application form is structured in 3 parts:

1. **Part A** seeks information about the Australian industry. This data is used to assess claims of material injury due to dumping/subsidisation. Where an Australian industry comprises more than one company, each should separately prepare a response to Part A to protect commercial confidentiality.
2. **Part B** relates to evidence of dumping.
3. **Part C** is for supplementary information that may not be appropriate to all applications. However some questions in Part C may be essential for an application, for example, if action is sought against subsidisation.

All questions in Parts A and B must be answered, even if the answer is 'Not applicable' or 'None'. Where appropriate, applicants should provide a short explanation about why the requested data is not applicable. This will avoid the need for follow up questions by the Commission.

The application form requests data over several periods ( $P^1, P^2 \dots P^n$ ) to evaluate industry trends and to correlate injury with dumped imports. The labels  $P^1 \dots P^n$  are used for convenience in this application form. Lodged applications should identify the period relevant to the data. This form does not specify a minimum period for data provision. However, sufficient data must be provided to substantiate the claims made. If yearly data is provided, this would typically comprise a period of at least four years (for example the current financial year in addition to three prior years). Where information is supplied for a shorter period, applicants may consider the use of quarterly data. Data must also be sufficiently recent to demonstrate that the claims made are current.

When an investigation is initiated, the Commission will verify the claims made in the application. A verification visit to the Australian industry usually takes several days.

Applicant companies should be prepared to substantiate all Australian industry financial and commercial information submitted in the application. Any worksheets used in preparing the application should therefore be retained to facilitate verification.

During the verification visit, the Commission will examine company records and obtain copies of documents relating to the manufacture and sale of the goods.



<b>Appendices</b>	Some questions require attachments to be provided. The attachment numbering sequence should refer to the question answered. For example, question A2.2 requests a copy of an organisation chart. To facilitate reference, the chart should be labelled <u>Attachment A2.2</u> . If a second organisation chart is provided in response to the same question, it should be labelled <u>Attachment A2.2.2</u> (the first would be labelled <u>Attachment A2.2.1</u> ).
<b>Provision of data</b>	<p>Industry financial data must, wherever possible, be submitted in an electronic format.</p> <ul style="list-style-type: none"> <li>• The data should be submitted on a media format compatible with Microsoft Windows.</li> <li>• Microsoft Excel, or an Excel compatible format, is required.</li> <li>• If the data cannot be presented electronically please contact the Commission’s client support section for advice.</li> </ul>
<b>Lodgement of the application</b>	<p>This application, together with the supporting evidence, should be lodged with:</p> <p style="padding-left: 40px;">The National Manager - Operations Anti-Dumping Commission Customs House 1010 Latrobe St Docklands VIC 3008</p> <p style="padding-left: 40px;">or</p> <p style="padding-left: 40px;">Sent by facsimile to <b>1300 882 506</b></p>
<b>Public Record</b>	<p>During an investigation all interested parties are given the opportunity to defend their interests, by making a submission. The Commission maintains a public record of these submissions. The public record is available on the Commission’s website at <a href="http://www.adcommission.gov.au">www.adcommission.gov.au</a>.</p> <p>At the time of making the application both a confidential version (for official use only) and non-confidential version (public record) of the application <u>must</u> be submitted. Please ensure each page of the application is clearly marked “FOR OFFICIAL USE ONLY” or “PUBLIC RECORD”. The non-confidential application should enable a reasonable understanding of the substance of the information submitted in confidence, clearly showing the reasons for seeking the conduct of a dumping and/or subsidy investigation, or, if those reasons cannot be summarised, a statement of reasons why summarisation is not possible. If you cannot provide a non-confidential version, contact the Commission’s client support section for advice.</p>

# PART A

## INJURY

### TO AN AUSTRALIAN INDUSTRY

#### **IMPORTANT**

All questions in Part A should be answered even if the answer is 'Not applicable' or 'None'. If an Australian industry comprises more than one company/entity, each should separately complete Part A.

For advice about completing this part please contact the Commission's client support section on:

**Phone:** 1300 884 159  
**Fax:** 1300 882 506  
**Email:** [clientsupport@adcommission.gov.au](mailto:clientsupport@adcommission.gov.au)

## A-1 Identity and communication.

Please nominate a person in your company for contact about the application:

Contact Name:	Mr Matt Condon
Company and position:	Manager Trade Development, OneSteel Manufacturing , Pty Ltd
Address:	Level 6, 205 Pacific Highway, St Leonards, NSW 2065
Telephone:	(02) 8424 9880
Facsimile:	(02) 8424 9885
E-mail address:	Matt.Condon@onesteel.com
ABN:	42 004 651 325

### Alternative contact

Name:	Ms Stephanie Peenz
Position in company:	Trade Development Officer
Address:	Level 6, 205 Pacific Highway, St Leonards, NSW 2065
Telephone:	(02) 8245 9785
Facsimile:	(02) 9424 9885
E-mail address:	Stephanie.Peenz@onesteel.com

If you have appointed a representative to assist with your application, provide the following details and complete Appendix A8 (Representation).

Name:	Mr John O'Connor
Business name:	John O'Connor & Associates Pty Ltd
Address:	P.O. Box 329, Coorparoo Qld 4151
Telephone:	(07) 3342 1921
Facsimile:	(07) 3342 1931
E-mail address:	jmoconnor@optusnet.com.au
ABN:	39 098 650 241

## A-2 Company information.

1. **State the legal name of your business and its type (eg. company, partnership, sole trader, joint venture). Please provide details of any other business names you use to manufacture/produce/sell the goods that are the subject of your application.**

This application requests the imposition of anti-dumping measures on steel reinforcing bar (commonly referred to as “rebar”) exported from South Korea, Taiwan, Malaysia, Singapore, Thailand, Spain and Turkey. The name of the applicant company requesting the imposition of anti-dumping measures is:

- OneSteel Manufacturing Pty Ltd (ABN 42 004 651 325)

OneSteel Manufacturing Pty Ltd (hereafter referred to as “OneSteel”) is a wholly-owned subsidiary of Arrium Limited (formerly OneSteel Limited).

2. **Provide your company’s internal organisation chart. Describe the functions performed by each group within the organisation.**

An internal organisation chart for OneSteel Manufacturing is enclosed at Confidential Attachment A-2.2.

3. **List the major shareholders of your company. Provide the shareholding percentages for joint owners and/or major shareholders.**

Arrium Limited is a publicly listed company. Major shareholders within the Arrium Limited Group of companies are disclosed in the company’s annual report.

4. **If your company is a subsidiary of another company list the major shareholders of that company.**

As indicated, OneSteel is a wholly-owned subsidiary of Arrium Limited, which is a publicly listed company on the Australian Stock Exchange.

5. **If your parent company is a subsidiary of another company, list the major shareholders of that company.**

Arrium Limited is not a subsidiary of any other company.

6. **Provide an outline diagram showing major associated or affiliated companies and your company’s place within that structure (include the ABNs of each company).**

A diagram identifying associated companies to OneSteel is included at Confidential Attachment A-2.6.

7. **Are any management fees/corporate allocations charged to your company by your parent or related company?**

Corporate allocations are made to OneSteel by Arrium Limited in the form of corporate charges (for shared services, etc). The allocations have been included in OneSteel’s Confidential Appendix A6.1 and Appendix A6.2 data.

8. **Identify and provide details of any relationship you have with an exporter to Australia or Australian importer of the goods.**

OneSteel is not related to any exporters of the goods the subject of this application in Korea, Malaysia, Singapore, Spain, Taiwan, Thailand or Turkey.

OneSteel has a distribution relationship with [REDACTED] purely commercial and no cross ownership exists.

**9. Provide a copy of all annual reports applicable to the data supplied in appendix A3 (Sales Turnover). Any relevant brochures or pamphlets on your business activities should also be supplied.**

Arrium Limited's annual report for 2013 is included as Non-Confidential Attachment A-2.9. Copies of earlier annual reports are available from the company's website at [www.onesteel.com](http://www.onesteel.com). The 2014 Annual Report is not available at the time of lodgement of this application and will be forwarded to the Anti-Dumping Commission ("the Commission") once it is available.

**10. Provide details of any relevant industry association.**

Arrium is a member of the Australian Industry Group ("AiGroup"), the Australian Steel Institute ("ASI"), the Bureau of Steel Manufacturers of Australia ("BOSMA"), the South East Asian Iron & Steel Institute ("SEAIISI") and the Steel Reinforcement Institute of Australia ("SRIA").

**A-3 The imported and locally produced goods.**

**1. Fully describe the imported product(s) the subject of your application:**

- Include physical, technical or other properties.
- Where the application covers a range of products, list this information for each make and model in the range.
- Supply technical documentation where appropriate.

Goods the subject of the application

The goods the subject of this application (“the goods”) are:

*Hot-rolled deformed steel reinforcing bar whether or not in coil form, commonly identified as rebar or debar, in various diameters up to and including 50 millimetres, containing indentations, ribs, grooves or other deformations produced during the rolling process.*

*The goods covered by this application include all steel reinforcing bar meeting the above description of the goods regardless of the particular grade or alloy content or coating.*

Goods excluded from this application are plain round bar, stainless steel and reinforcing mesh.

**2. What is the tariff classification and statistical code of the imported goods.**

Imports of the goods described above are typically, but not exclusively classified under the following tariff classifications and statistical codes:

<b>Product</b>	<b>HS Code</b>	<b>Rate</b>	<b>DCS</b>	<b>DCT</b>
Rebar Straights	7214200047	5%	Free	Free
Rebar Straights – Alloy	7228309049	5%	Free	Free
Rebar Coil	7213100042	5%	Free	Free
Rebar Coil – Other Alloy	7227909042	5%	Free	Free

The General rate of duty applies to Spain for all HS Codes above. All other exporting countries are either DCS or DCT and attract a “Free” rate of duty.

An extract of the Customs Tariff for codes contained in the table above is enclosed at Non-Confidential Attachment A-3.2.

3. **Fully describe your product(s) that are 'like' to the imported product:**
- **Include physical, technical or other properties.**
  - **Where the application covers a range of products, list this information for each make and model in the range.**
  - **Supply technical documentation where appropriate.**
  - **Indicate which of your product types or models are comparable to each of the imported product types or models. If appropriate, the comparison can be done in a table.**

#### **Applicable International Standards from exporting countries**

OneSteel has included a comparison of the applicable International Standards for rebar considered to be alike to the goods manufactured by the Australian industry. For each of these standards, the grade which most closely resembles AS/NZS 4671:2001 – Grade 500N has been identified:

- |               |                        |                  |
|---------------|------------------------|------------------|
| • Spain :     | Standard UNE 36-068    | - Grade B500S    |
| • Turkey :    | Standard TS 708        | - Grade VCH IV A |
| • Korea :     | Standard KS D 3504     | - Grade SD500W   |
| • Taiwan :    | Standard CNS 560 A2006 | - Grade SD490    |
| • Malaysia :  | Standard MS 146        | - Grade 500      |
| • Singapore : | Standard SS 2          | - Grade RB500W   |
| • Thailand :  | Standard TIS 24-2563   | - Grade SD50     |

Please refer to Non-Confidential Attachment A-3.3.1 for more detail on all applicable standards.

#### **Australian Steel Reinforcing Standards**

AS/NZS 4671:2001 specifies requirements for the chemical composition and the mechanical and geometrical properties of deformed reinforcing bars and coils used for the reinforcement of concrete. Refer to Non-Confidential Attachment A-3.3.2 for a copy of AS/NZS 4671:2001.

#### **Australian Steel Reinforcing Strength Grades**

AS/NZS 4671:2001 identifies yield strength levels of 250 MPa, 300 MPa, and 500 MPa. The numbers refers to the minimum yield strength measured in megapascals. Yield strength is measured with an extensometer in accordance with the requirements outlined in AS/NZS 4671:2001

The 500 MPa represents the standard yield strength for rebar specified in the Australian market. The 250 MPa (commonly referred to as “pool steel”) represents less than █ of rebar produced by OneSteel and is representative of the overall market demand for the lower strength grade rebar used primarily in swimming pool construction.

#### **Australian Steel Reinforcing Ductility Classes**

AS/NZS 4671:2001 specifies three ductility classes for rebar which are distinguished by the letters ‘L’ (low), ‘N’ (normal), and ‘E’ (earthquake). N class rebar represents the standard ductility class used the Australian market – dictated by the low level of seismic activity. E Class is the prevailing ductility class in New Zealand due to higher levels of seismic activity.

#### **Australian Steel Reinforcing Designation**

Rebar is designated by distinguishing letter or numbers in the following manner:

- a) Shape – by the letters, R, D, or I, representing plain (i.e. Round), Deformed ribbed, or Deformed Indented, surfaces respectively.
- b) Strength grade – by the numerical value of the lower characteristic yield stress expressed in megapascals.

- c) Ductility Class – by the letters L, N or E representing Low, Normal or seismic (Earthquake) ductility respectively.
- d) Size – by the numeral value of the nominal diameter expressed in millimetres.

For Example, a deformed ribbed bar of grade 500 MPa normal ductility steel with a nominal 16mm diameter would be designated as 'D500N16'.

### Australian Steel Reinforcing Certification

The Australasian Certification Authority for Reinforcing and Structural Steels (ACRS) administers an independent, expert, industry-based product certification scheme, certifying manufacturers and suppliers of rebar, pre-stressing and structural steels to Australian and New Zealand Standards.

The manufacturers nominated as exporters of the goods in this application are listed together with OneSteel as having ACRS accreditation for the manufacture of reinforcing bar to AS/NZS 4671:2001.

Rebar may be imported into Australia from Mills that do not have ACRS accreditation.

#### Standard OneSteel Manufactured Type, Size and Grade of Rebar by Mill

OneSteel Mill	Rebar Type	Diameter Range (mm)	Grades
Laverton Rod Mill	Rebar Coil	12 & 16	500N
Laverton Bar Mill	Rebar Straights	12,16, 20, 24, 28, 32, 36, 40	500N
Sydney Bar Mill	Rebar Straights	12,16, 20, 24, 28, 32, 36, 40	500N
		12	250N
Newcastle Rod Mill	Rebar Coil	10, 12, 16	500N

OneSteel's Laverton facility has previously manufactured rebar of 50mm diameter and has the capability to do so again if required.

#### Note:

1. The mechanical properties required by AS/NZS 4671:2001 can be attained through various chemical, heat-treatment and cold-working processes employed through the OneSteel Mills listed above. As such the grade sheets contained in OneSteel's "ReoData" Brochures for reinforcing bar at Non-Confidential Attachment A-3.3.3 include:

- Micro-alloyed AS/NZS 4671-500N
- QST AS/NZS 4671-500N
- Contistretch AS/NZS 4671-500N
- AS/NZS 4671-250N

The diameters in the above table also represent the typical range of imported rebar sold in the Australian market.

The standard rebar straight lengths sold by OneSteel are 6, 9, 10, 12, and 15 metres. Rebar can also be sold in various other lengths as specified by customers – refer to OneSteel Product and Availability Guide (refer Non-Confidential Attachment A-3.3.3). Imported rebar straights are typically offered in lengths ranging from 6 metres up to 15 metres.

OneSteel manufactures rebar coil in coil sizes ranging from 1.5 tonnes to up to 4.5 tonnes at facilities in Newcastle and Laverton. Imported rebar coil is typically imported from 1.5 tonnes up to a maximum coil weight of 4 tonnes from the countries included in this application.

OneSteel sells rebar straights and rebar coil on an actual weight basis (the actual mass measured by scales). Imported rebar coil is also sold on an actual weight basis whilst imported rebar straights can be sold on either a theoretical weight basis (nominal weight according to the standard) or an actual weight basis. The Commission is familiar with the differences between theoretical and actual



weight and the concept of rolling to minimum allowable weight tolerance.

**4. Describe the ways in which the essential characteristics of the imported goods are alike to the goods produced by the Australian industry.**

Most of the imported goods are produced by Mills that have ACRS Accreditation (as does OneSteel's), which certifies that the goods meet the performance requirements of AS/NZS 4671.2001.

Imported rebar is manufactured in a similar manner to OneSteel and is directly substitutable to rebar produced domestically by OneSteel. Rebar is generally regarded as a commodity product which, when having similar grade and dimension, are interchangeable regardless of origin.

OneSteel considers that the imported rebar possesses the same essential performance characteristics as locally produced rebar.

Straight rebar and coiled rebar of a similar diameter can be used for a given application. Rebar fabricators or service centres can use either depending on the equipment available in their processing facility. For some applications, processing rebar through an off-coil machine is preferred due to operating efficiencies delivered by a higher processing rate and reduced losses from unusable off-cuts. It is not possible to produce or process larger diameter rebar in coil form.

**I. Physical likeness**

OneSteel's locally produced rebar and most imported goods are manufactured to AS/NZS 4671.2001 from ACRS certified mills, and are alike in physical appearance.

**II. Commercial likeness**

OneSteel's locally produced rebar competes directly with imported rebar in the Australian market.

**III. Functional likeness**

Imported rebar is directly interchangeable with locally produced rebar.

**IV. Production likeness**

The rebar manufactured by OneSteel is manufactured via similar manufacturing processes to the imported goods. For Mills that have ACRS accreditation, the accreditation ensures that rebar produced through those facilities is subject to the same testing and verification processes prescribed to meet the requirements of AS/NZ4671.2001.

It can be concluded that where imported rebar is not identical to locally produced rebar (rib profiles will be unique to a given Mill), it does possess characteristics closely resembling locally produced rebar. Imported rebar from the subject countries is directly substitutable for locally manufactured rebar.

Grades of rebar sold into Australia that are made to AS/NZS 4671.2001 are readily weldable. OneSteel considers that whilst exporters' domestic regular and readily weldable grades are like goods, the readily weldable grades (often designated "W" in the grade name) are those most closely resembling the goods exported to Australia.

**5. What is the Australian and New Zealand Standard Industrial Classification Code (ANZSIC) applicable to your product.**

The ANZSIC code applicable to rebar is category 2110 for Iron Smelting and Steel Manufacturing.

**6. Provide a summary and a diagram of your production process.**

Rebar can be produced via a fully integrated steel production manufacturing process or, alternatively by using ferrous scrap metal as the principal raw material input to electric arc furnace steelmaking. In the OneSteel rebar production, the steel billet used as input feed to the rod and bar mills that produce the rebar coil and straights is produced either via the integrated steelmaking route (from Whyalla) or, via the electric arc furnace route (from Sydney or Laverton).

OneSteel operates four rolling mills for the production of rebar. Rebar coil is rolled through the Newcastle Rod Mill and the Laverton Rod Mill. Rebar straights are produced through the Sydney Bar Mill and the Laverton Bar Mill. OneSteel's rolling process is as follows:

#### For Rebar Straights:

- Steel billets are loaded into a reheat furnace and reheated to approximately 1200°C.
- The heated billet then passes through a series of rolling stands.
- As the billet passes through each stand it gradually reduces in size and changes shape from a square section to a circular section.
- The final (finishing) stand rolls have a rib profile machined into them so that when the circular bar passes through the rolls, deformations (ribs) are formed on the bar which will provide gripping power so that concrete adheres to the bar and provides reinforcing value.
- After the finishing stand, the bar passes through a special water cooling process where the surface of the bar is quenched rapidly. On exiting this part of the mill for slow cooling on the cooling bed, the temperature gradient established over the cross-section of the bar causes heat to flow from the core to the surface resulting in a (tempered) steel microstructure which gives increased strength. This special cooling process is known as the "TEMPCORE" process and rebar produced in this way is known as "QST" rebar as the bar has been Qu~~en~~ched and Self-Tempered. [REDACTED] Bar Mill produce straight rebar in this way.

#### For Rebar Coils:

- Steel billets are loaded into a reheat furnace and reheated to approximately 1200°C.
- The heated billet then passes through a series of rolling stands.
- As the billet passes through each stand it gradually reduces in size and changes shape from a square section to a circular section.
- The final (finishing) stand rolls have a rib profile machined into them so that when the circular section passes through the rolls, deformations (ribs) are formed on the bar which will provide gripping power so that concrete adheres to the bar and provides reinforcing value.
- For rebar coils produced through Laverton Rod Mill: all rebar coils (10, 12 and 16mm diameter) are produced by rolling billets that have had a small controlled amount of a microalloy (typically ferrovanadium) added. The steel chemistry ensures the rebar strength requirements are met. After the finishing stand, the deformed rod is looped into rings, laid onto a cooling conveyor and the cooled rings are then formed into a coil.
- For rebar coils produced through Newcastle Rod Mill: 10mm rebar coils are produced the same way as through the Laverton Rod Mill using billets with microalloy additions to effect the required rebar strength through chemistry. For 12mm and 16mm rebar coil, billets without microalloy additions are rolled, looped into rings, cooled and formed into coils. These coils are then put through a process known as [REDACTED] where the required strength is achieved by cold-working (mechanical strain-hardening) the coil through a stretching panel. At the end of the [REDACTED] the rebar is spooled into a coil.

A schematic of the manufacturing process is included at Confidential Attachment A-3.6 along with a brief overview of the EAF steelmaking process.

7. **If your product is manufactured from both Australian and imported inputs:**
- describe the use of the imported inputs; and
  - identify that at least one substantial process of manufacture occurs in Australia (for example by reference to the value added, complexity of process, or investment in capital).

OneSteel uses its own iron ore to produce billets manufactured at its Whyalla steelworks and produces billets at Laverton and Sydney from purchases of steel scrap. The iron ore and steel scrap are sourced locally and account for the significant proportion of total raw material goods used in the rebar manufacturing process.

OneSteel considers that the manufacture of steel billet from iron ore and/or scrap involves a substantial process of manufacture – as does the production of rebar from steel billet.

8. **If your product is a processed agricultural good, you may need to complete Part C-3 (close processed agricultural goods).**

Rebar is not a close processed agricultural product.

9. **Supply a list of the names and contact details of all other Australian producers of the product.**

OneSteel is the sole Australian manufacturer of rebar the subject of this application.

#### **A-4 The Australian market.**

1. **Describe the end uses of both your product and the imported goods.**

Rebar is primarily purchased by rebar fabricators and steel service centres who typically process it before supply into the residential, commercial and engineering construction sector. Rebar is typically cut, bent, and/or welded into various shapes before use in concrete reinforcement as a tension device.

Rebar fabricators quote jobs to the construction sector, cut and bend locally manufactured or imported rebar to order and deliver to job sites. Final end use applications for rebar include (but are not limited to) concrete slabs and prefabricated concrete beams, columns, cages and precast products.

Steel service centres will also purchase locally or imported rebar to stock for re-sale, primarily to smaller rebar fabricators for use as concrete reinforcement.

Whilst the vast majority of rebar is fabricated in some way there are instances where no cutting, bending or welding is required by a fabricator or service centre prior to end use.

2. **Generally describe the Australian market for the Australian and imported product and the conditions of competition within the overall market. Your description could include information about:**

- sources of product demand;
- marketing and distribution arrangements;
- typical customers/users/consumers of the product;
- the presence of market segmentation, such as geographic or product segmentation;
- causes of demand variability, such as seasonal fluctuations, factors contributing to overall market growth or decline, government regulation, and developments in technology affecting either demand or production;

- **the way in which the imported and Australian product compete; and**
- **any other factors influencing the market.**

Australian market and sources of demand

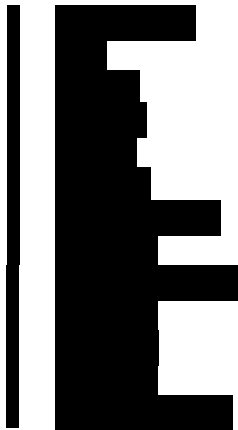
The total size of the rebar market in Australia in 2013/14 is estimated at approximately [REDACTED] metric tonnes.

The total size of the external rebar market in Australia for the twelve months to June 2014 is estimated to be approximately [REDACTED] metric tonnes. OneSteel sold [REDACTED] metric tonnes to its domestic independent customers and approximately [REDACTED] metric tonnes were imported from a range of countries including Spain, Taiwan, Singapore, South Korea, Thailand, New Zealand, Malaysia and Turkey.

Rebar is sold nationally with the majority of the volume sold in the eastern states of Queensland, New South Wales and Victoria.

Marketing and distribution

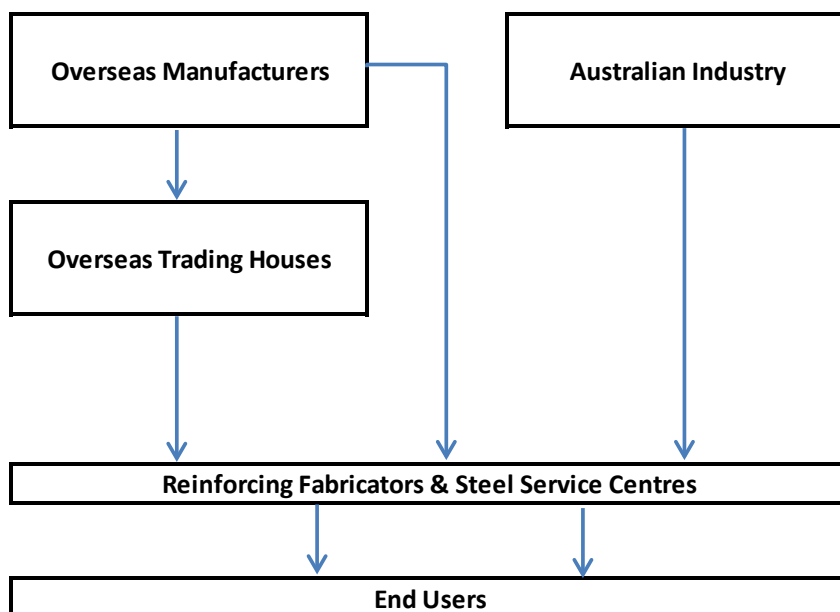
In 2013/14 OneSteel sold rebar straights and rebar coil to the following external steel service centres and end-use customers:



[Detail of distribution arrangements]

Rebar distribution diagram

The Australian rebar market comprises a single Australian producer, exporter, importers, and distributors / fabricators who process and sell rebar into the construction sector. The following diagram illustrates the distribution of locally produced and imported rebar.



Market negotiations

[Detail on determining pricing]

[Redacted content]

The way in which the imported and Australian product compete

Rebar is sold in the Australian market based on Australian Standard specifications with the majority of exporters meeting AS/NZS 4671.2001 and having ACRS Accreditation. Given the interchangeable nature of rebar it is regarded as a commodity market that competes primarily on the basis of price.

Independent reinforcing customers can purchase rebar either from OneSteel or from an import supply source. Import offers and the movement in the price of import offers are used by independent customers to negotiate prices from OneSteel.

OneSteel alleges that exporters of the goods in each of the following countries are exporting at dumped prices: Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey. OneSteel is aware that Pacific Steel in New Zealand is an exporter of rebar and exports regular quantities of the GUC into Australia. OneSteel has no evidence to suggest the imports from New Zealand are unfairly priced.

**3. Identify if there are any commercially significant market substitutes for the Australian and imported product.**

There are no commercially significant market substitutes for locally produced or imported rebar.

**4. Complete appendix A1 (Australian production). This data is used to support your declaration at the beginning of this application.**

OneSteel has completed Confidential Appendix A1 for the goods the subject of this application produced in Australia during 2013/14. Please refer to Confidential Appendix A1.

**5. Complete appendix A2 (Australian market).**

OneSteel has completed Confidential Appendix A2 – Australian market for the period 2010/11 to 2013/14 inclusive. Please refer to Confidential Appendix A2. OneSteel’s sales data includes sales to related and independent customers.

**6. Use the data from appendix A2 (Australian market) to complete this table:**

*Indexed table of sales quantities\**

Period	(a) Your Sales	(b) Other Aust <sup>n</sup> Sales	(c) Total Aust <sup>n</sup> Sales (a+b)	(d) Dumped Imports	(e) Other Imports	(f) Total Imports (d+e)	(g) Total Market (c+f)
<b>2010/11</b>	100	100	100	100	100	100	100
<b>2011/12</b>	117.4	100	117.4	122.6	107.8	118.3	117.7
<b>2012/13</b>	119.3	100	119.3	134.5	129.8	133.2	123.4
<b>2013/14</b>	114.6	100	114.6	167.6	138.6	159.2	121.3

**Notes:**

1. Years are July to June.
2. Export data for all countries not available to June 2014; Data for Malaysia and Singapore available to March 2014; Data for Spain available to April 2014; Data for Korea, Turkey, Taiwan, Thailand & New Zealand available to May 2014.
3. Imports from dumped and “other” sources has been pro-rated for whole 2013/14 period.

The above Table indicates that OneSteel’s sales of rebar have declined by approximately five percentage points in 2013/14 as imports from the dumped source countries have surged by more than 33 percentage points. Imports from other source countries (predominantly New Zealand) have increased by 8 percentage points in the same period.

The overall Australian rebar market increased in 2011/12 and again in 2012/13, however, retreated by approximately 2 percentage points in 2013/14.

## A-5 Applicant's sales.

### 1. Complete appendix A3 (sales turnover).

OneSteel has completed Confidential Appendix A3 for its sales of rebar straights and coil (consolidated).

### 2. Use the data from appendix A3 (sales turnover) to complete these tables.

*Indexed table of Applicant's sales quantities\**

Quantity	2010/11	2011/12	2012/13	2013/14
<b>All products</b>				
Australian market	100	108.8	103.9	99.2
Export market	100	65.9	39.1	72.4
<b>Total</b>	100	107.2	101.4	98.2
<b>Like goods</b>				
Australian market	100	117.4	119.4	114.6
Export market	100	9034.0	3927.4	14941.0
<b>Total</b>	100	117.9	119.5	115.4

**Notes:**

1. Years are July to June.
2. "All Products" includes all steel product sales by OneSteel Manufacturing. "Like Goods" includes goods the subject of this application.

Sales of steel products by OneSteel (i.e. "All Products") have decreased in 2013/14, however, OneSteel's sales of rebar have fallen by a greater margin.

*Indexed table of Applicant's sales values\**

Values	2010/11	2011/12	2012/13	2013/14
<b>All products</b>				
Australian market	100	108.7	99.8	96.4
Export market	100	77.2	51.1	89.8
<b>Total</b>	100	107.7	98.3	96.2
<b>Like goods</b>				
Australian market	100	115.3	115.5	112.4
Export market	100	8628.9	3963.5	15561.0
<b>Total</b>	100	115.8	115.7	113.2

**Notes:**

1. Years are July to June.

### 3. Complete appendix A5 (sales of other production) if you have made any:

- internal transfers; or
- domestic sales of like goods that you have not produced, for example if you have imported the product or on-sold purchases from another Australian manufacturer.

OneSteel has completed Confidential Appendix A5 for its sales of local production to related parties. OneSteel has been the [REDACTED] over the

nominated period. Please refer to Confidential Appendix A5.

**4. Complete appendix A4 (domestic sales).**

Confidential Appendix A4 has been completed by OneSteel. As this file is large, it has been supplied on memory stick. Please refer to Confidential Appendix A4.

**5. If any of the customers listed at appendix A4 (domestic sales) are associated with your business, provide details of the association. Describe the price effect of the association.**

Related party sales in Confidential Appendix A4 are readily identified.

**6. Attach a copy of distributor or agency agreements/contracts.**

OneSteel has included copies of distributor agreement [REDACTED]  
[REDACTED] Please refer to confidential Attachment A-5.6.

**7. Provide copies of any price lists.**

Customer price lists for 2013/14 have been included at Confidential Attachment A-5.7. OneSteel has also included a copy of its Transport Delivery Guide for Steel in Concrete products (including rebar) effective from 1 February 2013.

**8. If any price reductions (for example commissions, discounts, rebates, allowances and credit notes) have been made on your Australian sales of like goods provide a description and explain the terms and conditions that must be met by the customer to qualify.**

- Where the reduction is not identified on the sales invoice, explain how you calculated the amounts shown in appendix A4 (domestic sales).
- If you have issued credit notes (directly or indirectly) provide details if the credited amount has not been reported appendix A4 (domestic sales) as a discount or rebate.

Price reductions (rebates) and discounts have been included in Confidential Appendix A4.

**9. Select two domestic sales in each quarter of the data supplied in appendix A4 (domestic sales). Provide a complete set of commercial documentation for these sales. Include, for example, purchase order, order acceptance, commercial invoice, discounts or rebates applicable, credit/debit notes, long or short term contract of sale, inland freight contract, and bank documentation showing proof of payment.**

OneSteel has included two complete sets of commercial documentation for sales in each quarter of 2013/14. Please refer to Confidential Attachment A-5.9.



## **A-6 General accounting/administration information.**

### **1. Specify your accounting period.**

OneSteel's financial year is 1 July to 30 June.

### **2. Provide details of the address(es) where your financial records are held.**

The financial records for OneSteel are located at the premises nominated at Section A-1 above.

### **3. To the extent relevant to the application, please provide the following financial documents for the two most recently completed financial years plus any subsequent statements:**

- **chart of accounts;**
- **audited consolidated and unconsolidated financial statements (including all footnotes and the auditor's opinion);**
- **internal financial statements, income statements (profit and loss reports), or management accounts, that are prepared and maintained in the normal course of business for the goods.**

*These documents should relate to:*

1. **the division or section/s of your business responsible for the production and sale of the goods covered by the application, and**
2. **the company overall.**

The Chart of Accounts for OneSteel has been included electronically with this application.

Annual Report for Arrium's 2013 year is included at Non-Confidential Attachment A-2.9.

Internal management reports for OneSteel have been included at Confidential Attachment A-6.3.

### **4. If your accounts are not audited, provide the unaudited financial statements for the two most recently completed financial years, together with your taxation returns. Any subsequent monthly, quarterly or half yearly statements should also be provided.**

The accounts of Arrium Ltd (the parent company of OneSteel) are audited annually. This question is therefore not applicable.

### **5. If your accounting practices, or aspects of your practices, differ from Australian generally accepted accounting principles, provide details.**

The accounting practices of OneSteel are maintained in accordance with Australia's generally accepted accounting practices.

### **6. Describe your accounting methodology, where applicable, for:**

- **The recognition/timing of income, and the impact of discounts, rebates, sales returns warranty claims and intercompany transfers;**

Income from the sale of goods is recognised when the consolidated entity has passed control of the goods to the buyer.

- **provisions for bad or doubtful debts;**

Trade debtors are reviewed on an ongoing basis. Debts which are known to be uncollectible are written off. A provision for doubtful debts is raised when some doubt as to collection exists.

- **the accounting treatment of general expenses and/or interest and the extent to which these are allocated to the cost of goods;**

Cost is comprised of materials, labour and an appropriate proportion of fixed and variable overheads, on an absorption cost basis.

- **costing methods (eg by tonnes, units, revenue, activity, direct costs etc) and allocation of costs shared with other goods or processes;**

Costing methodology is by production/sales tonnes.

- **the method of valuation for inventories of raw material, work-in-process, and finished goods (eg FIFO, weighted average cost);**

Raw materials, stores, work in progress and manufactured stocks are valued at the lower of cost and net realisable value. The methods used to assign costs to inventories are actual invoiced cost or standard costs.

- **valuation methods for scrap, by-products, or joint products;**

Lower of cost and net realisable value.

- **valuation methods for damaged or sub-standard goods generated at the various stages of production;**

Lower of cost and net realisable value.

- **valuation and revaluation of fixed assets;**

Subsequent to initial recognition, assets are valued at fair value. Revaluations are made with sufficient regularity to ensure carrying amounts do not differ dramatically from fair value.

- **average useful life for each class of production equipment, the depreciation method and depreciation rate used for each;**

Buildings 10-40 years  
Plant and equipment 3-20 years  
Equipment under finance lease 3-5 years

- **treatment of foreign exchange gains and losses arising from transactions and from the translation of balance sheet items; and**

Foreign exchange gains and losses are brought to account using the rate of exchange applicable at the date of the transaction.

- **restructuring costs, costs of plant closure, expenses for idle equipment and/or plant shut-downs.**

Provisions for restructuring represents best estimate of the costs directly and necessarily incurred for the restructuring and not associated with ongoing activities.

- 7. If the accounting methods used by your company have changed over the period covered by your application please provide an explanation of the changes, the date of change, and the reasons.**

Accounting methods have not altered over the periods for which financial data has been prepared for this application, unless required to by the relevant accounting standard.

## A-7 Cost information

### 1. Complete appendices A6.1 and A6.2 (cost to make and sell) for domestic and export sales.

OneSteel has completed Confidential Appendices A6.1 and A6.2 for rebar. Separate schedules have been completed for rebar “straights” and rebar “coils”, as well as a combined schedule that includes all related and independent sales of rebar.

## A-8 Injury

The principal indicators of injury are prices, volumes and profit effects – although not all of these must be evident. For this application, profit refers to amounts earned. Profitability is the ratio of profit to sales revenue. Where injury is threatened, but has not yet occurred, refer to question C.2.

### 1. Estimate the date when the material injury from dumped imports commenced.

It is OneSteel’s position that material injury from the dumped rebar exports from Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey commenced prior to 2010/11.

### 2. Using the data from appendix A6 (cost to make and sell), complete the following tables for each model and grade of your production. P<sup>n</sup> is the most recent period.

*Index of production variations (model, type, grade of goods)*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar – Coil</b>	100	122.30	121.73	125.39
<b>Rebar – Straights</b>	100	111.96	119.88	103.26
<b>Rebar - Total</b>	100	115.28	120.47	110.37

**Notes:**

1. Periods are July to June;
2. Production includes both for domestic and export sourced from Appendix A6.1 and A6.2.

OneSteel’s production of rebar coils increased in 2011/12, declined marginally in 2012/13 and increased in 2013/14. The company’s production of rebar straights increased in 2011/12 and again in 2012/13, before retreating by 16.5 per cent in 2013/14 (the year in which the dumped exports increased by approximately 33 per cent). OneSteel’s total rebar production increased each year in 2011/12 and 2012/13, before declining by 10 per cent in 2013/14.

*Index of cost variations (model, type, grade of goods)*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar – Coil</b>	100	99.57	95.86	99.37
<b>Rebar – Straights</b>	100	98.22	93.89	96.56
<b>Rebar - Total</b>	100	98.64	94.52	97.50

**Notes:**

1. Periods are July to June;
2. Data from Label J of Appendix A6.1.

OneSteel’s cost to make and sell (“CTM&S”) rebar remained relatively stable in 2011/12, before reducing in 2012/13, and then increasing in 2013/14.

*Index of price variations (model, type, grade of goods)*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar – Coil</b>	100	99.82	96.14	99.31
<b>Rebar – Straights</b>	100	97.36	97.12	97.21
<b>Rebar - Total</b>	100	98.24	96.80	98.06

**Notes:**

1. Periods are July to June;
2. Data from Label L of Appendix A6.1.

OneSteel's selling prices for rebar coil declined by 3.5 per cent in 2012/13, before improving to almost the same level as in 2011/12. The selling price for rebar straights declined in 2011/12, remained stable in 2012/13 and 2013/14. Sales of rebar straights represent the larger proportion of total rebar sales. In 2013/14, rebar straights costs increased by almost 3 per cent, however, OneSteel could not recover this increase in costs through higher selling prices.

*Index of profit variations (model, type, grade of goods)*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar – Coil</b>	100	83.79	90.86	73.99
<b>Rebar – Straights</b>	100	78.00	123.0	101.83
<b>Rebar - Total</b>	100	79.20	116.35	95.78

**Notes:**

1. Periods are July to June;
2. Data from Label M of Appendix A6.1.
3. As OneSteel's rebar profits are negative across the four years, the inverse of the calculated index number has been used.

The Australian industry's margin improved in 2012/13 with higher sales volumes (in both rebar coils and straights), before deteriorating in 2013/14. The aggregate profit for rebar in 2013/14 deteriorated by approximately [REDACTED] or by more than 20 per cent.

*Index of profitability variations (model, type, grade of goods)*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar – Coil</b>	100	104.49	105.22	98.80
<b>Rebar – Straights</b>	100	91.22	133.05	106.61
<b>Rebar - Total</b>	100	95.25	127.30	106.60

**Notes:**

1. Periods are July to June;
2. Data from Label O of Appendix A6.1.

The profitability of the Australian industry followed a similar trend to aggregate profit – an approximate 20 per cent decline was evident between 2012/13 and 2013/14.

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**3. Complete appendix A7 (other injury factors).**

Where applicable to injury claims, prepare an indexed table for other injury factor(s) in the format above.

*Index of Revenue*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar – Coil</b>	100	121.77	115.21	126.05
<b>Rebar – Straights</b>	100	112.80	115.27	105.53
<b>Rebar - Total</b>	100	115.76	115.70	113.18

**Notes:**

1. Periods are July to June;
2. Data from Appendix A6.1.

OneSteel's rebar revenues have reduced in 2013/14 from the stable levels of 2011/12 and 2012/13. The reduction in revenue has primarily been in sales of rebar straights.

*Index of Employment*

<b>Product</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
<b>Rebar - Total</b>	100	100.8	97.3	95.1

**Notes:**

1. Periods are July to June;
2. Data from Appendix A7.

OneSteel has reduced its workforce in its rebar production facilities as it has sought to reduce costs and remain competitive against dumped rebar imports. There has been a 5 per cent reduction in employee numbers in the last two years.

## A-9 Link between injury and dumped imports.

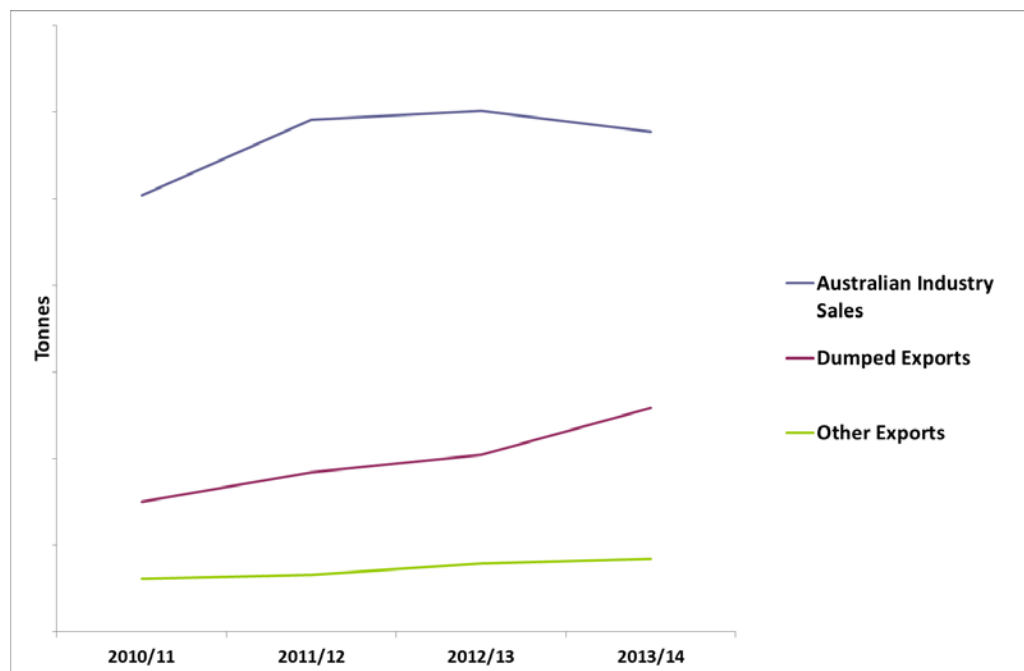
To establish grounds to initiate an investigation there must be evidence of a relationship between the injury and the alleged dumping. This section provides for an applicant to analyse the data provided in the application to establish this link. It is not necessary that injury be shown for each economic indicator.

### 1. Identify from the data at appendix A2 (Australian market) the influence of the volume of dumped imports on your quarterly sales volume and market share.

The Australian industry's sales of rebar (coils and straights) increased in 2011/12 from the impacts of the global financial crisis in the prior year, and further again in 2012/13. In 2013/14, the Australian industry's sales declined by approximately 5 per cent. Over this time period, exports of dumped rebar from Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey, in aggregate, increased in each successive year, with the largest increase in 2013/14 of approximately 33 per cent.

The following graph depicts the movement in Australian industry sales volumes and exports (dumped and non-dumped).

**Graph A-9.1 – Sales volumes of Australian industry and exports to Australia**



Source: Confidential Appendix A2

Graph A-9.1 depicts a declining sales volume of the Australian industry in 2013/14 against a robust increase in dumped exports in the same year. Meanwhile, exports from “other” countries (including from New Zealand) remained relatively stable across the four-year period.

The Australian industry's market share has declined by 5 percent since 2010/11, whereas dumped exports to Australia have increased market share by 4 percent. Exports from other source countries increased by 1 per cent over the four-year period. OneSteel would like to highlight with the Anti-Dumping Commission (“the Commission”) that although New Zealand exports to Australia hold a significant share of the “other countries” export category to Australia, the export prices for New Zealand goods are well above the export prices for the dumped exports to Australia.

In addition to the lost market share that is demonstrated in the above graph, OneSteel draws to the attention of the Commission that it has been unable to regain share to a significant customer due to

dumped exports. [REDACTED]

[Discussion relating to customer supply agreement]

2. Use the data at appendix A2 (Australian market) to show the influence of the price of dumped imports on your quarterly prices, profits and profitability provided at appendix A6.1 (costs to make and sell). If appropriate, refer to any price undercutting and price depression evident in the market.

Price suppression

The impact of the dumped exports on the Australian industry's sales volumes and market share is most observable following the 2011/12 year. In 2012/13, the Australian industry's sales volumes increased by approximately 1.5 per cent, however, the dumped exports increased by 11 per cent and the Australian industry's market share declined by 2 per cent. In the subsequent year (2013/14), the Australian industry's sales volumes retreated by 2 per cent whilst dumped exports of rebar increased by approximately 33 per cent. The Australian industry's market share declined by a further 4 per cent in 2013/14.

The decline in the Australian industry's sales volumes and market share in 2013/14 can be attributed to the price-effect impact of the dumped exports that undercut the Australian industry's selling prices throughout this period. The Australian industry has experienced price suppression in 2013/14 – the industry's costs have increased at a much faster rate than selling prices i.e. a direct result of the impact of the reduced sales volume of rebar straights and price undercutting from the dumped exports.

OneSteel is a supplier of rebar in "straights" and "coil" form. Imports of rebar are in both forms, with the majority of rebar coil imports from Korea and Spain, with volumes also from Singapore. The remaining countries (i.e. Malaysia, Taiwan, Thailand and Turkey) and Singapore predominantly export rebar straights to Australia. The preference for coil over straights in some applications, is that there exists productivity gains (i.e. quicker processing times, less waste) on rebar coil, when compared with straights. There will continue to be demand for straights, as there are always applications where coil is not suitable (particularly for sections greater than 20mm as coil is not generally available in this thickness - although 24mm coil is produced in Europe, there are no machines in Australia that can process 24mm coil).

Due to productivity gains that are possible through the use of rebar coil instead of straights (equipment availability and rebar size permitting), in normal market conditions (in the absence of dumped coil) rebar coil commands a higher price than straight rebar. Refer to Pages 13 and 19 of the [REDACTED] available as Confidential Attachment A-9.2.1 for indicative price difference between rebar coil and straight rebar. Typical premiums for rebar coil over straights in Korea and Taiwan range between \$15-\$30/t.

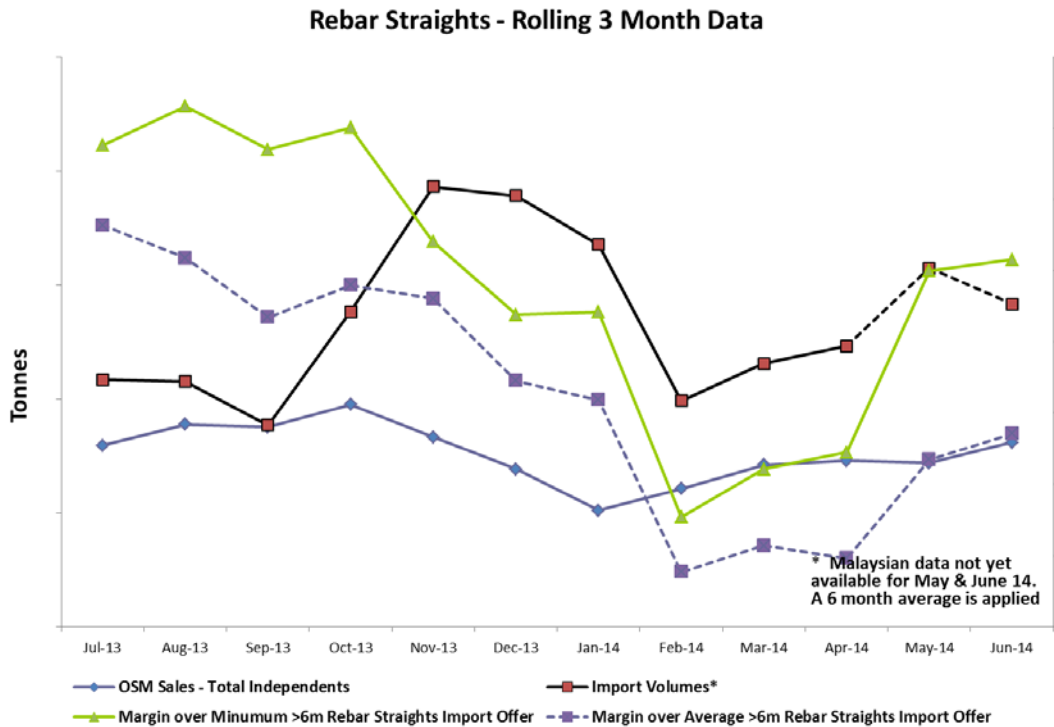
In 2008/2009 (prior to the influx of dumped rebar coil), price lists for independent [REDACTED]

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<sup>1</sup> Refer Confidential Attachment A-9.1 – Supply agreement

\_\_\_\_\_ for coil (12 & 16mm used for comparison as these sizes are also produced as straights) over straight rebar. Comparison with the net pricing for 2014 for independent customers shows that these premiums are largely non-existent with coil being offered at a lower price than straight rebar in a number of cases in order to compete with the imported coil. These price lists are available as Confidential Attachment A-9.2.2.

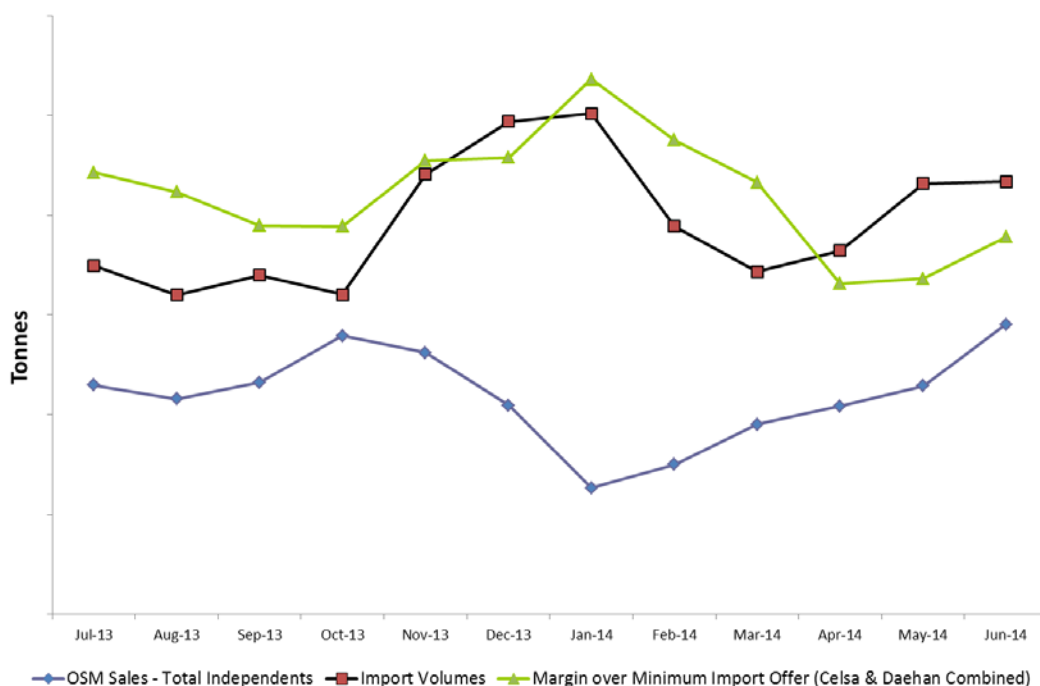
The following graph depicts the sales volume trends between OneSteel's sales to distributors and sales of imported dumped goods. There is a direct correlation between a fall in OneSteel's sales volumes to distributors and an increase in dumped imports. As OneSteel reduces its margin, it is able to recover sales volumes.



Import offers for rebar straights are principally from Malaysia, Taiwan, Thailand and Turkey. Offers for rebar coil originate from Celsa, Spain and Daehan, Korea. The correlation between OneSteel's sales to Independents and offers for coil imports from Celsa and Daehan are reflected in the following graph.



### Rebar in Coil - Rolling 3 Month Data



#### Price undercutting

In analysing the impact of price undercutting by the dumped exports OneSteel has examined the rebar straights and coil segments separately.

#### Straights

OneSteel has compared its average selling price for rebar straights with the average import offer for rebar straights between July 2013 and June 2014. The following Table depicts the extent of price undercutting evident (import offers not available for rebar straights for October and December 2013).

Table A-9.2.1 – Rebar Straights – Price Undercutting

Month	OneSteel average price To Distributors	Average Import Price	Difference
Jul 2013			
Aug 2013			
Sep 2013			
Oct 2013			
Nov 2013			
Dec 2013			
Jan 2014			
Feb 2014			
Mar 2014			
Apr 2014			
May 2014			
Jun 2014			

**Source:** OneSteel independents Pricing and Debar Pivots worksheet at Confidential Attachment A-9.2.3. (provided in soft copy form)

The above Table indicates that OneSteel has experienced price undercutting in the range 2.5 per cent to 7 per cent in the debar straights segment of the market in 2013/14.

**Coil**

As indicated, the major import sources for rebar coil are Daehan, Korea and Celsa, Spain. OneSteel has included import price offers for Daehan and Celsa imports, along with OneSteel’s selling prices to Independents (refer Confidential Attachment A-9.2.1 (Debar Coil Data Worksheet) on a monthly basis from July 2013 to June 2014.

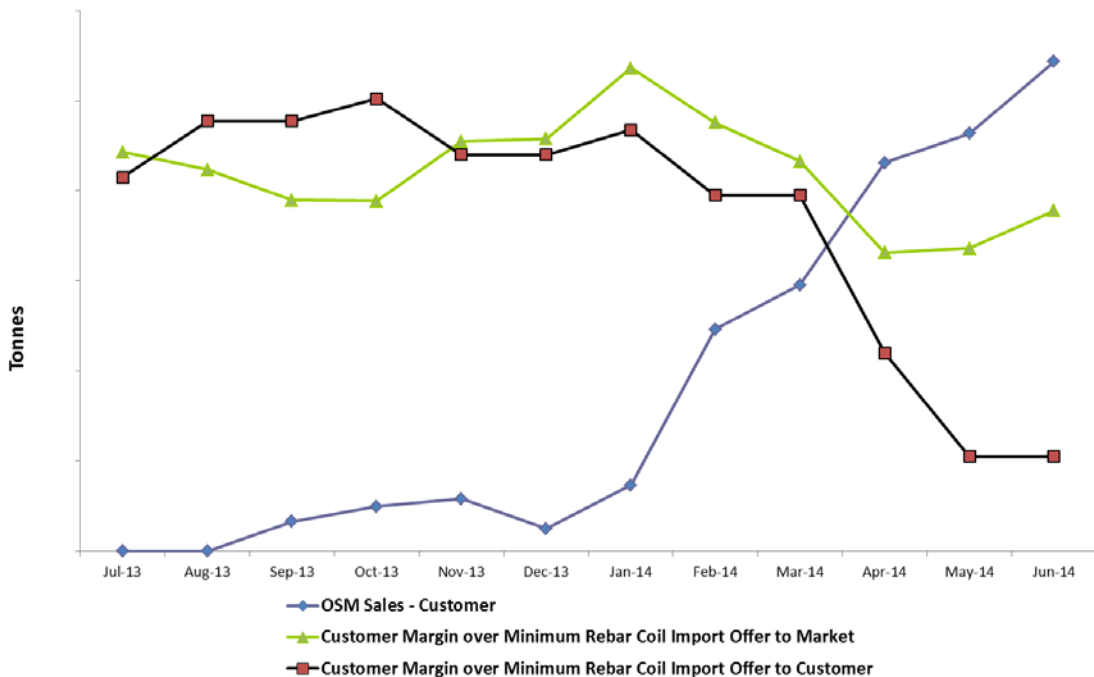
The worksheet includes calculated levels of price undercutting from the dumped exports by margins of approximately 5 to 9 percent over the twelve month period.

The following example demonstrates the price undercutting experienced by OneSteel from dumped rebar coil exports at an independent reinforcing customer [redacted]

[Customer specific detail]

At the beginning of the 2013/14 year OneSteel’s market share [redacted] By reducing its premium for coil [redacted] (refer graph below), OneSteel has increased its share against the dumped imports from Korea and Spain. [redacted] import certain straight volumes as OneSteel has not reduced its price for equivalents goods to the same dumped levels. The graph demonstrates [redacted] price sensitive customer and that it will import rebar that significantly undercuts OneSteel’s prices. [redacted] use the dumped import prices to drive down OneSteel’s prices.

**Rebar in Coil - Rolling 3 Month Data - Customer**



The above information included in the graph is sourced from Confidential Attachment A-9.2.3.

OneSteel submits that it has experienced price undercutting from dumped exports of rebar coil from Korea and Spain during 2013/14 in the range 5 to 9 per cent.

3. **Compare the data at appendix A2 (Australian market) to identify the influence of dumped imports on your quarterly costs to make and sell at appendix A6.1 (for example refer to changes in unit fixed costs or the ability to raise prices in response to material cost increases).**

The impact of the 33 per cent increase in dumped exports on OneSteel's CTM&S in 2013/14 is observable in its reduced margin (i.e. price suppression) as it has not been able to pass on increased costs (due to lower rates of production) through to higher selling prices (primarily in the higher-volume rebar straights market segment).

OneSteel's production of rebar is a volume-dependent manufacturing process. OneSteel, therefore, has sought to hold market share at the expense of price (where practicable) to ensure production and sales volumes are maintained. The loss of sales volumes in the rebar straights segment of the market in 2013/14 has led to an increase in exports, as well as reduced production volumes for domestic sales.

As indicated in the [REDACTED] above, OneSteel's Independents are similarly price-sensitive to lower-priced dumped export volumes. Where the import offer for dumped rebar is priced sufficiently below OneSteel's offer, the Independent will source a greater proportion of the attractively-priced dumped imports.

4. **The quantity and prices of dumped imported goods may affect various economic factors relevant to an Australian industry. These include, amongst other things, the return on investment in an industry, cash flow, the number of persons employed and their wages, the ability to raise capital, and the level of investment in the industry. Describe, as appropriate, the effect of dumped imports on these factors and where applicable use references to the data you have provided at appendix A7 (other economic factors). If factors other than those listed at appendix A7 (other economic factors) are relevant, include discussion of those in response to this question.**

OneSteel has experienced injury in "other" economic indicators including reduced revenues and reduced employment numbers.

It is also relevant to highlight with the Commission that OneSteel's profit over the four-year period to 2013/14 has shown negative returns. This performance is commensurate with OneSteel's view that it has suffered injury from dumped exports over the four-year period. Due to the negative returns, the rebar business demonstrates poor returns on investment, and is similarly not an attractive business for re-investment purposes.

5. **Describe how the injury factors caused by dumping and suffered by the Australian industry are considered to be 'material'.**

The injury experienced by OneSteel in 2013/14 is considered 'material' as the 33 per cent increase in the dumped exports has contributed to an overall 5 per cent decline in OneSteel's rebar sales from local production. In addition to the lower sales volumes and loss of market share, OneSteel has experienced price suppression on its domestic sales of rebar that have [REDACTED] negative impact on OneSteel's rebar margin (or a 20 per cent reduction in the profit of 2012/13).

The loss of sales volume and further reduction in profit (and profitability) are considered to be 'material' in the context of recent profit levels achieved in the domestic rebar business.

6. **Discuss factors other than dumped imports that may have caused injury to the industry. This may be relevant to the application in that an industry weakened by other events may be more susceptible to injury from dumping.**

In 2013/14 the Australian rebar market contracted by less than 2 per cent. The dumped exports, however, increased by 33 per cent, and the Australian industry's sales volumes lost 5 percent market share. It is clear that the slight contraction of the Australian market did not retard the rapid increase in

the dumped exports and, the Australian industry's sales contracted at more than twice the levels of the contraction of the market.

The shifts in volumes of local sales and import sales indicate that the dumped exports have had an increasing impact on the sales volumes of the Australian industry.

OneSteel submits that the effects of the dumping have had a more influential impact on the sales volume of the Australian industry than has a weakening market.

**7. This question is not mandatory, but may support your application. Where trends are evident in your estimate of the volume and prices of dumped imports, forecast their impact on your industry's economic condition. Use the data at appendix A2 (Australian market), appendix A6 (cost to make and sell), and appendix A7 (other economic factors) to support your analysis.**

The trend-line for the dumped exports from Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey indicates that further increases in export volumes are likely in 2014/15 (on the rapid increase in 2013/14 of 33 per cent) and that sales of Australian manufactured rebar will decline further.

OneSteel submits that the growth in the exports nominated in this application have been aided by the dumping margins evident (up to 29.4 per cent) and the price undercutting of the Australian industry's selling prices (up to 9 per cent).

Anti-dumping measures are warranted to halt the increasing volume of dumped exports to Australia from the identified countries (i.e. Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey). Without measures it is considered likely that the Australian industry will experience increasing price pressures and lost sales volumes, resulting in further reductions in market share, and lost profit and profitability.

The Australian market for rebar contracted by minor levels in 2013/14 yet this did not have an adverse impact on the volumes of dumped imports entering Australia. OneSteel understands that the key Asian markets of Korea, Malaysia and Taiwan have been negatively impacted by an influx of Chinese exports, requiring domestic producers in these countries to seek alternate supply opportunities on the export market. Australia, with minimal barriers to entry, is an obvious target for suppliers seeking to sell rebar that would normally be consumed domestically.

OneSteel requests the Commission to conduct a formal investigation into the allegations of dumping, material injury and causal link against exports of reinforcing bar (rebar) exported from Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey. It is further requested that following Day 60 of a formal investigation that the Commission consider the publication of a Preliminary Affirmative Determination ("PAD") and the imposition of provisional measures as soon as practicable.

OneSteel looks forward to assisting the Commission with its inquiries into this application.

# PART B

## DUMPING

### **IMPORTANT**

All questions in Part B should be answered even if the answer is 'Not applicable' or 'None' (unless the application is for countervailing duty only: refer Part C). If an Australian industry comprises more than one company/entity, Part B need only be completed once.

For advice about completing this part please contact the Commission's client support section on:

**Phone:** 1300 884 159  
**Fax:** 1300 882 506  
**Email:** [clientsupport@adcommission.gov.au](mailto:clientsupport@adcommission.gov.au)

## **B-1 Source of exports.**

### **1. Identify the country(ies) of export of the dumped goods.**

The countries from which the goods nominated in this application have been exported from that the anti-dumping measures are requested are the Republic of Korea ("Korea"), Malaysia, Singapore, Spain, Taiwan, The Kingdom of Thailand ("Thailand") and Turkey.

### **2. Identify whether each country is also the country of origin of the imported goods. If not, provide details.**

OneSteel understands that the country of origin of the imported goods is also the country of export of the goods.

### **3. If the source of the exports is a non-market economy, or an 'economy in transition' refer to Part C.4 and Part C.5 of the application.**

The countries the subject of this application – Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey – are each considered 'market' economy countries, hence this question is not applicable to the countries named in this application.

### **4. Where possible, provide the names, addresses and contact details of:**

- **producers of the goods exported to Australia;**
- **exporters to Australia; and**
- **importers in Australia.**

#### **Producers/Exporters**

The subject goods have been produced and exported to Australia from the nominated countries by the exporters listed below.

#### Korea

- (i) Daehan Steel Co., Ltd  
69, Hasin Beonyeong-ro,  
Saha-gu, Busan, Korea

Tel: 82 51 220 3300

Fax: 82 51 220 3398

(Headquarters and Sinpyeong Plant address and contact details).

#### Malaysia

- (i) Amsteel Mills SDN BHD  
Lot 1, Jalan Waja  
Bukit Raya Industrial Estate  
41050 Klang, Selangor Darul Ehsan

Tel: 603 3182 2000

Fax: 603 3182 2356, 57

Amsteel is a member of The Lion Group of Companies, Malaysia.

- (ii) Southern Steel PC SDN BHD  
2723, Lorong Perusahaan 12,  
Prai Industrial Estate, Prai Penang

13600 Perai,  
Pulau Pinang 14000 Malaysia

Tel: 60 4 390 6540

- (iii) Malaysia Steel Works (KL) Berhad  
(Masteel)  
29C, Jalan Tandang  
Section 51  
46050 Petaling Jaya  
Selangor, 46050 Malaysia

Tel: 60 3 7781 1611

- (iv) Ann Joo Steel Berhad (AJSB)  
Ann Joo Building  
2610, Tingkat Perusahaan Tiga,  
Kawasan Perusahaan Prai,  
1360 Prai, Penang, Malaysia

Tel: 604 388 8300  
Fax: 604 390 4534

Ann Joo Steel Berhad is part of Ann Joo Resources Berhad (See [annjoo.com.my](http://annjoo.com.my)).

#### Singapore

- (i) Natsteel Singapore  
C/o Natsteel holdings Pte Ltd  
22 Tanjong Kling Road  
Singapore, 628048

Tel: 65 6265 1233  
Fax: 65 6265 8317

#### Spain

- (i) Celsa Barcelona  
Carrer de la Ferralla, 12,  
Pol. Ind. San Vicente 08755  
Castellbisbal (Barcelona) Spain

Tel: 34 937 730 400  
Web: [www.celsa.com](http://www.celsa.com)

- (ii) Nervacero SA,  
Barrio Ballonti  
S/N 048510  
Valle de Trapaga, Vizcaya Spain

Tel: 34 944 939 000  
Fax: 34 944 939 020

(A further Celsa company exporting to Australia)

## Taiwan

- (i) Wei Chih Steel Industrial Co., Ltd  
No. 123 Nan Pu  
Nan Pu Village, Kuan Tien Dist.  
Tainan 720 Taiwan
- Tel: 886 657 90213  
Fax: 886 657 90441
- (ii) Power Steel Co., Ltd  
No. 54, Ta Yeh South Road  
Hsiao Kang Dist.  
Kaohsiung, Taiwan, 81250
- Web: [www.pSCO.com.tw](http://www.pSCO.com.tw)
- Tel: 886 7 8711666  
Fax: 886 7 8712069
- (iii) Tung Ho Steel Enterprise Corporation  
No. 116, Neighbour 8  
Baojhang Village, Guanyin Township  
Taoyuan County 32847 Taiwan
- Tel: 886 3 476 1151  
Fax: 886 3 476 1609

Note: Tung Ho recently secured ACRS certification. Tung Ho also produces rebar at its Kaohsiung works.

## Thailand

- (i) Millcon Steel PLC  
9, 11, 13 Banggradee Road  
Samareedum, Bangkhuntein, Bangkok 10150
- Tel: 66 2896 4444  
Fax: 66 2896 9622, 4420

## Turkey

- (i) HABAS Sinai ve Tibbi Gazlar Istihsal Endustri A.S. ("Habas")  
Sanayi Caddesi No: 26  
Bozkoy – Allaga  
Izmir  
Turkey
- Tel: 90 232 625 11 70  
Fax: 90 232 625 11 84

The above exporters are the companies that are known to OneSteel to be producers and exporters of rebar straights and/or coils having ACRS certification to AS/NZS 4671:2001 exported to Australia.



## Importers

The following companies are understood to be importers of the goods the subject of this application:

- Commercial Metals Pty Ltd  
Level 6, 697 Burke road  
Camberwell Victoria 3124  
Tel: (03) 9805 0400  
Fax: (03) 9805 0455
- Croft Steel Pty Ltd  
Unit 1/26 Newheath Drive  
Arundel Qld 4214  
Tel: (07) 5500 0260
- ThyssenKruppMannex Pty. Ltd.  
Level 4, Tower B  
799 Pacific Highway  
Chatswood NSW 20607  
Tel: (02) 8424 2000  
Fax: (02) 8424 2099
- Stemcor Australia Pty Ltd  
Level 13/15 Blue Street  
North Sydney NSW 2059  
Tel: (02) 9458 8528  
Fax: (02) 9925 0844
- GP Marketing International  
Level 4 / 177 Pacific Highway  
North Sydney NSW 2060  
Tel: (02) 9925 0755  
Fax: (02) 9925 0909
- Sanwa Pty Ltd  
201/100 New South Head Road  
Edgecliff NSW 2027  
Tel: (02) 9362 4088

**5. If the import volume from each nominated country at Appendix A.2 (Australian Market) does not exceed 3% of all imports of the product into Australia refer to Part C.6 of the application.**

The goods the subject of this application are the subject of suppression orders by the Australian Bureau of Statistics ("ABS") and are not available on a regular monthly basis for each of the nominated exporting countries.

OneSteel has relied upon published monthly export data sourced from [REDACTED] a recognised international supplier of steel industry trade statistics. OneSteel has been able to obtain export trade statistics for all countries against the nominated tariff codes (including those the subject of the application i.e. Korea, Malaysia, Singapore, Spain, Taiwan and Turkey) with the exception of Thailand. A review of the aggregated annual import data from Australian Bureau of Statistics (ABS) against the nominated tariff codes has shown significant tonnage present for Thailand which was not evident in the [REDACTED] data. OneSteel has been able to source export trade data for Thai exports to Australia from the Thai Customs website (i.e. [www.customs.go.th](http://www.customs.go.th)) over the nominated periods against an alternative tariff code, the volume and value of which suggest that it is likely to have been used at the time of export for the GUC.

OneSteel has relied upon [REDACTED] and Thai Customs export data to identify volumes exported to Australia over the period 2010/11 to 2013/14. The following Table depicts the export volumes.

**Table B-1.5 – Rebar export volumes to Australia (metric tonnes)**

Source Country	2010/11	2011/12	2012/13	2013/14	Percent of Total Imports 2013/14
Korea	1133	1125	7020	18763	5.59%
Malaysia	26628	34546	9980	12600	3.76%
Singapore	64077	61559	43274	55017	16.40%
Spain	25647	42830	72546	66179	18.28%
Taiwan	16752	24834	42996	64634	19.27%
Thailand	15725	18019	28325	26590	7.93%
Turkey	50	934	48	12469	3.72%
New Zealand	52651	59317	72598	73219	21.83%
Other	8018	6057	6160	10839	3.23%
Total	210681	249221	282947	340309	100.0%

**Notes:**

1. Years are July to June;
2. 2013/14 includes data for Malaysia, Singapore and “other” countries to March 2014; Spain to April 2014; Korea, N.Z., Taiwan, Turkey and Thai data to May 2014; Data has been pro-rated for complete 2013/14 year.
3. All data included at Confidential Attachment B-1.5 (Export Volumes) in soft copy form.

Table B-1.5 demonstrates that the volumes of exports to Australia (that reflect import volumes, with a time delay apparent between export date and arrival date) are above negligible levels for each of Korea, Malaysia, Singapore, Spain, Taiwan and Thailand.

6. **In the case of an application for countervailing measures against exports from a developing country, if the import volume from each nominated country at Appendix A.2 (Australian Market) does not exceed 4% of all imports of the product into Australia refer to Part C.6 of the application**

This application does not seek the imposition of countervailing measures and is therefore not applicable.

## B-2 Export price

Possible sources of information on export price include export price lists; estimates from the Australian Bureau of Statistics; a deductive export price calculation from the Australian selling price of the imported goods; export sales quotations or invoices; foreign government export trade clearances.

1. **Indicate the FOB export price(s) of the imported goods. Where there are different grades, levels of trade, models or types involved, an export price should be supplied for each.**

The export data relied upon by OneSteel and sourced from [REDACTED] reflects FOB prices for the goods exported from Korea, Malaysia, Singapore, Spain, Taiwan, Turkey and all “other” countries (except for Thailand).

For Thailand, export data sourced from the Thai Customs website, is based upon exports at the FOB level also.

All FOB prices (from [REDACTED] and Thai Customs) are published on a monthly basis. The export data reflected in Table B-1.5 above reflects exports for the month recorded by [REDACTED] and Thai Customs. Due to the timing differences between actual date of export and import arrival time in Australia, OneSteel has used for import purposes (i.e. July 2013) the published export volume and price for the previous month (i.e. June 2013) – i.e. a one-month delay has been followed, for Korea, Malaysia, Singapore, Taiwan, and Thailand. For Spain and Turkey, a two-month delay has been allowed for to account for longer shipping times.

The following Tables (B-2.1.1 and B-1.2) detail the export volumes and prices of the goods the subject of the application exported from each of the nominated countries from July 2013 to June 2014 (where available). As indicated, an import volume for July 2013 was designated an export volume for June 2013 in the source data (except for Spain and Turkey where a two-month delay applies).

**Table B-2.1.1 – Monthly import volumes (metric tonnes) of rebar (straights and coil) exported to Australia**

Month	Korea	Malaysia	Singapore	Spain	Taiwan	Thailand	Turkey
Jul 2013	0	26	1989	6472	3780	2290	48
Aug 2012	0	694	5224	7103	3137	789	0
Sep 2013	968	1594	3698	5351	935	2468	1515
Oct 2013	988	2919	5279	4309	10399	3561	901
Nov 2013	1458	1363	6331	13591	14031	3682	598
Dec 2013	1565	1246	3642	7955	0	3664	376
Jan 2014	519	154	7755	5369	6212	1584	887
Feb 2014	762	833	2350	6242	51	1091	2262
Mar 2014	1942	215	9196	2579	4548	1263	617
Apr 2014	1834	433	8379	1979	10094	2560	554
May 2014	3928		7265	5154	6637	2830	1170
Jun 2014	2881			2620	3204	881	1251
Jul 2014							1300

**Notes:**

1. Import volumes reflect actual volume exported in previous month, except for Spain and Turkey where two month delay is used.
2. Data for Malaysia and Singapore available to March 2014 only; Data for Spain to April 2014; Data for Korea, Taiwan, Thailand and Turkey to May 2014.
3. Data sourced from [REDACTED] for Korea, Malaysia, Singapore, Spain, Taiwan and Turkey; Thai data obtained from Thai Customs website at [www.customs.go.th](http://www.customs.go.th).
4. The above volumes reflect actual export volumes, whereas data in Table B-1.5 is pro-rated for full twelve months of 2013/14.

**Table B-2.1.2 – Monthly US\$FOB values (per metric tonne) for rebar exported to Australia**

Month	Korea	Malaysia	Singapore	Spain	Taiwan	Thailand	Turkey
Jul 2013	-	679	679	643	624	669	613
Aug 2013	-	688	712	630	613	640	-
Sep 2013	644	650	732	611	607	669	556
Oct 2013	631	662	732	611	614	625	571
Nov 2013	659	651	706	619	623	634	553
Dec 2013	651	678	676	640	-	641	551
Jan 2014	674	622	682	625	614	613	560
Feb 2014	637	655	737	637	628	604	568
Mar 2014	644	626	700	627	613	608	569
Apr 2014	632	636	717	626	602	634	564
May 2014	591		695	629	583	652	547
Jun 2014	659			630	582	616	545
Jul 2014							548

**Notes:**

1. Export prices sourced from [REDACTED] and Thai Customs website.
2. Singapore export prices are straights and coil combined.

Table B-2.1.1 summarizes monthly import volumes from the nominated countries sourced from [REDACTED] data and for Thailand from Thai Customs website export data.

Table B-2.1.2 summarizes monthly export prices (in US\$ per metric tonne) for goods exported to Australia in period 2013/14.

**2. Specify the terms and conditions of the sale, where known.**

OneSteel understands that the export prices sourced from [REDACTED] and Thai Customs are Free-On-Board ("FOB") are at the country of export point of sale (i.e. at wharf in country of export). It is understood by OneSteel that the published FOB export prices would include amounts for inland freight to wharf in the exporting country.

Normal values for exporters in each of the nominated countries may therefore require an adjustment for the inland freight component included in the export price.

**3. If you consider published export prices are inadequate, or do not appropriately reflect actual prices, please calculate a deductive export price for the goods. Appendix B1 (Deductive Export Price) can be used to assist your estimation.**

OneSteel considers that the published export prices obtained from [REDACTED] and the Thai Customs database are considered adequate for the purposes of determining dumping margins for rebar exported to Australia from the nominated countries. The published export prices appear to be consistent with competitive offers for rebar sold by importers/agents in Australia.

OneSteel does not have access to any information that suggest the [REDACTED] data and the Thai Customs data may be considered unreliable.

**4. It is important that the application be supported by evidence to show how export price(s) have been calculated or estimated. The evidence should identify the source(s) of data.**

Please refer to Confidential Attachment B-2.1 for export data sourced from [REDACTED] and Thai Customs.

**B-3 Selling price (normal value) in the exporter's domestic market.**

Possible sources of information about domestic selling prices in the country of export include: price lists for domestic sales (with information on discounts); actual quotations or invoices relating to domestic sales; published material providing information on the domestic selling prices; or market research undertaken on behalf of the applicant.

**1. State the selling price for each grade, model or type of like goods sold by the exporter, or other sellers, on the domestic market of the country of export.**

OneSteel had sought to utilise domestic selling prices sourced from reputable steel industry newsletters and publications in each of the nominated countries to establish margins on export prices to Australia over the period July 2013 to June 2014 (as this is the likely investigation period to be considered by the Anti-Dumping Commission).

Certain domestic selling price information for rebar sold in the nominated countries is available from

publications including [REDACTED] [REDACTED] [REDACTED] [REDACTED] is a source for steel pricing information that is well known to the Commission as a reference source for steel prices in numerous countries. [REDACTED] pricing for rebar sold in Korea, Taiwan and Spain is available across the nominated period (data not available for other nominated countries from [REDACTED]). Rebar domestic prices are also available for products sold in Malaysia and Turkey, sourced from [REDACTED].

Domestic selling prices for rebar sold in Korea, Malaysia and Taiwan during 2013/14 are considered to be below the fully-absorbed cost-to-make-and-sell (“CTM&S”) rebar in the respective countries. OneSteel has therefore sought to use a constructed selling price methodology (based upon independent information sourced from steel industry analysts and raw material pricing) for rebar produced and sold in Korea, Malaysia and Taiwan as the basis for normal values. Please refer to Section B-4.1 below.

OneSteel has been unable to obtain domestic selling prices for rebar sold in Thailand as domestic rebar prices are tightly held and not published in industry newsletters (as is the case with domestic prices in Korea, Malaysia, Spain, Taiwan and Turkey). OneSteel has therefore used a constructed selling price methodology to arrive at domestic selling prices for rebar sold in Thailand (please refer to Section B-4.1 below).

### Spain and Turkey

As indicated, OneSteel has obtained domestic pricing information for rebar sold in Spain sourced from the [REDACTED] newsletter. Domestic selling prices for rebar sold in Spain between May 2013 (to align with export arrivals for July 2013) and April 2014 have been obtained from [REDACTED]. It is understood by OneSteel that in excess of 95 per cent of rebar exports to Australia from Spain are for coil. In some countries, rebar coil may sell for a premium to rebar straights (up to US\$30 per metric tonne is known for Korea – refer [REDACTED] at Confidential Attachment A-9.2.1), however, a rebar straight price has been used for domestic price purposes.

For Turkey, OneSteel has obtained domestic selling prices from [REDACTED]. It is understood that Turkish exports to Australia are for rebar straights.

It is understood that the domestic selling prices in Spain and Turkey are at the ex-factory level.

**Table B-3.1.1 – Domestic selling prices for Rebar – Spain and Turkey**

	Domestic Price – Spain US\$/Metric Tonne	Domestic Price – Turkey US\$/Metric Tonne
May 2013	638	585
June 2013	623	590
July 2013	619	603
August 2013	614	610
Sep 2013	659	600
Oct 2013	641	608
Nov 2013	641	600
Dec 2013	648	590
Jan 2014	678	578
Feb 2014	675	570
Mar 2014	655	570
Apr 2014	650	590

**Notes:**

1. Spanish domestic selling prices sourced from [REDACTED] – see Confidential Attachment B-3.1.1
2. Turkish domestic selling prices sourced from [REDACTED] – refer Confidential Attachment B-3.1.2

<sup>2</sup> [REDACTED] service that specialises in global steel news and prices. [REDACTED] specialises in products including Flat and Long products, the latter which includes rebar. Refer [REDACTED]

Domestic selling prices for rebar in Korea, Malaysia, Singapore, Taiwan and Thailand have been determined on a constructed basis. Please refer to Section B-4.1 below.

**2. Specify the terms and conditions of the sale, where known.**

Domestic selling prices for Rebar sold in Spain and Turkey are understood to be at the ex-factory level.

**3. Provide supporting documentary evidence.**

Please refer to Confidential Attachment B-3.1 for domestic selling price information sourced from [REDACTED] and [REDACTED].

**4. List the names and contact details of other known sellers of like goods in the domestic market of the exporting country.**

**(i) Spain**

Corrugados Getafe and Corrugados Azpeitia (Alfonso Gallardo Group)  
Ctra. De Badajoz 32  
06380 Jerez de los Caballeros  
(Badajoz)

Tel: 34 924 759 000  
Fax: 34 924 759 101/070

**ArcelorMittal Gipuzkoa (Bergara)**  
**Calle Ibarra, 6,**  
**Bergara, Gipuzkoa 20570, Spain**

**Tel: 34 943 761940**

**(ii) Turkey**

Hammad Steel Industries

Tel: 90 212 705 5624  
Fax: 90 212 705 5661

## B-4 Estimate of normal value using another method.

This section is not mandatory. It need only be completed where there is no reliable information available about selling prices in the exporter's domestic market. Other methods of calculating a normal value include:

- the cost to make the exported goods plus the selling and administration costs (as if they were sold in the exporter's domestic market) plus an amount for profit (if applicable);
- OR
- the selling price of like goods from the country of export to a third country.

### 1. Indicate the normal value of the like goods in the country of export using another method (if applicable, use appendix B2 Constructed Normal Value).

#### Introduction to Constructed Selling Price Methodologies

As indicated above, OneSteel considers that the domestic selling prices for rebar sold in Korea, Malaysia, Singapore, Taiwan and Thailand are below the fully-absorbed CTM&S. OneSteel obtains on a subscription basis production cost economics for steel producers in certain countries, including Korea, Taiwan and Thailand. The cost economics data is sourced from [REDACTED] analyses and reports on steel prices, steelmakers' costs, steel supply/demand and steel finances. This information is available on a subscription basis.

#### *Korea*

OneSteel has examined the [REDACTED] rebar cost-economics modelling [REDACTED] – recognised by [REDACTED] based upon production of billet in-house. The total billet, wire rod cost, with depreciation and interests (with no amounts for Selling and General Administration (“S,G&A”) and profit) indicate a cost-to-produce amount of US\$703 per metric tonne (Please refer to Confidential Attachment B-4.1.1 for [REDACTED] cost of production economics data extracts [REDACTED]. According to [REDACTED] the prevailing domestic price for re-bar throughout the period July 2013 to May 2014 the average price was US\$595-659 per metric tonne (please refer to [REDACTED] domestic pricing data at Confidential Attachment B-4.1.2). The domestic selling prices do include domestic freight, however, these prices would also include amounts for S,G&A which are not included in the cost of production figure of US\$703 per metric tonne.

OneSteel also understands that Korean rebar producers are experiencing intense import competition from Chinese rebar exports. Chinese exports of rebar to Korea increased 83 per cent in the first half of 2014, with prices falling by 11 per cent over the same time frame<sup>4</sup>. The reduced domestic selling prices in Korea confirm OneSteel's claim that Korean rebar producers are selling below the fully absorbed cost to make and sell rebar (See [REDACTED] article included in Confidential Attachment B-4.1.1).

#### *Malaysia*

As with rebar prices in Korea, OneSteel understands that Malaysian domestic selling prices for rebar have been adversely impacted by Chinese rebar exports<sup>5</sup>. [REDACTED] reports that Malaysian steel mills “have resorted to importing Chinese bars in a bid to preserve or improve margins<sup>6</sup>”. OneSteel attributes the low dumping margins evident for Malaysian rebar exports to Australia to suppressed selling prices for rebar in Malaysia that are impacted by injurious Chinese rebar export prices.

OneSteel does not have access to independent rebar production cost economics in Malaysia. In order to construct a normal value for rebar sold in Malaysia, OneSteel has relied upon regional billet prices sourced from [REDACTED], with a conversion factor (based upon [REDACTED] conversion costs, and amounts for S,G&A and profit also included.

<sup>3</sup> Refer Confidential Attachment B-4.1.1

<sup>4</sup> Refer Confidential Attachment B-4.1.3.

<sup>5</sup> Refer Confidential Attachment B-3.1.3.

<sup>6</sup> Refer Confidential Attachment B-3.1.3 and B-3.1.4.

## Taiwan

In respect of Taiwan, [REDACTED] has detailed production cost economics data for the Taiwanese rebar producer, [REDACTED]. The production cost [REDACTED] is US\$582 per metric tonne (refer Confidential Attachment B-4.1.3). On the basis an amount is included for S,G&A of [REDACTED] per metric tonne (which is less than the OneSteel S,G&A amount in the 2013/14 year), the CTM&S rebar for the Taiwanese producer is US\$602 per metric tonne. The average domestic selling price over this period was US\$587 per metric tonne (refer Confidential Attachment B-4.1.2 for [REDACTED] domestic selling prices in Taiwan), indicating that the domestic selling prices in Taiwan did not recover the full CTM&S re-bar in 2013/14.

### Constructed Selling Prices

OneSteel has determined *prima facie* normal values for rebar exported from Korea, Malaysia, Singapore, Taiwan and Thailand on the basis of constructed selling price methodologies. In the absence of domestic selling price information for Thailand, OneSteel has also based normal values upon [REDACTED] constructed selling prices that reflect the cost economics to manufacture wire rod, with the addition of S,G&A expenses and an amount for profit.

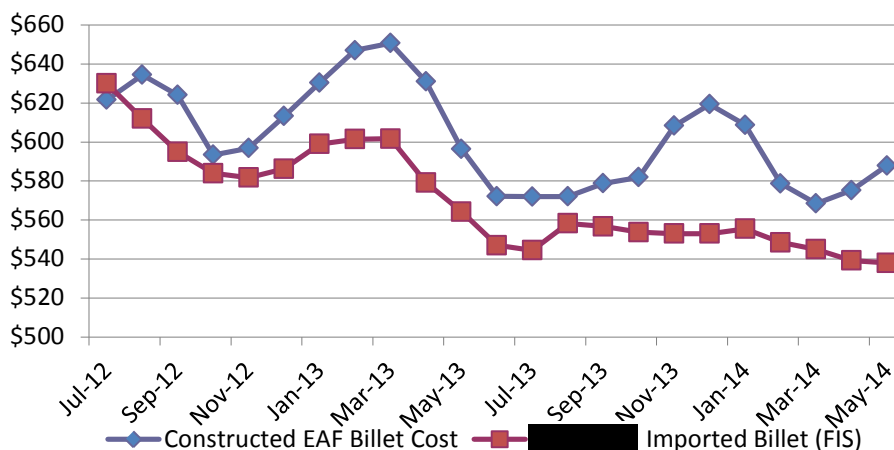
## Korea

Market intelligence confirms that the majority of the goods exported to Australia from Korea is rebar in coil form. The reference material for constructed cost economics in Korea reflects the costs of production associated with the manufacture of wire rod (i.e. rebar) by the Korean producer [REDACTED] facility. This data is considered reasonable for contrasting with the selling prices of the [REDACTED] rebar to Australia. The [REDACTED] production costs associated with the raw material billet (in May 2014) was US\$557.95 per metric tonne. The further processing costs (including manufacturing overheads, depreciation and interest) is estimated by [REDACTED] per metric tonne (refer to Confidential Attachment B-4.1.1 for [REDACTED]).

The fully absorbed production cost for wire rod (for the integrated billet/wire rod producer, [REDACTED]) was [REDACTED] per metric tonne (for [REDACTED]).

So that the monthly production costs can be reasonably compared to the monthly export prices (and account for movements in the costs associated with the manufacture of billet), OneSteel examined the [REDACTED] Korean cost of production for billet and compared it with an imported billet cost (i.e. an average of [REDACTED] published price, plus a [REDACTED] local freight charge). The following graph reflects the comparison:

**Korean Constructed versus Imported Billet Cost**





Source: [REDACTED]

The imported billet cost is lower than the Korean billet production cost over the July 2013 to May 2014 period. OneSteel has therefore applied the wire rod processing costs over average imported billet prices to determine a monthly constructed production cost for [REDACTED]

In the absence of production cost economic data for coil production, OneSteel has relied upon the [REDACTED] conversion costs for bar (i.e. straights) from billet.

OneSteel has applied its S,G&A expense to the wire rod production costs (i.e. [REDACTED]), and applied a [REDACTED] profit (sourced from [REDACTED]) to arrive at a constructed selling price for rebar produced in Korea.

The following Table depicts the constructed selling price for rebar coil manufactured [REDACTED] and used as the basis for normal values for [REDACTED] during 2013/14.

**Table B-4.1.1 – Constructed Selling Price Rebar Coil – Korea**

Month	Billet US\$/MT	Processing Cost to Rebar US\$/MT	S, G&A US\$/MT	Profit	Constructed Selling Price
Jun 2013	547	[REDACTED]	[REDACTED]	[REDACTED]	792
Jul 2013	545	[REDACTED]	[REDACTED]	[REDACTED]	789
Aug 2013	558	[REDACTED]	[REDACTED]	[REDACTED]	803
Sep 2013	557	[REDACTED]	[REDACTED]	[REDACTED]	802
Oct 2013	554	[REDACTED]	[REDACTED]	[REDACTED]	799
Nov 2013	553	[REDACTED]	[REDACTED]	[REDACTED]	798
Dec 2013	553	[REDACTED]	[REDACTED]	[REDACTED]	798
Jan 2014	556	[REDACTED]	[REDACTED]	[REDACTED]	801
Feb 2014	549	[REDACTED]	[REDACTED]	[REDACTED]	794
Mar 2014	545	[REDACTED]	[REDACTED]	[REDACTED]	789
Apr 2014	539	[REDACTED]	[REDACTED]	[REDACTED]	783
May 2014		[REDACTED]	[REDACTED]	[REDACTED]	783

**Notes:**

1. Billet price based upon average [REDACTED] price plus [REDACTED] per MT for inland freight to factory – Confidential Attachment B-4.1.4;
2. Processing cost based upon [REDACTED] estimate [REDACTED];
3. S,G&A based upon OneSteel's selling and administration costs for 2013/14 in absence of any other S,G&A data;
4. Profit based upon [REDACTED]

The constructed selling prices in Table B-4.1.1 form the basis of normal values (subject to adjustments) for goods exported to Australia from Korea.

**Malaysia**

In the absence of specific cost data for rebar produced in Malaysia, OneSteel has constructed a selling price for rebar based upon the same methodology as applied to rebar [REDACTED]. That is, a constructed selling price for rebar sold in Malaysia has been determined utilising a regional billet price, with a rebar processing cost applied, plus amounts for S,G&A (OneSteel costs) and profit [REDACTED] also included.

The prima facie normal values for rebar sold in Malaysia are the [REDACTED] (and reflected in Table B-4.1.1).

Rebar domestic selling prices in [REDACTED] (refer Confidential Attachment B-3.1.2) are in the range US\$637 to US\$706 per metric tonne delivered. When contrasted with the constructed selling prices in Table B-4.1.1 above, it is clear that the impact of imported rebar from China has resulted in depressed rebar selling prices in Malaysia, as the constructed selling prices (ex-factory) are well above prevailing domestic prices in Malaysia (on a delivered basis). This findings supports OneSteel's position that rebar selling prices in Malaysia are below the fully absorbed cost-to-make-and-sell rebar.

## Taiwan

As per Korea, OneSteel has subscribed to [REDACTED] for production cost economics data [REDACTED], a Taiwanese rebar producer. [REDACTED] its own steel billet in-house at a lower cost to itself (US\$487 per metric tonne) than the prevailing regional import price (US\$549 per metric tonne CFR SE Asia) for steel billet. The [REDACTED] production cost data [REDACTED] a production cost of US\$582 per metric tonne (including conversion to rod and overhead charges of depreciation and interest). No S,G&A or profit is included in this figure.

In the absence of actual profit data [REDACTED], OneSteel has used the profit [REDACTED]

OneSteel has taken the [REDACTED] production cost figure (for May 2014 – refer to Confidential Attachment B-4.1.3 for [REDACTED] cost data) and applied its own S,G&A expenses (for 2013/14 year), and then included a level of profit. [REDACTED] constructed selling price for 2013/14 is therefore US\$673 per metric tonne (including 7.5 per cent profit).

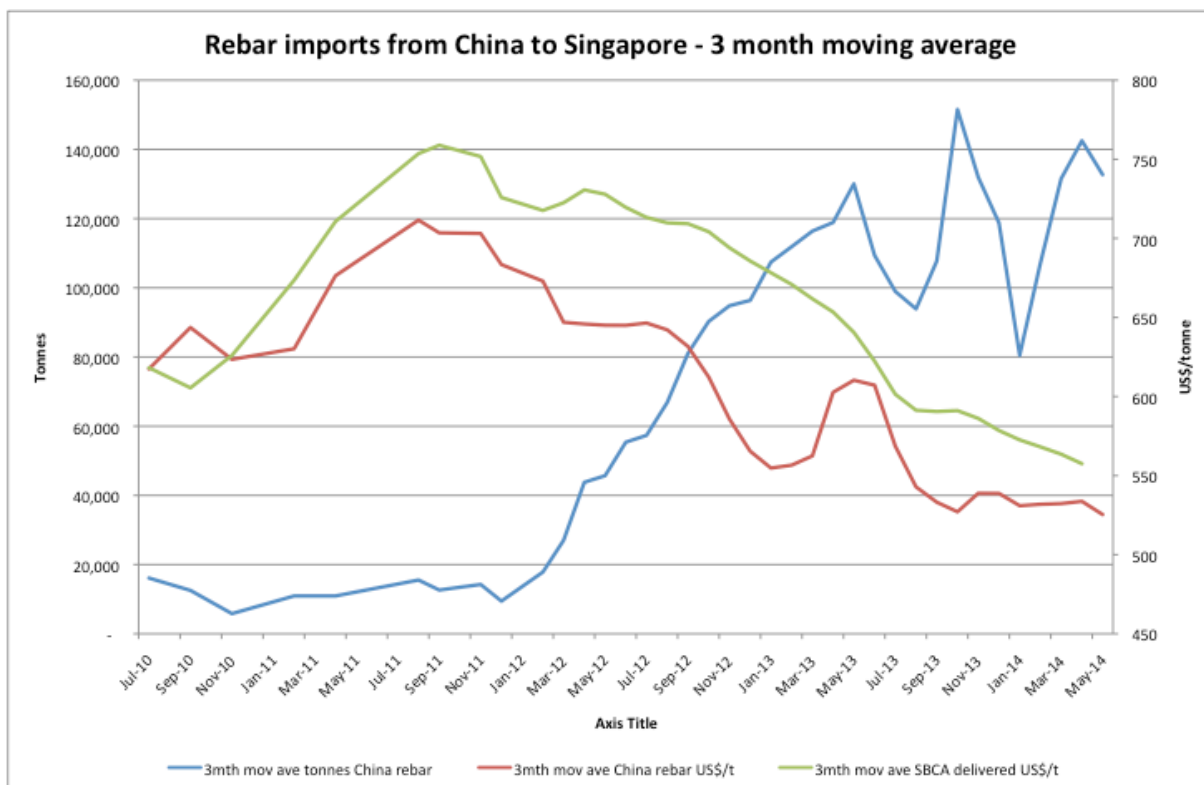
The US\$673 constructed selling price [REDACTED] forms the basis of normal value (subject to adjustments) for goods exported to Australia from Taiwan.

## Singapore

Cost of production economics data is not available from [REDACTED] for Singapore's only rebar producer, Natsteel, the exporter of rebar straights and coils to Australia. It is understood that Natsteel manufactures its own billet from scrap steel. OneSteel has access to limited domestic selling prices for rebar in Singapore, via the Singapore Building and Construction Authority (refer Confidential Attachment B-4.1.6). Domestic selling prices for rebar in Singapore in 2013/14 fall decreased across the period from a high of US\$601 per metric tonne to a low of US\$558 per metric tonne at the end of the period.

The Singaporean rebar domestic selling prices are only marginally higher than traded billet selling prices in the region. [REDACTED] reports that Chinese rebar exports to Singapore have had a significant impact on the Singaporean rebar market (refer Confidential Attachment B-3.1.3) through reduced market share and declines in prices.

The following graph outlines the increase in Chinese rebar exports to Singapore and the decline in rebar selling prices.



OneSteel submits that rebar selling prices in Singapore are impacted by Chinese rebar exports (as are domestic rebar markets in Malaysia and Korea). It is reasonable to conclude that as domestic rebar prices in Singapore are at levels close to billet selling prices, it is unlikely that Singaporean rebar mills are recovering the fully absorbed costs of production and selling expenses (as confirmed by the [REDACTED] article at Confidential Attachment B-4.1.7).

OneSteel has therefore constructed rebar normal values for the sole Singaporean producer, Natsteel on the basis of the only information reasonably available to it – regionally traded prices for billet (i.e. sourced from [REDACTED], as for Korea, above), plus a conversion factor and amounts for S,G&A and profit.

The following Table outlines the Constructed Selling Price data for rebar in Singapore (Table 4.1.2) during 2013/14.

**Table 4.1.2 – Constructed selling price – rebar straights Singapore**

Month	Billet US\$/MT	Processing Cost to Rebar (Straight) US\$/MT	S, G&A US\$/MT	Profit	Constructed Selling Price US\$/MT
Jun 2013	547				756
Jul 2013	545				754
Aug 2013	558				767
Sep 2013	557				766
Oct 2013	554				763
Nov 2013	553				762
Dec 2013	553				762
Jan 2014	556				765
Feb 2014	549				758
Mar 2014	545				754
Apr 2014	539				748

**Notes:**

1. Billet price based upon average [redacted] price plus [redacted] per MT for inland freight to factory;
2. Processing cost based upon [redacted] estimate for [redacted] [redacted] for assessing production cost economics purposes;
3. S,G&A based upon OneSteel's selling and administration costs for 2013/14 in absence of any other S,G&A data;
4. Profit based upon Natsteel's operating margin sourced from [redacted] – refer Confidential Attachment B-4.1.8.

The profit applied to the rebar costs for the Singaporean producer has been sourced from [redacted] a company that specializes in the provision of corporate information. According to the Report, Natsteel's gross profit (margin for revenue over costs) for the twelve months to 31 March 2013 was [redacted]. The margin on revenue was [redacted]. OneSteel has applied the [redacted] margin to the constructed costs to arrive at constructed selling prices for the Singaporean rebar producer, Natsteel.

OneSteel highlights with the Commission that the selling price for rebar coil generally attracts a premium with customers as it is subject to less waste than sales of straights in the typical lengths. It is understood that the typical price premium for coil is approximately US\$30 per metric tonne.

For the purposes of demonstrating dumping on rebar exported from Singapore, OneSteel has used the constructed selling prices for rebar straights as shown in Table 4.1.2 above.

**Thailand**

In respect of Thailand, OneSteel also anticipates that Chinese exports of rebar would impact the Thai domestic rebar market. OneSteel has therefore also used [redacted] as the basis for a constructed normal value. [redacted] billet cost is lower than the regional average import price for billet, hence the [redacted] billet cost has been used (i.e. [redacted] per metric tonne).

A conversion factor to reflect the processing cost of billet to rod has been applied of [redacted] (as determined at [redacted]). OneSteel has obtained [redacted] for the Thai steel producer [redacted] that includes a [redacted] Sufficient information as to Selling and Administrative expenses, and a level of profit is available from the report. OneSteel has relied upon the Selling, Administrative and Financial components of [redacted] to apply and amount for S,G&A expenses in the Thai Constructed normal value. A level of profit has been applied based upon [redacted] in the 2013 year sourced from [redacted] (i.e. Net Profit Margin before Extraordinary Items of [redacted]).

██████████). Once the profit has been applied to the fully-absorbed costs, a constructed selling price for rebar straights manufactured and sold in Thailand is established.

The constructed selling price for rebar straights sold in Thailand in 2013/14 is US\$652 per metric tonne.

Please refer to Confidential Attachment B-4.1.9 for an extract of ██████████ production cost economic for rebar straights manufactured by ██████████, and the ██████████

## 2. Provide supporting documentary evidence.

Supporting information for normal values for each of the nominated countries has been referenced in the preceding Sections B-3.1 and B-4.1 of this application.

## B-5 Adjustments.

A fair comparison must be made between the export price and the normal value. Adjustments should be made for differences in the terms and circumstances of the sales such as the level of trade, physical characteristics, taxes or other factors that affect price comparability.

### 1. Provide details of any known differences between the export price and the normal value. Include supporting information, including the basis of estimates.

The ██████████ and Thai Customs' export data are for free on board prices (i.e. include local internal freight to wharf). It is also expected that the FOB price includes a containerisation charge.

Domestic selling prices for Turkey rebar are on an ex-works basis. In respect of Spain, an average of the highest and lowest prices has been used (██████████ and ██████████) and these prices are ex-works. No delivery and local taxes are included in the Spanish prices.

OneSteel has made an upward adjustment to normal value for inland export freight to the Spanish and Turkish domestic selling prices. Additionally a containerisation charge on goods exported to Australia included in FOB prices (not included in domestic prices) is also required.

Constructed selling prices for Korea, Malaysia, Singapore, Taiwan and Thailand are at the ex-factory level (and do not include amounts for local freight to wharf, or containerisation charges). An adjustment for inland freight and containerisation charges has been included in the dumping margin calculations.

OneSteel understands from the recent petition filed in Canada by the Canadian Rebar industry on exports from China, Korea and Turkey (dated April 2014) that Turkish producers manufacture a "different variety of rebar for their home market that costs less to produce than the rebar they produce for export sales". The Turkish producers manufacture rebar for domestic consumption using a water based cooling process known as 'Quench and Self Temper' to produce "high strength/high ductility rebar with reduced alloy cost". It is understood the process allows compression of "the ratio of Tensile Strength (TS) to Yield Strength (YS) as strength levels increase", however, the minimum standard allowed in Turkey is below that permitted by International Standards in other jurisdictions. An adjustment for the higher costs associated with export sales will therefore be required for Turkish normal values. OneSteel has not made an adjustment of this nature.

2. **State the amount of adjustment required for each and apply the adjustments to the domestic prices to calculate normal values. Include supporting information, including the basis of estimates.**

Adjustments for inland freight to wharf (estimated at █████ per metric tonne<sup>7</sup>) and containerisation charges (█████ per metric tonne) have been made to the selling prices (domestic selling prices sourced from publications for Spain and Turkey, and for constructed selling prices for Korea, Malaysia, Singapore, Taiwan and Thailand) in Sections B-4.1 as required.

## **B-6 Dumping margin.**

1. **Subtract the export price from the normal value for each grade, model or type of the goods (after adjusting for any differences affecting price comparability).**

Weighted average dumping margins have been calculated for rebar exported to Australia from each of the nominated countries. In respect of rebar exports from Korea and Spain where the vast majority of exports are rebar coil, OneSteel has not included a premium for the selling price of coil over straights (estimated at US\$30 per metric tonne) as dumping margins are evident based upon a rebar straight calculated selling price (Korea) and market selling price (Spain). Similarly, in respect of exports from Singapore which include a mix of straights and coils, no adjustment has been included in the normal value for the rebar coil premium.

Normal values used in dumping margin calculations include the adjustment for internal freight and an amount for containerisation for export (not included in domestic selling prices in Sections 3.1 and 4.1 above).

The weighted-average dumping margins and margins as a percentage of export price are included in the Table below:

**Table B-6.1 Dumping Margins for Rebar exported to Australia**

<b>Country</b>	<b>Dumping Margin US\$/MT</b>	<b>Margin as % of Export Price</b>
Korea	186.66	29.4 per cent
Malaysia	170.12	25.8 per cent
Singapore	83.51	11.8 per cent
Spain	45.93	7.3 per cent
Taiwan	91.95	15.1 per cent
Thailand	46.83	7.4 per cent
Turkey	60.29	10.8 per cent

**Notes:**

1. Dumping margin calculations are included at Confidential Attachment B-6.1.

Normal values, export prices and weighted-average dumping margins are included at Confidential Attachment B-6.1.

2. **Show dumping margins as a percentage of the export price.**

Please refer to Table B-6.1 above for dumping margins as a percentage of export price calculations.

---

<sup>7</sup> Supporting documentation at Confidential Attachment B-5.2

# PART C

## SUPPLEMENTARY SECTION

### IMPORTANT

Replies to questions in Part C are not mandatory in all instances, but may be essential for certain applications.

For advice about completing this part please contact the Commission's client support section on:

**Phone:** 1300 884 159  
**Fax:** 1300 882 506  
**Email:** [clientsupport@adcommission.gov.au](mailto:clientsupport@adcommission.gov.au)

## C-1 Subsidy

This section must be completed where countervailing duties are sought to offset foreign government assistance through subsidies to exporters or producers.

If the application is for countervailing duty alone, the domestic price information required by Part B of the application need not be supplied.

Responses to questions A-9 will need to identify the link between subsidisation and injury.

1. **Identify the subsidy paid in the country of export or origin. Provide supporting evidence including details of:**
  - (i) the nature and title of the subsidy;
  - (ii) the government agency responsible for administering the subsidy;
  - (iii) the recipients of the subsidy; and
  - (iv) the amount of the subsidy.

This application is a request for anti-dumping measures only and does not include a request for countervailing measures. This question is therefore not applicable.

## C-2. Threat of material injury

Address this section if the application relies solely on threat of material injury (ie where material injury to an Australian industry is not yet evident).

1. **Identify the change in circumstances that has created a situation where threat of material injury to an Australian industry from dumping/subsidisation is foreseeable and imminent, for example by having regard to:**
  1. the rate of increase of dumped/subsidised imports;
  2. changes to the available capacity of the exporter(s);
  3. the prices of imports that will have a significant depressing or suppressing effect on domestic prices and lead to further imports;
  4. inventories of the product to be investigated; or
  5. any other relevant factor(s).

Whereas it is OneSteel's view that future exports of rebar at dumped prices from Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey present a future threat of material injury to the Australian industry manufacturing like goods, this application has demonstrated that the Australian industry has already experienced material injury from the goods exported to Australia.

OneSteel submits that a Preliminary Affirmative determination ("PAD") imposing provisional measures is necessary to minimize any future threat of material injury from the dumped and injurious exports.

2. **If appropriate, include an analysis of trends (or a projection of trends) and market conditions illustrating that the threat is both foreseeable and imminent.**

OneSteel would like to highlight with the Commission that exports from the nominated countries have increased year-on-year by 22 per cent, 11 per cent and 26 per cent in each of the previous years. In the event that the dumped and injurious exports continue to grow in volume on annual basis, the Australian industry will experience reductions in profits and profitability.

## C-3. Close processed agricultural goods

Where it is established that the like (processed) goods are closely related to the locally produced (unprocessed) raw agricultural goods, then – for the purposes of injury assessment – the producers of the raw agricultural goods form part of the Australian industry. This section is to be completed only



where processed agricultural goods are the subject of the application. **Applicants are advised to contact the Commission's client support section before completing this section.**

**1. Fully describe the locally produced raw agricultural goods.**

Rebar is not a raw agricultural product.

**2. Provide details showing that the raw agricultural goods are devoted substantially or completely to the processed agricultural goods.**

As indicated above, rebar is not a raw agricultural good. This question does not apply.

**3. Provide details showing that the processed agricultural goods are derived substantially or completely from the raw agricultural goods.**

Not applicable.

**4. Provide information to establish either:**

- a close relationship between the price of the raw agricultural goods and the processed agricultural goods; or
- that the cost of the raw agricultural goods is a significant part of the production cost of the processed agricultural goods.

Not applicable.

#### **C-4. Exports from a non-market economy**

Complete this section only if exports from a non-market economy are covered by the application. The domestic price information required by Part B of the application need not be supplied if this question is answered.

Normal values for non-market economies may be established by reference to selling prices or to costs to make and sell the goods in a comparable market economy country.

**1. Provide evidence the country of export is a non-market economy. A non-market economy exists where the government has a monopoly, or a substantial monopoly, of trade in the country of export and determines (or substantially influences) the domestic price of like goods in that country.**

The exporting countries nominated in this application (Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey) are not considered 'non-market economy' countries. This question is not applicable to the goods the subject of this application.

**2. Nominate a comparable market economy to establish selling prices.**

Not applicable.

**3. Explain the basis for selection of the comparable market economy country.**

Not applicable.

**4. Indicate the selling price (or the cost to make and sell) for each grade, model or type of the goods sold in the comparable market economy country. Provide supporting evidence.**

Not applicable.

## C-5 Exports from an ‘economy in transition’

An ‘economy in transition’ exists where the government of the country of export had a monopoly, or substantial monopoly, on the trade of that country (such as per question C-4) and that situation no longer applies.

Complete this section only if exports from an ‘economy in transition’ are covered by the application. Applicants are advised to contact the Commission’s client support section before completing this section

### 1. Provide information establishing that the country of export is an ‘economy in transition’.

The exporting countries nominated in this application (Korea, Malaysia, Singapore, Spain, Taiwan, Thailand and Turkey) are not considered to be ‘economies-in-transition’ for the purposes of Australia’s Anti-Dumping provisions. This question is not applicable.

### 2. A price control situation exists where the price of the goods is controlled or substantially controlled by a government in the country of export. Provide evidence that a price control situation exists in the country of export in respect of like goods.

Not applicable.

### 3. Provide information (reasonably available to you) that raw material inputs used in manufacturing/producing the exported goods are supplied by an enterprise wholly owned by a government, at any level, of the country of export.

Not applicable.

### 4. Estimate a ‘normal value’ for the goods in the country of export for comparison with export price. Provide evidence to support your estimate.

Not applicable.

## C-6 Aggregation of Volumes of dumped goods

Only answer this question if required by question B-1.5 of the application and action is sought against countries that individually account for less than 3% of total imports from all countries (or 4% in the case of subsidised goods from developing countries). To be included in an investigation, they must collectively account for more than 7% of the total (or 9% in the case of subsidised goods from developing countries).

	Quantity	%	Value	%
All imports into Australia		100%		100%
Country A*				
Country B*				
etc*				
<b>Total</b>				

\* Only include countries that account for less than 3% of all imports (or 4% in the case of subsidised goods from developing countries). Use the data at [Appendix A.2](#) (Australian Market) to complete the table.

Exports from the countries nominated in this application each account for more than 3 per cent of the total import volume into Australia (based upon export data) during 2013/14. This question is therefore not applicable.

## APPENDICES

Appendix A1	Australian Production
Appendix A2	Australian Market
Appendix A3	Sales Turnover
Appendix A4	Domestic Sales
Appendix A5	Sales of Other Production
Appendix A6.1	Cost to Make and Sell (& profit) Domestic Sales
Appendix A6.2	Cost to Make and Sell (& profit) Export Sales
Appendix A7	Other Injury Factors
Appendix A8	Authority to Deal With Representative
Appendix B1	Deductive Export Price
Appendix B2	Constructed Normal Value

AS/NZS 4671:2001  
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

**Steel reinforcing materials**

## **AS/NZS 4671:2001**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-084, Reinforcing and Prestressing Materials. It was approved on behalf of the Council of Standards Australia on 18 January 2001 and on behalf of the Council of Standards New Zealand on 9 March 2001. It was published on 2 April 2001.

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The following are represented on Committee BD-084:

Association of Consulting Engineers, Australia  
Australian Chamber of Commerce and Industry  
Australian Post Tensioning Association  
Australian Steel Association  
AUSTROADS  
Bureau of Steel Manufacturers of Australia  
Cement & Concrete Association of New Zealand  
Galvanizers Association of Australia  
Institution of Professional Engineers New Zealand  
Master Builders Australia  
National Precast Concrete Association Australia  
New Zealand Manufacturers' Federation  
Steel Reinforcement Institute of Australia

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*This Standard was issued in draft form for comment as DR 98119.*

# Australian/New Zealand Standard™

## Steel reinforcing materials

Originated in Australia as part of AS A81—1958, AS A82—1958, AS A83—1958, AS A84—1958, AS A92—1958 and AS A97—1965.  
Previous Australian editions AS 1302—1991, AS 1303—1991 and AS 1304—1991.  
Originated in New Zealand as part of NZS 197:1949 NZS 1255:1956, NZS 1693:1962, NZS 1879:1964 and NZS 3423P:1972.  
Previous New Zealand editions NZS 3421:1975, NZS 3422:1975 and NZS 3402:1989.  
AS 1302—1991, AS 1303—1991, AS 1304—1991, NZS 3421:1975, NZS 3422:1975 and NZS 3402:1989 jointly revised, amalgamated and redesignated AS/NZS:4671:2001.  
Reissued incorporating Amendment No. 1 (5 June 2003).

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Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 3752 8

## PREFACE

This Standard was prepared by the Standards Australia/Standards New Zealand Committee BD/84, Reinforcing and Prestressing Materials, to supersede the following Standards:

- AS 1302—1991 *Steel reinforcing bars for concrete*  
 AS 1303—1991 *Steel reinforcing wire for concrete*  
 AS 1304—1991 *Welded wire reinforcing fabric for concrete*  
 NZS 3402:1989 *Steel bars for the reinforcement of concrete*  
 NZS 3421:1975 *Specification for hard drawn mild steel wire for concrete reinforcement. Metric units*  
 NZS 3422:1975 *Specification for welded fabric of drawn steel wire for concrete reinforcement*

*This Standard incorporates Amendment No. 1 (5 June 2003). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

To permit the reinforcing steel and reinforced concrete design industries with time to adjust to the new Standard, the above six standards will remain current and will be withdrawn 12 months from the date of publication of this Standard.

The objective of the Standard is to provide a single specification of material requirements for steel bars, wire and mesh, intended for use in reinforced concrete structures which have been designed in accordance with AS 3600 or NZS 3101.1.

Differences between this Standard and current Standards are briefly outlined below.

### 1 General

A major departure from the current Standards is that this document applies to reinforcement generally, irrespective of the process of its manufacture.

Although closely aligned technically with both ISO 6935, *Steel for the reinforcement of concrete*, and the European Pre-Standard DDENV 10080, *Steel for the reinforcement of concrete—Weldable ribbed reinforcing steel B500 — Technical delivery conditions for bars, coils and welded fabric*, the Standard is not classed as ‘technically equivalent’ to either of these documents primarily because—

- (a) both ISO 6935 and ENV 10080 require mandatory third party assessment of compliance, contrary to the principles of Standards Australia and Standards New Zealand in this regard (see Appendix A);
- (b) ISO 6935 does not contain specific requirements appropriate for reinforcement for earthquake-resistant structures; and
- (c) consequent differences in both the text and numerical values, although minor in nature, are too numerous to meet the strict definition of ‘technically equivalent’.

In choosing to vary the above documents where they considered it necessary, the Committee took into account the fact that, to date, neither document has found wide acceptance.

### 2 Strength grades

Only three strength Grades have been considered, i.e., those having lower characteristic yield strengths of 250 MPa, 300 MPa and 500 MPa respectively. The 500 Grade material replaces the Grade 400/450 Australian and the Grade 430/485 New Zealand materials, while

the Grade 300 material corresponds closely to the current New Zealand Standard. Plain round material other than grade 300E is required to correspond to AS/NZS 3679.

Requirements for Grade 500 steel have been developed from ENV 10080, while those for earthquake-resistant applications have been developed from the current edition of NZS 3402.

### 3 Ductility classes

The need to provide reinforcement with ductility appropriate to earthquake-resistant concrete structures, coupled with recent investigations into the structural consequences of the relatively low ductility of cold-worked reinforcement, has led to the introduction of three ductility classes. These are distinguished in requirements by the letters 'L' (low), 'N' (normal) and 'E' (earthquake), placed immediately after the strength-grade number, corresponding with different minimum values for uniform elongation and maximum stress to yield stress ratio.

### 4 Chemical and mechanical properties

Adjustments have been made to the chemical composition, carbon equivalent, and mechanical properties parameters, as necessary, to satisfy the (sometimes conflicting) requirements of strength, ductility and weldability.

### 5 New inclusions

In addition to the items noted above the following new material has been included:

- (a) *Production control* in all stages of manufacture is a specific requirement (Clauses 6.3 and 8) with the details of how it is to be achieved being spelt out in Appendix B.
- (b) *Purpose-made meshes* are covered in Clause 7.5.4 and distinguished from the commonly available meshes, whereas only stock meshes were previously specified.
- (c) *Identification* rules for the standard strength grades and ductility classes are given and illustrated in Clause 9 so that the different materials can be readily differentiated visually on site and distinguished from previously manufactured materials.
- (d) *The bond test* in Appendix C has been introduced as an alternative means for demonstrating the ability of deformed reinforcement to develop sufficient bond to achieve its characteristic yield strength when embedded in concrete.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.



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## FOREWORD

Prior to 1995, responsibility for the Australian/New Zealand Standards on steel reinforcing and prestressing materials lay with Committee BD-023, Structural Steels, whose interest and expertise were mainly oriented toward materials for steel structures rather than for concrete structures. In recognition of this and in pursuance of the Memorandum of Understanding between Standards Australia and Standards New Zealand, a new joint Australian/New Zealand committee (BD-084) was formed in December 1994 to take on the specific responsibility of upgrading and harmonizing the relevant reinforcing and prestressing materials Standards of both countries.

At about this time, the results of international and local research indicated markedly different ductile behaviour between concrete members containing either hot-rolled or cold-rolled reinforcement. As this has consequent implications in the design and detailing for both normal and earthquake-resistant structures, concerns were being expressed regarding the status of the current high strength steels and, in particular, welded mesh.

The Australian Standards most directly affected by the latter material are AS 2870, *Residential slabs and footings*, and AS 3600, *Concrete structures*. The Committees responsible for those Standards (BD-025 and BD-002 respectively) have reviewed the implications of the proposals in this Standard and as a result have taken the following actions:

- (a) The latest edition of AS 2870 (June 1996) permits the substitution of ribbed-wire meshes, on an equivalent strength basis with a minimum uniform elongation requirement, for the plain-wire meshes generally specified in that Standard and foreshadows the introduction of this Standard.
- (b) Committee BD-002 has set up a special Working Group to investigate the consequences, in both design and detailing requirements, of using low ductility steels for reinforcement. As an interim measure, Amendment 1 to AS 3600—1994 (August 1996) introduced limitations on the use of this material in negative moment regions and flagged other areas where caution in its use should be exercised. When the investigations have been completed and all the results assessed, it is anticipated that further amendments will be necessary and that they will be published at or about the same time as this Standard.

While this Standard theoretically provides for three ductility classes and three strength grades, it should be realized that some of the possible combinations are not technically achievable in practice. Furthermore, from a simple commercial viewpoint, it is unlikely that all achievable combinations will be produced in either country. Specifically, it is envisaged that 500E steels are unlikely to be used in Australia, it being considered that Australia's generally low seismicity can be adequately accounted for by using Normal (N) class steels. Conversely, Normal class steels are unlikely to be used in New Zealand where the seismicity is generally high.

It is felt that this joint Standard will enable a number of significant benefits to the concrete construction industry, namely—

- (i) more efficient use of materials, and for designers to detail less congested reinforcing layouts (particularly in columns and walls) with the use of higher strength steels;
- (ii) more reliable member performance as a result of the clarification of minimum ductility levels;
- (iii) more uniform product as a result of tighter conformance requirements; and
- (iv) greater compatibility between 'design' and 'production' parameters (e.g. characteristic values),

all of which should lead to more efficient, reliable and cost effective concrete structures.

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard**  
**Steel reinforcing materials**

**1 SCOPE**

This Standard specifies requirements for the chemical composition and the mechanical and geometrical properties of reinforcing steel used for the reinforcement of concrete in the form of—

- (a) deformed or plain bars and coils;
- (b) machine-welded mesh; and
- (c) continuously threaded bars.

This Standard does not apply to prestressing steels, stainless steel reinforcement, epoxy-coated steels and galvanized steels.

**NOTES:**

- 1 Means for demonstrating compliance with this Standard are given in Appendix A.
- 2 Prestressing steels are covered by AS 1310, AS 1311, AS 1313.
- 3 Information on stainless steel reinforcement may be found in other internationally (accepted) Standards such as BS 6744 or ASTM A955M.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard.

<b>AS</b>	
1199	Sampling procedures and tables for inspection by attributes
1310	Steel wire for tendons in prestressed concrete
1311	Steel tendons for prestressed concrete — 7-wire stress-relieved steel strand
1313	Steel tendons for prestressed concrete — Cold-worked high-tensile alloy steel bars for prestressed concrete
1391	Methods for tensile testing of metals
1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
1554	Structural steel welding
1554.3	Part 3: Welding of reinforcing steel
2193	Methods for calibration and grading of force-measuring systems of testing machines
<b>AS/NZS</b>	
1050	Methods for the analysis of iron and steel
3679	Structural steel
3679.1	Part 1: Hot-rolled bars and sections
<b>ISO</b>	
A1   15630-1	Steel for the reinforcement and prestressing of concrete—Test methods, Part 1: Reinforcing bars, wire rod and wire
15630-2	Steel for the reinforcement and prestressing of concrete—Test methods, Part 2: Welded fabric

SAI

HB 18 Guidelines for third-party certification and accreditation

HB 18.28 Guide 28: General rules for a model third-party certification scheme for products

### 3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

#### 3.1 Ageing

Heating of the test specimen to  $100 \pm 10^\circ\text{C}$ , maintaining this temperature for a period of 1 h +15, -0 min and then cooling the specimen in still air to room temperature.

#### 3.2 Bar

A straight length of reinforcing steel.

#### 3.3 Characteristic value

##### 3.3.1 Lower characteristic value ( $C_{vL}$ )

The value of a property having a prescribed (high) probability (p) of being exceeded in a hypothetical unlimited series of standard tests.

NOTE: The probability of a test value being below this value is  $(1 - p)$  at a confidence level of 0.9.

##### 3.3.2 Upper characteristic value ( $C_{vU}$ )

The value of a property having a prescribed (high) probability (p) of not being exceeded in a hypothetical unlimited series of standard tests.

NOTE: The probability of a test value being above this value is  $(1 - p)$  at a confidence level of 0.9.

#### 3.4 Decoiled steel

Reinforcing steel manufactured in coils and subsequently processed.

#### 3.5 Deformed reinforcement

##### 3.5.1 Indented reinforcement

Reinforcing steel with at least two rows of transverse indentations, which are distributed uniformly along the entire length.

##### 3.5.2 Ribbed reinforcement

Reinforcing steel with at least two rows of transverse ribs, which are distributed uniformly along the entire length.

#### 3.6 Mesh

Longitudinal and transverse bars of the same or different diameter and length, which are arranged substantially at right angles and factory electrical resistance welded by automatic machines at points of intersection.

#### 3.7 Mesh, length of

The longest side of the mesh, irrespective of the manufacturing direction.

#### 3.8 Mesh, longitudinal bars in

The reinforcing steel in the manufacturing direction of the mesh.

**3.9 Mesh, overhang of**

Length of longitudinal or transverse bars projecting beyond the centre of the outer crossing bar in the mesh. For twin bar mesh, the overhang is measured from the midpoint line of the adjacent bars (see Figure 3).

**3.10 Mesh, pitch of**

The centre-to-centre distance of bars in the mesh. For twin bar mesh, the pitch is measured between the midpoint of the adjacent bars (see Figure 3).

**3.11 Mesh, purpose made**

Mesh manufactured according to specific requirements.

**3.12 Mesh, transverse bars in**

Reinforcing steel perpendicular to the manufacturing direction of the mesh.

**3.13 Mesh, twin bars in**

Two bars of the same designation placed adjacent to each other as a pair.

**3.14 Mesh, width of**

The shortest side of the mesh, irrespective of the manufacturing direction.

**3.15 Plain reinforcing steel**

Reinforcing steel without surface deformations excluding identifying marks.

**3.16 Reinforcing steel**

Steel with a circular or practically circular cross-section, which is suitable for the reinforcement of concrete.

**3.17 Rib, longitudinal**

Uniform continuous protrusion parallel to the axis of the reinforcing steel.

**3.18 Rib, transverse**

Any protrusion on the surface of the product other than a longitudinal rib.

**3.19 Steel producer**

The organization responsible for producing reinforcing steel in bar or coil form from a hot-rolling process.

**3.20 Steel processor**

The organization responsible for subsequent processing of reinforcing steel supplied by a steel producer, which significantly changes the shape and properties of the steel. The processing may include cold-rolling, cold-drawing, decoiling and straightening, or automatic, electrical-resistance welding.

**4 NOTATION**

The following symbols are used in this Standard.

- $A_{gt}$  = the percentage elongation at maximum force when tested in accordance with Appendix C, as a percentage
- $A_s$  = the nominal cross-sectional area of a reinforcing steel, in millimetres squared
- $a$  = pitch of bars in a mesh, in millimetres
- $C_{vL}$  = lower characteristic value of a variable parameter
- $C_{vU}$  = upper characteristic value of a variable parameter

- $c$  = the longitudinal pitch of the transverse deformations measured parallel to the axis of the reinforcing steel, in millimetres
- $d$  = the nominal diameter of a reinforcing steel, in millimetres
- $f_P$  = the specific projected area of transverse indentations
- $f_R$  = the specific projected area of transverse ribs
- $g$  = the circumferential gap between deformations
- $h$  = the rib height or indentation depth, in millimetres
- $k_i$  = a coefficient
- $L_n$  = the nominal length of a bar, in millimetres
- $n$  = the number of tests in a series of tests; or  
= the number of longitudinal bars in a particular trench mesh
- $R_e$  = the value of the yield stress (or 0.2% proof stress) determined from a single tensile test in accordance with AS 1391, in megapascals
- $R_{ek,L}$  = the lower characteristic value of the yield stress determined from a series of tensile tests, in megapascals
- $R_{ek,U}$  = the upper characteristic value of the yield stress determined from a series of tensile tests, in megapascals
- $R_m$  = the value of the maximum tensile strength determined from a single tensile test in accordance with AS 1391, in megapascals
- $u$  = edge overhang of a bar in a mesh, in millimetres
- $w_c$  = the crest width of ribs
- $w_i$  = the indentation width
- $\alpha$  = rib flank inclination (See Figure 2)
- $\beta$  = angle of inclination between the centre-line of the transverse deformation and the longitudinal axis of the reinforcing steel (see Figure 1)

## 5 CLASSIFICATION AND DESIGNATION

### 5.1 Classification

Reinforcing steel shall be classified by—

- shape, as characterized by the presence or absence of ribs or indentations on its surface;
- strength grade, as specified by the lower characteristic value of its yield stress ( $R_{ek,L}$ );
- relative ductility, as characterized by its uniform elongation ( $A_{gt}$ ) and ratio of tensile strength to yield stress ( $R_m/R_e$ );
- size, as characterized by its nominal diameter.

### 5.2 Designation

Each of the reinforcing steels described in Clause 5.1 shall be designated by distinguishing letters or numbers in the following manner:

- Shape—by the letters, R, D, or I, representing plain (Round), Deformed ribbed, or deformed Indented, surfaces respectively.
- Strength grade—by the numerical value of the lower characteristic yield stress expressed in megapascals.

- (c) Ductility Class—by the letters L, N or E representing Low, Normal or seismic (Earthquake) ductility respectively, in accordance with Table 2.
- (d) Size—by the numerical value of the nominal diameter expressed in millimetres.

The designators shall be stated in the order of shape, strength grade, ductility class and size.

Full designators shall be used in all communications unless the use of abbreviated forms causes no ambiguity, and the omitted characteristics can be readily distinguished or deduced.

NOTES:

- 1 For example, a deformed ribbed bar, of grade 500 MPa normal ductility steel with a nominal 16 mm diameter, would be designated as 'D500N16'.
- 2 In the example given in Note 1, if all the reinforcement ordered or required for a particular project was to be deformed ribbed bars of the same strength grade but varied in other characteristics, and there was a general note to this effect in the project plans and specifications, the designation may be abbreviated to 'N16'.

### 5.3 Standard grades

The standard grades of reinforcing steels, characterized by their strength grade and relative ductility class shall be as follows:

- (a) 250N.
- (b) 300E.
- (c) 500L.
- (d) 500N.
- (e) 500E.

### 5.4 Designation of welded mesh

Welded mesh shall be designated by distinguishing letters or numbers in the following manner:

- (a) Shape—by the letters, R, D, or I, representing plain (Round), Deformed ribbed, or deformed Indented, surfaces respectively.
- (b) Strength grade—by the numerical value of the lower characteristic yield stress expressed in megapascals.
- (c) Configuration of the orthogonal bars—by the letters S or R, representing Square or Rectangular configurations.
- (d) Ductility Class—by the letters L, N or E representing Low, Normal or seismic (Earthquake) ductility respectively, in accordance with Table 2.
- (e) Size—by the numerical value of the nominal bar diameter in the longitudinal direction, expressed in millimetres.
- (f) Transverse spacing of the longitudinal steel—by the numerical value of the transverse spacing, expressed in millimetres, divided by 100.
- (g) Transverse reinforcement for rectangular configured welded mesh—by the numerical value of the nominal bar diameter expressed in millimetres. Transverse reinforcement shall be of the same shape, strength grade and ductility class as the longitudinal reinforcing steel. Unless noted otherwise, transverse reinforcement is usually spaced at 200 mm centres.

The designators shall be stated in the order shape, strength, configuration, ductility, size, spacing and secondary reinforcement if applicable.

Full designators shall be used in all communications unless the use of abbreviated forms causes no ambiguity, and the omitted characteristics can be readily distinguished or deduced.

NOTES:

- 1 For example, a square mesh consisting of 9 mm diameter deformed ribbed bar at 200 mm centres, of grade 500 MPa low ductility steel, would be designated as 'D500SL92'.
- 2 In the example given in Note 1, if all the welded mesh ordered or required for a particular project was to be deformed ribbed bars, of the same strength grade but may vary in other characteristics, and there was a general note to this effect in the project plans and specifications, the designation may be abbreviated to 'SL92'.

## 6 MANUFACTURING METHODS

### 6.1 Production

Production methods, including method of deoxidization of the steel, shall be at the discretion of the steel producer and shall be reported if so requested.

### 6.2 Processing

#### 6.2.1 Bars and coils

Processing methods for bars and coils shall be at the discretion of the steel processor and shall be reported if so requested.

Processing of coiled steel shall only be carried out in such a way that ensures the material properties of this Standard are met.

#### 6.2.2 Mesh

All mesh shall be factory made and machine welded. The joints at the intersections of the longitudinal bars and the transverse bars shall be made by electrical resistance welding to provide shear resistant connections complying with Clause 7.2.5. Mesh that includes butt welded bars shall be permitted.

### 6.3 Manufacturing control

Production and processing shall be subject to continual control in accordance with Clause 8 and Appendix B.

## 7 CHEMICAL, MECHANICAL AND DIMENSIONAL REQUIREMENTS

### 7.1 Chemical composition and weldability

The chemical composition of the steels, expressed as percentages by mass of the non-ferrous constituents, shall be determined in accordance with the relevant item of Clause 8, and the results, including the calculated carbon equivalent, shall comply with the corresponding values specified in Table 1.

The carbon equivalent value ( $C_{eq}$ ) shall be determined by the following equation:

$$C_{eq} = C + \frac{Mn}{6} + \frac{Cr + Mo + V}{5} + \frac{Ni + Cu}{15}$$

where the symbols of the chemical elements indicate their content in percent by mass.

The steels conforming to this Standard shall be deemed to be weldable under the conditions specified for each class in AS 1554.3.



## 7.2 Mechanical properties

### 7.2.1 General

Mechanical properties of the standard grades of reinforcing steels shall be determined in accordance with the relevant item of Clause 8 and the values obtained shall satisfy the appropriate criteria given in Table 2.

In all determinations of mechanical properties, the condition of test pieces at the time of testing shall be as given in Table 3.

**TABLE 1**  
**COMPOSITION OF REINFORCING STEELS**

Type of analysis	Chemical composition, % max.							
	All grades			Carbon equivalent value ( $C_{eq}$ ) for standard grades				
	C	P	S	250N	500L	500N	300E	500E
Cast analysis	0.22	0.050	0.050	0.43	0.39	0.44	0.43	0.49
Product analysis	0.24	0.055	0.055	0.45	0.41	0.46	0.45	0.51

**TABLE 2**  
**CHARACTERISTIC MECHANICAL PROPERTIES OF REINFORCING STEELS**

Property	250N (Note 1)	500L (Note 2)	500N	300E (Seismic)	500E (Seismic)	Type of specified value
Yield stress (MPa)	$R_{ek,L}$	$\geq 250$	$\geq 500$	$\geq 300$	$\geq 500$	$C_{vL}$ : p = 0.95
	$R_{ek,U}$	—	$\leq 750$	$\leq 380$	$\leq 600$	$C_{vU}$ : p = 0.05
Ratio	$R_m/R_e$	$\geq 1.08$	$\geq 1.03$	$\geq 1.15$	$\geq 1.15$	$C_{vL}$ : p = 0.90
		—	—	$\leq 1.50$	$\leq 1.40$	$C_{vU}$ : p = 0.10
Uniform elongation $A_{gt}$ (%)	$\geq 5.0$	$\geq 1.5$	$\geq 5.0$	$\geq 15.0$	$\geq 10.0$	$C_{vL}$ : p = 0.90

NOTES:

- Grade 250N may be supplied as plain round reinforcing steel complying with AS 3679.1, except that the tolerance on the diameter and roundness does not apply.
- For 500L steels, the only requirement for  $d < 5.0$  mm is  $R_{ek,L} \geq 500$  MPa.

**TABLE 3**  
**CONDITION OF TEST PIECES FOR MECHANICAL PROPERTIES**

Manufacturing and delivery condition of the reinforcing steel	Condition of testing (test pieces)
Produced in straight lengths or coils by hot rolling	As produced*
Produced in straight lengths by cold working	Aged†
Produced as coil and delivered in straight lengths	Aged†
Produced by cold working and delivered as coil	Straightened and aged†
Welded mesh	Aged†

\* Coiled product shall be straightened before testing

† Except for the rebend test, see Clause 7.2.3

### 7.2.2 Tensile properties

The yield stress ( $R_e$ ), maximum tensile strength ( $R_m$ ) and uniform elongation ( $A_{gt}$ ) shall be determined in accordance with Clause 8.

The values for  $R_e$  and  $R_m$  shall be calculated using the nominal cross-sectional areas of the reinforcing steels.

For the yield stress ( $R_e$ ) specified in Table 2, the lower yield stress shall apply. If an observable yield phenomenon is not present, the 0.2% proof stress ( $R_{p0.2}$ ), or the stress for a total elongation of 0.5% ( $R_{t0.5}$ ) shall be determined.

In cases of dispute, the 0.2% proof stress ( $R_{p0.2}$ ) shall apply.

Test specimens shall have a maximum out-of-straightness of  $L_n/50$ .

### 7.2.3 Bending and rebending properties

This property applies to deformed reinforcing steels only. The suitability of bars for bending or rebending shall be determined by bending around the stated mandrel diameters and angles specified in Table 4.

For bars subject to the rebend test, after the initial 90° bend, the bars shall be aged and cooled and then bent in the reverse direction through the appropriate rebend angle specified by applying a constant force. After bending or rebending there shall be no visible evidence of cracking on the surface of the test bar, when inspected with the naked eye or with normal corrected vision.

A1 NOTE: In case of dispute the rebent bar may be subject to a tensile test and will be deemed to have passed the rebend requirements if the mechanical properties of this piece comply with Table 2.

TABLE 4

MANDREL DIAMETER AND ANGLE FOR BEND AND REBEND TEST

Nominal diameter (mm)	Mandrel diameter for ductility class			Bend angle	Bend angle after 90° initial bend
	L	N	E		
$d \leq 16$	$3d$			90°	20°
		$4d$	$4d$		90°
$d \geq 20$		$4d$	$4d$	180°	NA

### 7.2.4 Fatigue strength

If fatigue testing is requested by the purchaser, it may be carried out subject to an appropriate agreement being reached between the parties concerned.

### 7.2.5 Shear strength of joints in mesh

The shear strength of welded joints in mesh shall be determined in accordance with the relevant item of Clause 8. The welded connection at the intersection of bars in a mesh shall be capable of resisting a direct shear force of not less than  $0.5 R_{ek,L} A_s$ .

where

$R_{ek,L}$  = the specified lower characteristic yield stress, in megapascals

$A_s$  = the nominal cross-sectional area of the largest bar at the joint, in millimetres squared

Where the bar size differential is equal to or exceeds 3 mm, then these meshes shall not be subject to the tests of shear strength of welded joints in mesh.

### 7.3 Geometric properties

#### 7.3.1 Diameters, cross-sectional areas and masses

Values for the preferred nominal diameter, cross-sectional area and mass for some reinforcing bars are given in Tables 5A and 5B.

When determined in accordance with the relevant item of Clause 8, the mass per metre length of any size bar shall have a tolerance of  $\pm 4.5\%$ .

#### 7.3.2 Lengths of bars

The nominal lengths of bars ( $L_n$ ) shall be agreed at the time of order.

Unless otherwise specified, the permissible deviation from the nominal length shall be as follows:

- (a) For  $L_n \leq 7.0$  m ..... + 0, - 40 mm.
- (b) For  $7.0$  m  $< L_n < 12.0$  m ..... + 40, - 40 mm.
- (c) For  $L_n > 12.0$  m ..... + 60, - 40 mm.

NOTE: Bar lengths may use length tolerances as per AS/NZS 3679.1 by agreement.

#### 7.3.3 Straightness tolerance

Unless specified otherwise, the tolerance on straightness shall be as follows:

- (a) For  $d \leq 16$  mm .....  $L_n / 50$ .
- (b) For  $d \geq 20$  mm .....  $L_n / 100$ .

#### 7.3.4 Coil size

The mass and dimensions of the coils shall be agreed at the time of order.

**TABLE 5A**  
**PREFERRED NOMINAL DIAMETERS, CROSS-SECTIONAL AREAS**  
**AND MASSES FOR REINFORCING STEELS (AUSTRALIA ONLY)**

Nominal diameter mm	Cross-sectional area mm <sup>2</sup>	Mass per metre length, kg/m	Product grade and class
			500
12.0	113	0.888	N
16.0	201	1.58	N
20.0	314	2.47	N
24.0	452	3.55	N
28.0	616	4.83	N
32.0	804	6.31	N
36.0	1020	7.99	N

NOTE: The values for the mass per unit length given in Table 5A have been calculated from the values for the nominal diameter using a density value of 7850 kg/m<sup>3</sup>.

**TABLE 5B**  
**PREFERRED NOMINAL DIAMETERS, CROSS-SECTIONAL AREAS AND**  
**MASSES FOR REINFORCING STEELS (NEW ZEALAND ONLY)**

Nominal diameter mm	Cross-sectional area mm <sup>2</sup>	Mass per metre length, kg/m	Product grade and class	
			300	500
6.0	28.3	0.222	E	E
10.0	78.5	0.617	E	E
12.0	113	0.888	E	E
16.0	201	1.58	E	E
20.0	314	2.47	E	E
25.0	491	3.85	E	E
32.0	804	6.31		E
40.0	1260	9.86		E

NOTE: The values for the mass per unit length given in Table 5B have been calculated from the values for the nominal diameter area using a density value of 7850 kg/m<sup>3</sup>.

## 7.4 Surface geometry

### 7.4.1 General

The deformed steel bars and coils covered by this Standard shall be characterized by their surface geometry (dimensions, number and configuration of transverse and longitudinal ribs or indentations) by means of which increased bond with the concrete is achieved. The geometry of ribs or indentations shall comply with Clause 7.4.2.1, 7.4.2.2 and 7.4.2.3. For deformed reinforcement, achievement of the required bond with concrete shall be demonstrated by compliance with Clause 7.4.2.4 or by a bond test in accordance with Paragraph C4 of Appendix C.

NOTE: Geometry of indentations complying with Clause 7.4.2 does not imply similar high bond performance to ribbed bars complying with Clause 7.4.2.

### 7.4.2 Geometry of ribs and indentations

#### 7.4.2.1 General

The reinforcing steels shall have two or more rows of parallel transverse ribs or indentations equally distributed around the circumference and with a uniform spacing along the entire length excepting identifying markings. For ribbed bars, longitudinal ribs may or may not be present.

Methods for determining the geometry of ribs and indentations are provided in Paragraph C3 of Appendix C.

#### 7.4.2.2 Transverse ribs or indentations

The projection of the transverse ribs of a bar cross-section shall extend over approximately 75% or more of the circumference, calculated from the nominal diameter.

The angle ( $\beta$ ) of rib or indentation inclination to the axis of the bar shall be not less than 45°. Where the angle is greater than 45° and is less than 70°, then longitudinal ribs complying with Clause 7.4.2.3, shall be present and/or at least one row of ribs or indentations shall be in the reverse direction to the other rows (see Figure 1).

The rib flank inclination ( $\alpha$ ) shall be not less than 45° and the ribs shall be radiused at the transition to the core of the product (see Figure 2).

The rib height ( $h$ ) shall be  $0.05d$  to  $0.10d$  and the longitudinal spacing ( $c$ ) of the ribs shall be between  $0.5d$  to  $1.0d$  (see Figures 1 and 2). The crest width of ribs ( $w_c$ ) shall be not greater than  $0.3c$ .

The indentation depth ( $h$ ) shall be between  $0.03d$  and  $0.10d$  and the longitudinal spacing ( $c$ ) of the indentations shall be between  $0.5d$  and  $2.0d$  (see Figure C2, Appendix C). The width of indentations ( $w_i$ ) shall be not less than  $0.5c$ .

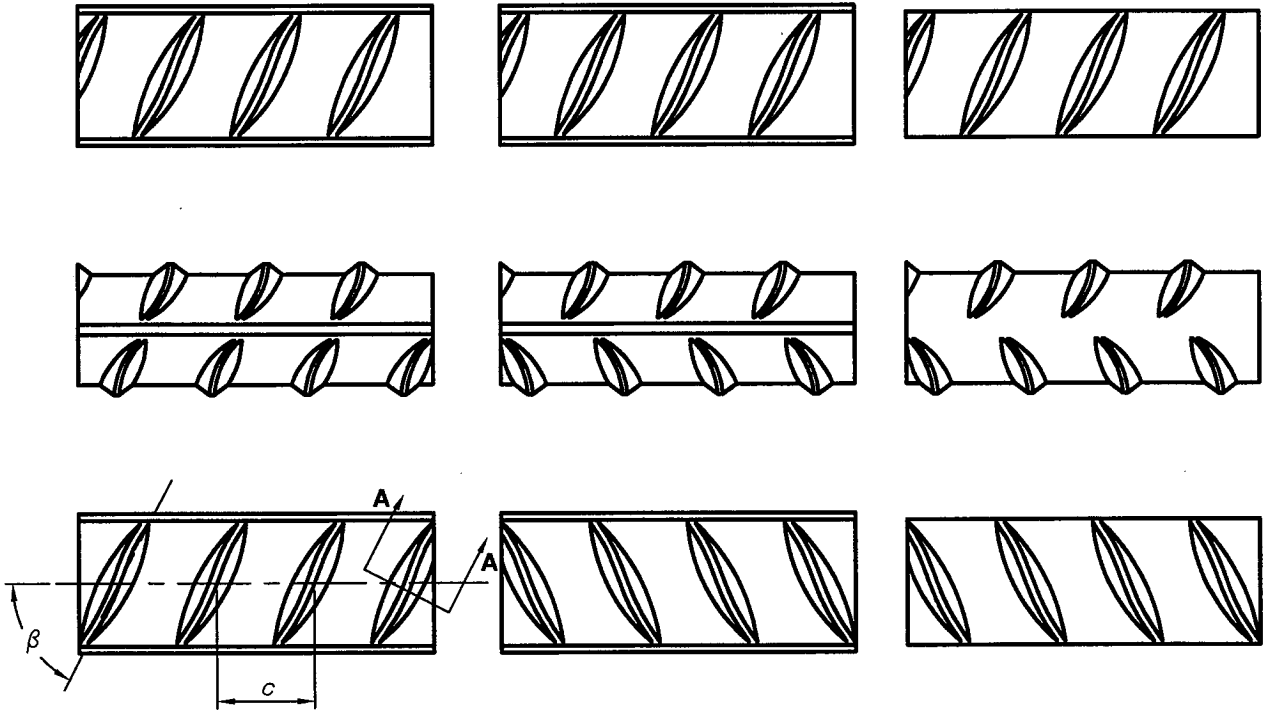


FIGURE 1 EXAMPLES OF RIB GEOMETRY  
(Examples with two rows of transverse ribs)

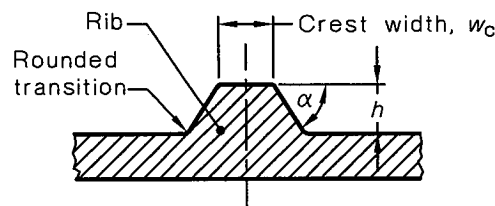


FIGURE 2 RIB FLANK INCLINATION ( $\alpha$ ) AND RIB HEIGHT ( $h$ )  
(SECTION A.A ON FIGURE 1)

7.4.2.3 Longitudinal ribs

Where longitudinal ribs are required by Clause 7.4.2.2, their height shall be not less  $0.025d$  and not more than  $0.10d$ .

#### 7.4.2.4 Specific projected area

The specific projected area of ribs ( $f_R$ ) or indentations ( $f_P$ ), shall be determined in accordance with Appendix C. When so determined, the minimum value shall be as follows:

(a) For ribs ( $f_R$ ):

- (i) 0.036 for .....4.0 mm  $\leq d < 5.0$  mm..
- (ii) 0.039 for .....5.0 mm  $\leq d \leq 6.0$  mm.
- (iii) 0.045 for .....6.0 mm  $< d \leq 8.0$  mm..
- (iv) 0.052 for .....8.0 mm  $< d \leq 10.0$  mm..
- (v) 0.056 for .....10.0 mm  $< d \leq 40.0$  mm.

(b) For indentations ( $f_P$ ):

- (i) 0.012 for .....4.0 mm  $\leq d < 5.0$  mm.
- (ii) 0.015 for .....5.0 mm  $\leq d \leq 6.0$  mm.
- (iii) 0.020 for .....6.0 mm  $< d \leq 8.0$  mm.
- (iv) 0.025 for .....8.0 mm  $< d \leq 10.0$  mm.
- (v) 0.030 for .....10.0 mm  $< d \leq 16.0$  mm.

### 7.5 Form and dimensions of mesh

#### 7.5.1 General

Each sheet shall contain not less than the number of bars appropriate to its specified length, width, pitch and overhang dimensions.

#### 7.5.2 Bar arrangement

The bar arrangement shall be single bars, twin bars or a combination of these.

#### 7.5.3 Commonly available mesh

Commonly available mesh sizes are specified in Table 6A (Australia only) and Table 6B (New Zealand only).

#### 7.5.4 Purpose-made mesh

Purpose-made mesh shall be specified by bar designation and configuration.

NOTE: Before detailing purpose-made mesh, specifiers should ascertain any limitations on length, width, configuration, or mass of sheets that may be imposed by the manufacturing plant or equipment.

**TABLE 6A**  
**COMMONLY AVAILABLE MESH SIZES (AUSTRALIA ONLY)**

Mesh type and reference number	Longitudinal bars		Cross-bars		Mass for 6 × 2.4 m sheets		Cross-sectional area/m width	
	No. × dia., mm	Pitch, @ mm	No. × dia., mm	Pitch, @ mm	Unit area, kg/m <sup>2</sup>	Sheet, kg	Long'l bars, mm <sup>2</sup> /m	Cross bars, mm <sup>2</sup> /m
Rectangular								
RL1218	25 × 11.9	100	30 × 7.6	200	10.5	157	1112	227
RL1018	25 × 9.5	100	30 × 7.6	200	7.3	109	709	227
RL818	25 × 7.6	100	30 × 7.6	200	5.3	79	454	227
Square, with edge side-lapping bars								
SL102	10 × 9.5 + 4 × 6.75	200 100	30 × 9.5	200	5.6	80	354	354
SL92	10 × 8.6 + 4 × 6.0	200 100	30 × 8.6	200	4.6	66	290	290
SL82	10 × 7.6 + 4 × 6.0	200 100	30 × 7.6	200	3.6	52	227	227
SL72	10 × 6.75 + 4 × 5.0	200 100	30 × 6.75	200	2.8	41	179	179
SL62	10 × 6.0 + 4 × 5.0	200 100	30 × 6.0	200	2.2	33	141	141
Square, without edge side-lapping bars								
SL81	25 × 7.6	100	60 × 7.6	100	7.1	105	454	454
Trench meshes								
L12TM	n × 11.9	100	20 × 5.0	300	N/A	N/A	1112	65
L11TM	n × 10.7	100	20 × 5.0	300	N/A	N/A	899	65
L8TM	n × 7.6	100	20 × 5.0	300	N/A	N/A	454	65

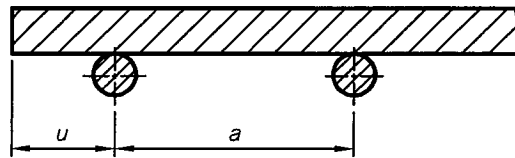
A1 NOTE: The edge bars on SL meshes may be replaced by smaller edge wires of equal or greater cross-sectional area, in total, then the main longitudinal bars being replaced, provided the smaller bars meet the minimum ductility requirements of the bar or bars to be replaced.

**TABLE 6B**  
**COMMONLY AVAILABLE MESH SIZES (NEW ZEALAND ONLY)**

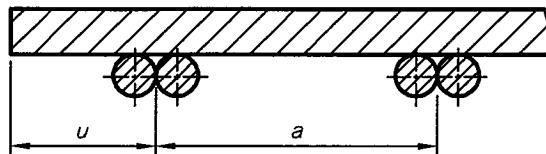
Mesh type and reference number	Longitudinal bars		Cross-bars		Mass for 6 × 2.4 m sheets		Cross-sectional area/m width	
	No. × dia., mm	Pitch, @ mm	No. × dia., mm	Pitch, @ mm	Unit area, kg/m <sup>2</sup>	Sheet, kg	Long'l bars, mm <sup>2</sup> /m	Cross bars, mm <sup>2</sup> /m
Structural								
SE92	13 × 9.0	200	30 × 9.0	200	5.0	75	318	318
SE82	13 × 8.0	200	30 × 8.0	200	3.9	59	251	251
SE72	13 × 7.0	200	30 × 7.0	200	3.0	45	192	192
SE62	13 × 6.0	200	30 × 6.0	200	2.2	33	141	141
Non-structural								
SL51.5	17 × 5.3	150	40 × 5.3	150	2.2	32	147	147
SL41.5	17 × 4.0	150	40 × 4.0	150	1.3	19	84	84

**7.5.5 Pitch**

The pitch (*a*) of longitudinal bars and transverse bars shall not be less than 50 mm. The pitch shall be measured as shown in Figure 3. The tolerance of the pitch shall not be more than ±0.075 times the specified value.



(a) Single-bar meshes



(b) Twin-bar meshes

**LEGEND:**

- u* = edge overhang of a bar in a mesh (mm)
- a* = pitch of bars in a mesh (mm)

**FIGURE 3 PITCH OF BARS AND OVERHANG OF BARS**

**7.5.6 Sheet size tolerances**

The permitted maximum deviations from the specified dimensions of mesh are as follows:

- (a) Sheet dimensions ≤ 6 m in length .....40 mm.
- (b) Sheet dimensions > 6 m in length .....±0.7%.



### 7.5.7 Welds

Welded joints shall withstand normal transport and handling without breaking. The presence of broken welds shall not constitute a cause for rejection unless—

- (a) in mesh supplied in sheets, the number of broken welds per sheet exceeds 1% of the total number of welded joints; or
- (b) in mesh supplied in rolls, the number of broken welds in any single continuous area of 15 m<sup>2</sup> measured over the full width of the mesh exceeds 1% of the total number of welded joints in that area; or
- (c) more than 50% of the permissible maximum number of broken welds in Items (a) and (b) above are located on any one wire.

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### 7.5.8 Deemed to comply rib or indentation geometry

Where anchorage is to be provided by the cross-weld, the requirements for rib or indentation geometry shall be deemed to be satisfied, provided the rib height or indentation depth exceeds 0.03*d*.

## 8 SAMPLING AND TESTING FOR MANUFACTURING CONTROL

For the purpose of satisfying the requirements of Clause 6.3 and Clauses 7.1 to 7.5, the sampling and frequency of testing of the various types of reinforcing steel shall be in accordance with Appendix B, and the values of relevant material parameters for the samples shall be determined in accordance with Table 7.

TABLE 7

### DETERMINATION OF REINFORCING STEEL MATERIAL PARAMETERS

Material parameter	Reinforcing type	Determined in accordance with
Chemical composition	All reinforcing steel	AS/NZS 1050
Yield stress ( $R_e$ ) and tensile strength ( $R_m$ ) (see Note)	All reinforcing steel	AS 1391, recorded to the nearest 1 MPa
Uniform elongation ( $A_{gt}$ )	All reinforcing steel	Paragraph C2.2 of Appendix C
Weld shear strength	Mesh	Paragraph C5 of Appendix C
Bending and rebending properties	Deformed reinforcement	Clause 7.2.3
Geometric properties	Deformed reinforcement	Paragraph C3.1 and C3.2 of Appendix C
Mass per unit length	All reinforcing steel	Paragraph C3.3 of Appendix C
Bond strength	Deformed reinforcement	Paragraph C4 of Appendix C if Clause 7.4.2 is not satisfied or appropriate.

NOTE: For yield stress/tensile strength determination, the nominal cross-sectional area shall be used (see Clause 7.2.2).

## 9 IDENTIFICATION

### 9.1 Identification of standard grades of reinforcing steels

The standard grades of reinforcing steels shall be identified by either an alphanumeric marking system on the surface of the bar that identifies strength grade and ductility class or by a series of surface features on the product, (see Figure 4) at intervals of not greater than 1.5 m, as follows:

NOTE: Care should be taken with identifying marks to minimize notching effects.

- (a) *Deformed Grade 250N*—crescent-shaped transverse ribs inclined at 90° to the bar axis or two rows of inclined transverse ribs of uniform height reversing in direction on opposite sides of the bar, as shown in Figure 4.
- (b) *Deformed Grade 300E*—identified by two rows of transverse ribs reversing in direction on opposite sides of the bar and having on one or two sides, two additional longitudinal marks joining two consecutive transverse ribs.
- (c) *Deformed Grade 500L*—identified by three rows of transverse ribs or indentations with one row in the reverse direction to the other two.
- (d) *Deformed Grade 500N*—identified by two or more continuous and clearly visible longitudinal marks in addition to longitudinal ribs if present, or by a minimum of two short transverse marking that are clearly distinguishable from the transverse ribs.
- (e) *Deformed Grade 500E*—(excluding threaded bar) identified by two rows of transverse ribs reversing in direction on opposite sides of the bar and have on one or two sides, two missed deformations adjacent to two additional longitudinal bars joining two consecutive transverse ribs.
- (f) *Plain Grade 250N*— no particular identifying features.
- (g) *Plain Grade 300E*—identified by a raised dot.
- (h) *Plain Grade 500E*—identified by a raised dot and dash.
- (i) *Right-hand-threaded Grade 500E*— identified by one short transverse rib on one side of the bar.

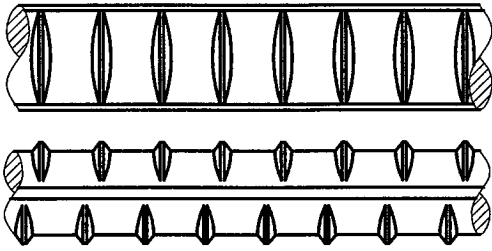
## 9.2 Identification of the steel producer

Deformed reinforcement shall carry unique marks enabling the steel producer to be identified. Details of the steel producer's identification marking shall be made available on request.

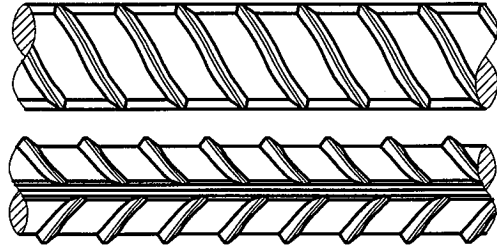
## 9.3 Labelling of reinforcing steel

Each coil or bundle of reinforcing steel, including mesh, shall have a durable label attached on which the following shall be shown:

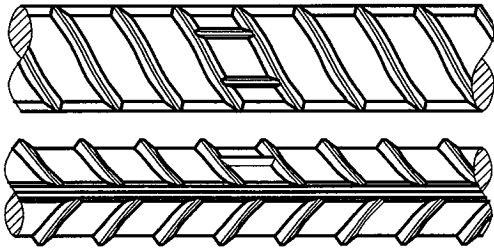
- (a) For steel producers—
  - (i) the steel producer's name or trademark.
  - (ii) the designation of reinforcing steel.
  - (iii) the number of this Australian/New Zealand Standard.
  - (iv) the heat number or batch number.
  - (v) the mass or quantity of the bundle.
  - (vi) a unique bundle identification number or mark.
- (b) For steel processors—
  - (i) the steel processor's name or trademark.
  - (ii) the designation of reinforcing steel including mesh.
  - (iii) the number of this Australian/New Zealand Standard.
  - (iv) a unique identification number or code.
  - (v) the mass or quantity of the bundle.



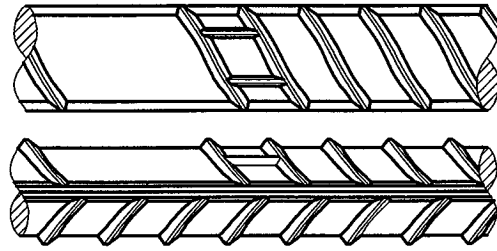
Grade 250 N (Bamboo)



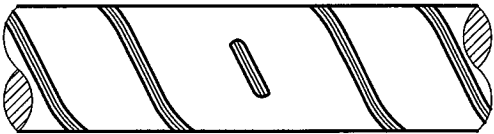
Grade 250 N



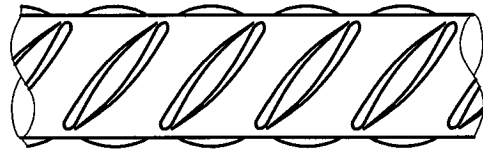
Grade 300 E



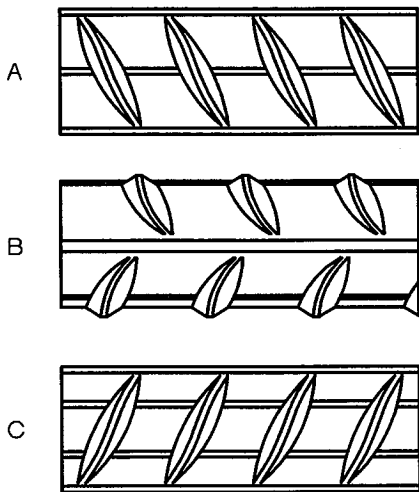
Grade 500 E



Grade 500 E (threaded)



Grade 500 L



Grade 500 N

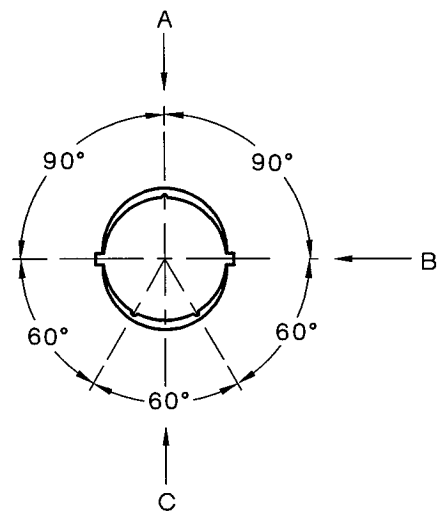


FIGURE 4 EXAMPLES OF GRADE IDENTIFIERS

**APPENDIX A**  
**MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD**  
(Informative)

**A1 SCOPE**

This Appendix sets out the following different means by which compliance with this Standard can be demonstrated by the manufacturer or supplier:

- (a) Evaluation by means of statistical sampling.
- (b) The use of a product certification scheme.
- (c) Assurance using the acceptability of the supplier's quality system.
- (d) Other such means proposed by the manufacturer or supplier and acceptable to the customer.

**A2 STATISTICAL SAMPLING**

Statistical sampling is a procedure which enables decisions to be made about the quality of batches of items after inspecting or testing only a portion of those items. This procedure will only be valid if the sampling plan has been determined on a statistical basis and the following requirements are met:

- (a) The sample shall be drawn randomly from a population of product of known history. The history shall enable verification that the product was made from known materials at essentially the same time, by essentially the same processes and under essentially the same system of control.
- (b) For each different situation, a suitable sampling plan needs to be defined. A sampling plan for one manufacturer of given capability and product throughput may not be relevant to another manufacturer producing the same items.

In order for statistical sampling to be meaningful to the customer, the manufacturer or supplier needs to demonstrate how the above conditions have been satisfied. Sampling and the establishment of a sampling plan should be carried out in accordance with AS 1199, guidance to which is given in AS 1399.

**A3 PRODUCT CERTIFICATION**

The purpose of product certification is to provide independent assurance of the claim by the manufacturer that products comply with the stated Standard.

The certification scheme should meet the criteria described in HB 18.28 (SANZ HB 18.28) in that, as well as full type testing from independently sampled production and subsequent verification of conformance, it requires the manufacturer to maintain effective quality planning to control production.

The certification scheme serves to indicate that the products consistently conform to the requirements of the Standard.

**A4 SUPPLIER'S QUALITY MANAGEMENT SYSTEM**

Where the manufacturer or supplier can demonstrate an audited and registered quality management system complying with the requirements of the appropriate or stipulated Australian or international Standard for a supplier's quality management system or systems, this may provide the necessary confidence that the specified requirements will be met.

The quality assurance requirements need to be agreed between the customer and supplier and should include a quality or inspection and test plan to ensure product conformity.

#### **A5 OTHER MEANS OF ASSESSMENT**

If the above methods are considered inappropriate, determination of compliance with the requirements of this Standard may be assessed from the results of testing coupled with the manufacturer's guarantee of product conformance.

Irrespective of acceptable quality levels (AQLs) or test frequencies, the responsibility remains with the manufacturer or supplier to supply products that conform with the full requirements of the Standard.

APPENDIX B  
MANUFACTURING CONTROL  
(Normative)

**B1 SCOPE AND GENERAL**

**B1.1 Scope**

Manufacturing control shall apply to all aspects of production, from steel melting to the dispatch of end products to the purchasers (steel processors or customers).

**B1.2 Application**

Reinforcing steel shall be sampled and tested in accordance with Paragraph B3. The results shall satisfy both the batch and long-term quality levels in accordance with Paragraphs B4 and B6.

Where long-term quality levels are not available, steel shall be sampled, tested and evaluated in accordance with Paragraph B7.

**B1.3 Definitions**

For the purpose of this Appendix, the definitions below apply.

**B1.3.1 Batch**

A quantity of reinforcing steel of the same surface geometry and diameter, of the same nominal strength grade and of the same ductility class; produced by essentially the same process from—

- (a) the same cast and continuous period of production, for hot-worked products; or
- (b) the same type of feed material, process, equipment and conditions, for cold-worked products but not exceeding 50 t of bars or coils or 1000 sheets of mesh, whichever is the less, unless specified otherwise.

**B1.3.2 Cold-worked products**

Bars and coils produced by cold rolling or cold drawing, or a combination of these, including mesh, and bars straightened from hot-rolled or cold-rolled coils.

**B1.3.3 Hot-worked products**

Bars and coils produced directly by hot-rolling.

**B1.3.4 Item**

A single piece of reinforcing steel (e.g. a bar, a coil or a sheet of mesh).

**B1.3.5 Test piece**

A portion of an item of the size (length or other measure) specified in the relevant test method, suitable for carrying out the required test and which has not been subjected to any post-production treatment that will unduly affect the test result.

**B2 NOTATION**

The following symbols are used in this Appendix:

- $K$  = a statistical multiplying factor
- $k$  = the acceptability index
- $n$  = number of test results or specimens

- $n_b$  = the number of test values determined in a batch
- $n_p$  = the number of test values determined in a number of batches
- $\bar{X}_b$  = the mean of individual test values determined in a particular batch
- $\bar{X}_p$  = the mean of individual test values determined in a number of batches
- $x_n$  = the mean value of characteristic strength for  $n$  number of specimens
- $x_s$  = an individual test value
- $s$  = the estimated standard deviation of a population
- $s_n$  = the standard deviation for  $n$  number of specimens

### B3 SAMPLING AND TESTING FREQUENCY

The minimum frequency of sampling and testing for each of the quality parameters specified and determined in accordance with Clause 8 of this Standard shall be as follows:

- (a) For bars and coils:
- (i) Chemical composition, one test per cast unless previously determined by the steel producer (see Note 1).
  - (ii) Mechanical properties, one test for each 50 t of product or part thereof, but not less than three tests per batch.
  - (iii) Bending properties, one test per batch.
  - (iv) Mass per unit length, one test (see Paragraph C3.3) per batch.
  - (v) Surface geometry of deformed products, one test per batch (see Note 3).
- (b) For decoiled products:
- (i) Chemical composition, one test per batch unless previously determined by the steel producer (see Note 1).
  - (ii) Mechanical and bending properties, one test per diameter per machine per week (see Note 2).
  - (iii) Deformation height or depth of deformed products, one test per day per machine and at each size change (see Note 3).
- (c) For mesh:
- (i) Mechanical properties, one test per batch on each of two separate longitudinal bars and two separate transverse bars (i.e. 4 tensile tests). It shall be permissible to sample from straightened and cut bars prior to welding, provided that it can be demonstrated that the welding does not adversely affect the mechanical properties.
  - (ii) Weld-shear test, one test per batch on each of two separate intersections from different wires.
  - (iii) Form and dimensions of the mesh, one test per batch in accordance with Clause 7.5.
  - (iv) Surface geometry of component deformed bars, one test per batch on any longitudinal bar and one transverse bar (see Note 3).
  - (v) Chemical testing is not required (see Note 1).

#### NOTES:

- 1 Upon request, compliance with Clause 7.1 may be demonstrated by presentation of the relevant test certificate or certificate of compliance from the steel producer.

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- 2 This testing is for evaluation of long-term quality level only, and is not a batch test for assessing compliance.
- 3 Only rib heights or indentation depths to be measured for each batch, with circumferential gap and transverse rib spacing or indentation spacing to be measured at each roll change or adjustment.

## **B4 EVALUATION AND CONFORMANCE OF BATCH QUALITY PARAMETERS**

### **B4.1 Tensile parameters**

#### **B4.1.1 Batch parameters**

The value for a batch of each of the tensile parameters  $R_e$ ,  $A_{gt}$  and  $(R_m/R_e)$  shall be taken as the mean ( $\bar{X}_b$ ) of the individual test values ( $x_s$ ) from the sampled items.

$$\bar{X}_b = \sum x_s / n_b$$

#### **B4.1.2 Batch conformance**

A batch shall be deemed to conform with the tensile parameters specified in Table 2 if the following are satisfied:

- (a) For  $R_e$  —
  - (i)  $1.02 R_{ek.L} \leq \bar{X}_b \leq 0.98 R_{ek.U}$  and no individual test value of  $R_e$  is less than  $0.95 R_{ek.L}$  or greater than  $1.05 R_{ek.U}$ ; or
  - (ii) all test values of  $R_e$  fall between  $R_{ek.L}$  and  $R_{ek.U}$ .
- (b) For  $A_{gt}$  —  $\bar{X}_b$  is not less than the specified value.
- (c) For  $(R_m/R_e)$  —  $\bar{X}_b$  is not less than the specified lower value or greater than the specified upper value.

If any requirements in Items (a), (b) or (c) above are not satisfied, the batch shall be deemed to be non-conforming and subject to further action in accordance with Paragraph B5.

### **B4.2 Other parameters**

#### **B4.2.1 Chemical composition**

The chemical composition of reinforcing steel shall conform to the requirements listed in Table 1.

#### **B4.2.2 Shear strength of joints in mesh**

The shear strength of the tested welded joints shall satisfy the requirements of Clause 7.2.5.

#### **B4.2.3 Rebend suitability**

The rebend properties of the test piece shall satisfy the requirements of Clause 7.2.3.

#### **B4.2.4 Mass per unit length**

The measured mass per unit length of each test piece shall satisfy the mass determined from the nominal diameter of the reinforcing steel and comply with the tolerances specified in Clause 7.3.1.

#### **B4.2.5 Surface geometry**

The surface geometry of the test piece shall satisfy the relevant parts of Clause 7.4.2 or, if appropriate, shall be such that Paragraph C4 of Appendix C is satisfied.



## B5 ACTION ON NON-CONFORMING BATCHES

When a production batch is deemed to be non-conforming in accordance with Paragraph B4.1 or B4.2, the steel producer or steel processor, as appropriate, shall promptly isolate the batch by suitable means.

For the non-conforming batch, twice as many additional items shall be taken from the batch and tested for the particular non-conforming parameter(s) concerned. If the additional test results demonstrate conformance, then the batch shall be deemed to comply with the Standard, and all of the additional results included for long-term conformance (see Paragraph B6).

If any of the additional test results demonstrate non-conformance, then the batch shall be rejected as non-conforming and the steel producer or steel processor, as appropriate, shall take immediate action to minimize the probability of further non-conformances of the same kind. The results from the non-conforming batch shall be excluded from the long-term conformance calculations.

## B6 DETERMINATION OF LONG-TERM QUALITY LEVEL

### B6.1 General

Test results for the material tensile parameters  $R_e$ ,  $A_{gt}$  and  $R_m/R_e$  shall be continually collected from the batch testing program, grouped under the same designation (see Clause 5.2) and their long-term characteristic values determined statistically in accordance with Paragraph B6.2.

A1 For each parameter, the determinations shall be made on a continual basis (but at intervals of not more than one month), covering the preceding six months test results or the last 200 consecutive test results.

#### NOTES:

- 1 The evaluation of long-term quality levels is based on the assumption that the distribution of a large number of test results is normal; however, this is not a requirement.
- A1 2 The application of long-term quality compliance for mesh with respect to  $A_{gt}$  and  $R_m/R_e$  may be waived for Australia until the end of September 2003, while several statistical anomalies are resolved. It may be waived for mesh to be used in New Zealand where all batch test results are above specified values.

### B6.2 Evaluation of results

#### B6.2.1 Estimation of population parameters

The mean ( $\bar{X}_p$ ) and standard deviation ( $s$ ) shall be estimated from the test results using the following equations, respectively:

$$\bar{X}_p = \Sigma x_s / n_p \quad \dots \text{B6.2.1(1)}$$

$$s = \sqrt{[\Sigma (x_s - \bar{X}_p)^2 / (n_p - 1)]} \quad \dots \text{B6.2.1(2)}$$

### B6.3 Conformance to long-term quality levels

The process shall be deemed to conform to long-term quality levels if—

- (a)  $\bar{X}_p - Ks \geq C_{v.L}$ ; and
- (b)  $\bar{X}_p + Ks \leq C_{v.U}$ ; and

as applicable, where  $K$  is obtained from the appropriate column of Table B1.

## **B7 MATERIAL NOT COVERED BY LONG-TERM QUALITY LEVEL**

### **B7.1 General**

Steel not covered by long-term quality level complying with Paragraph B6 shall be assessed by acceptance tests on each batch.

### **B7.2 Extent of sampling and testing**

For testing purposes, the batch shall be divided into test units each with a maximum mass of 100 t. Each test unit shall comprise products of the same steel grade and nominal diameter from the same cast. The steel producer or steel processor shall certify that all products in the test unit originate from the same cast.

Test specimens shall be taken from each test unit as follows:

- (a) Fifteen test pieces or, if appropriate, 60 specimens (see Paragraph B7.4.1(b)), from different bars for testing in accordance with Paragraphs B7.3(a) and B7.3(b);
- (b) Two test specimens from different bars, for testing in accordance with Paragraphs B7.3(c).

**TABLE B1**  
**STATISTICAL MULTIPLIER 'K'**

No. of samples ( $n_p$ )	Coefficient $K$ at 90% confidence level	
	For $R_e$ ( $p = 0.95$ )	for $A_{gt}$ , $R_m/R_e$ ( $p = 0.90$ )
5	3.40	2.74
6	3.09	2.49
7	2.89	2.33
8	2.75	2.22
9	2.65	2.13
10	2.57	2.07
11	2.50	2.01
12	2.45	1.97
13	2.40	1.93
14	2.36	1.90
15	2.33	1.87
16	2.30	1.84
17	2.27	1.82
18	2.25	1.80
19	2.23	1.78
20	2.21	1.77
30	2.08	1.66
40	2.01	1.60
50	1.97	1.56
60	1.93	1.53
70	1.90	1.51
80	1.89	1.49
90	1.87	1.48
100	1.86	1.47
150	1.82	1.43
200	1.79	1.41
250	1.78	1.40
300	1.77	1.39
400	1.75	1.37
500	1.74	1.36
1000	1.71	1.34
$\geq 2000$	1.65	1.30

### B7.3 Properties to be tested

Test pieces selected in accordance with Paragraph B7.2 shall be tested for the following:

- (a) Inspection by variables, i.e.
- (i) tensile strength  $R_m$ ;
  - (ii) yield stress  $R_e$ ;
  - (iii) tensile to yield ratio  $R_m/R_e$ ; and
  - (iv) total elongation at maximum force  $A_{gt}$ .

- (b) Inspection by attributes, i.e.
  - (i) behaviour in the rebend test;
  - (ii) deviations from the nominal cross-section; and
  - (iii) projected rib or indentation area or bond test.
- (c) Chemical composition according to the product analysis.

All elements listed in Table 1 and the carbon equivalent ( $C_{eq}$ ) shall be determined.

The test procedures shall be as described in Appendix C.

#### B7.4 Evaluation of results

##### B7.4.1 Inspection by variables

The following applies:

- (a) When testing for the properties listed in Paragraph B7.3(a), the following shall be determined for the characteristic strength.
  - (i) All individual values for characteristic strength  $R_{ek}$  for the 15 test specimens.
  - (ii) The mean value for the characteristic strength  $x_{15}$  (for  $n = 15$ ).
  - (iii) The standard deviation  $s_{15}$  (for  $n = 15$ ).

The test unit shall be deemed to comply with this Australian/New Zealand Standard if all individual values of  $R_m/R_e$  and uniform elongation ( $A_{gt}$ ) fall between the upper and lower characteristic values specified in Table 2, and the following conditions are fulfilled by the characteristic strength (see also Item (b) below):

$$\bar{x}_{15} - 2.33 s_{15} \geq R_{ek.L}; \text{ and} \quad \dots \text{ B7.4.1(1)}$$

$$\bar{x}_{15} + 2.33 s_{15} \leq R_{ek.U} \quad \dots \text{ B7.4.1(2)}$$

- (b) If the condition for the characteristic strength stated in Item (a) is not fulfilled, a secondary calculation, the acceptability index ( $k$ ) shall be determined, where—

$$k = \frac{\bar{x}_{15} - R_{ek.L}}{s_{15}} \quad \dots \text{ B7.4.1(3)}$$

If  $k \leq 2$ , the batch shall be deemed as non-conforming.

If  $k > 2$ , testing shall continue. Forty-five further test specimens shall be taken and tested from different items in the test unit, so that a total of 60 test results are available ( $n = 60$ ).

The test unit shall be deemed to comply with this Australian/New Zealand Standard if all individual values of  $R_m/R_e$  and uniform elongation  $A_{gt}$  fall between the upper and lower characteristic values specified in Table 2 and the following conditions are fulfilled by the characteristic strength:

$$\bar{x}_{60} - 1.93 s_{60} \geq R_{ek.L}; \text{ and}$$

$$\bar{x}_{60} + 1.93 s_{60} \leq R_{ek.U}$$

##### B7.4.2 Inspection by attributes

When testing the properties listed in Paragraph B7.3(b), the following applies:

- (a) All the results determined on the 15 test specimens shall conform to this Standard; or

- (b) If a maximum of two of the 15 results do not conform to this Standard, 45 further test specimens shall be taken and tested from different items in the test unit, making 60 test results available.

The unit shall be deemed to conform to this Standard if no more than two of the 60 test specimens fail the test.

#### **B7.5 Test report**

A test report shall be produced containing the following data:

- (a) The steel producer's or steel processor's name or trademark.
- (b) The nominal diameter of the reinforcing steel.
- (c) The strength and ductility grade of the reinforcing steel.
- (d) The marking on the reinforcing steel.
- (e) The cast number.
- (f) The date of testing.
- (g) The mass of the test unit.
- (h) The individual test results for all the properties specified in Paragraph B7.3.

## APPENDIX C

REQUIREMENTS FOR DETERMINING THE MECHANICAL AND  
GEOMETRIC PROPERTIES OF REINFORCEMENT

(Normative)

**C1 GENERAL**

This Appendix sets out requirements for the determination of mechanical and geometric properties of reinforcement, which are additional to the requirements given in Clauses 7.2, 7.3, 7.4 and 8.

**C2 MECHANICAL PROPERTIES****C2.1 General**

Tests for the determination of the mechanical properties of reinforcement shall be carried out at ambient temperatures in the range 10°C to 35°C.

The condition of test pieces at the time of testing shall be in accordance with Clause 7.2.1 and Table 3.

Unless otherwise specified, tests on bars and coils shall be carried out on straight test specimens of full cross-section having no machining within the gauge length.

Test specimens cut from mesh shall include at least one welded intersection. Before testing a twin-bar specimen, the bar not under test shall be removed without damage to the bar to be tested.

**C2.2 Tensile properties****C2.2.1 Equipment**

Tensile testing equipment shall be Grade A as defined in AS 2193.

**C2.2.2 Uniform elongation**

The uniform elongation ( $A_{gt}$ ) shall be determined in accordance with ISO 15630-1 or ISO 15630-2 as appropriate except as in the following cases:

- (a) All Classes of steels—from extensometer measurements at maximum force taken during tensioning; or
- (b) Class E and Class N steels only—from measurements taken after failure.

For the purpose of Item (a), a minimum extensometer gauge length of 50 mm may be used.

For the purpose of Item (b), gauge marks of up to 25 mm intervals may be used.

In the event of a dispute, the extensometer method shall take precedence, unless otherwise agreed between the parties concerned.

**C3 GEOMETRIC PROPERTIES****C3.1 Rib geometry****C3.1.1 Height of transverse ribs**

The height of transverse ribs ( $h$ ) shall be measured for each row of ribs at the point where the rib height is greatest. The measurement shall be reported to an accuracy of 0.01 mm.

### C3.1.2 Circumferential spacing of transverse ribs

The sum of the circumferential gaps ( $g$ ) between adjacent rows of transverse ribs shall be measured at each of three separate cross-sections and the mean value of the sum calculated. The measurement shall be reported to an accuracy of 0.1 mm.

### C3.1.3 Longitudinal spacing of transverse ribs

The spacing of the transverse ribs ( $c$ ) shall be taken as the length of the measuring distance divided by the number of the rib gaps contained within that length. The measuring distance is deemed to be the interval between the centre-line of a rib and the centre-line of another rib on the same side of the product, determined in a straight line parallel to the longitudinal axis of the product. The length of the measuring distance shall contain at least 10 rib gaps.

### C3.1.4 Calculation of the specific projected rib area ( $f_R$ )

The specific projected rib area ( $f_R$ ) shall be calculated from the following equation, and with reference to Figure C1:

$$f_R = k_i \frac{(\pi d - \Sigma g)h}{\pi d c} \quad \dots \text{C3.1.4}$$

where

$k_i$  = 0.72 for crescent shaped ribs; or  
= 1.0 for uniform height ribs

$d$  = the nominal diameter of the reinforcing steel

$\Sigma g$  = the sum, at a cross-section, of the circumferential gaps between adjacent rows of transverse ribs (see Paragraph C3.1.2)

$h$  = the mean of the maximum rib heights (see Paragraph C3.1.1)

$c$  = the longitudinal pitch of the transverse ribs (see Paragraph C3.1.3)

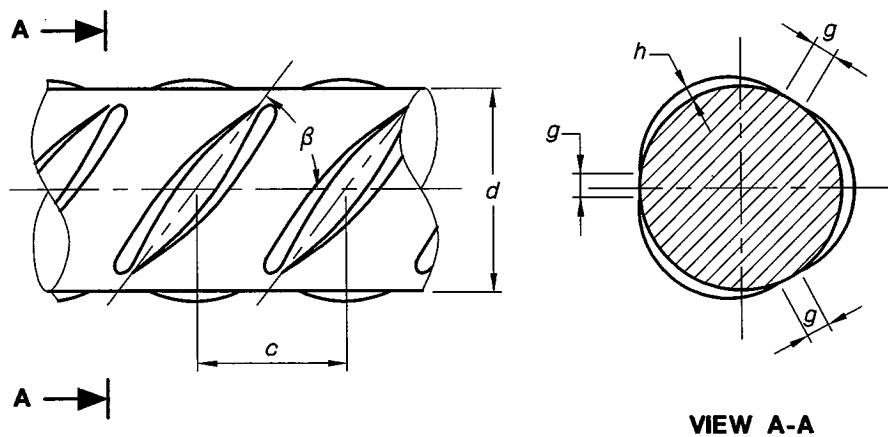


FIGURE C1 TERMS FOR SPECIFIC PROJECTED RIB AREA

## C3.2 Indentation geometry

### C3.2.1 Depths of transverse indentations

The depth of transverse indentations ( $h$ ) shall be measured for each row of indentations at the point where the indentation depth is greatest. The measurement shall be made to an accuracy 0.01 mm.

### C3.2.2 Circumferential spacing of transverse indentations

The sum of the circumferential gaps ( $g$ ) between adjacent rows of transverse indentations shall be measured at each of three separate cross-sections and the mean value of the sum calculated. The measurement shall be reported to an accuracy of 0.1 mm.

### C3.2.3 Longitudinal spacing of transverse indentations

The spacing of the transverse indentations ( $c$ ) shall be taken as the length of the measuring distance divided by the number of the indentation gaps contained within that distance. The measuring distance is deemed to be the interval between the centre-line of an indentation and the centre-line of another indentation on the same side of the product determined in a straight line parallel to the longitudinal axis of the product. The length of the measuring distance shall contain at least 10 indentation gaps.

### C3.2.4 Calculation of the specific projected indentation area ( $f_p$ )

The specific projected indentation area ( $f_p$ ) shall be calculated from the following equation, and with reference to Figure C2:

$$f_p = k_i \frac{(\pi d - \Sigma g)h}{\pi d.c} \quad \dots \text{C3.2.4}$$

$k_i$  = 0.72 for indents of non-uniform depth; or

= 1.0 for indents of uniform depth

$d$  = the nominal diameter of the reinforcing steel

$\Sigma g$  = the sum, at a cross-section, of the circumferential gaps between adjacent rows of transverse indentations

$h$  = the mean of the maximum indentation depths

$c$  = the longitudinal pitch of the transverse indentations (see Paragraph C3.2.3)



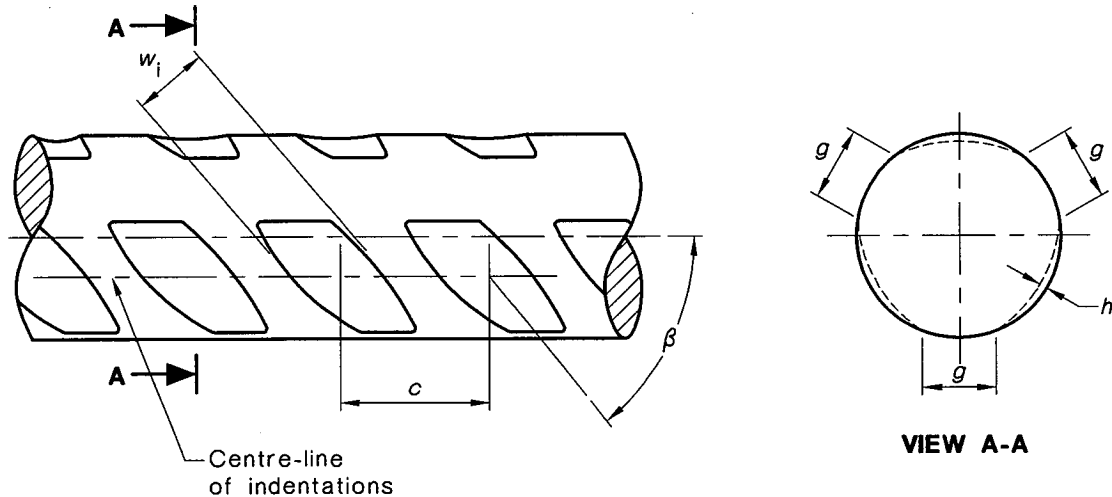


FIGURE C2 TERMS FOR SPECIFIC PROJECTED INDENTATION AREA

### C3.3 Mass per unit length of reinforcing steels

#### C3.3.1 General

The mass per unit length of bars in a batch shall be determined in accordance with Paragraphs C3.3.2 and C3.3.3 and the result expressed in kg/m.

#### C3.3.2 Test specimens

The determination shall be carried out on test specimens of a combined length not less than the greater of 300 mm or  $20d$ , for diameters not greater than or equal to 25 mm and not less than 500 mm for diameters greater than 25 mm.

#### C3.3.3 Procedure

The procedure for determination is as follows:

- (a) Cut a test specimen from each of three bars randomly selected from the batch, the length of each specimen being at least the minimum length specified in Paragraph C3.3.2 plus two bar diameters.
- (b) Grind the ends of each specimen perpendicular to the longitudinal axis of the bar.
- (c) For each specimen—
  - (i) measure its length in millimetres to the nearest 1 mm;
  - (ii) weigh the specimen to determine its mass in grams to an accuracy of three significant figures; and
  - (iii) calculate its mass per unit length (g/mm).
- (d) Calculate the average value of the mass per unit length to three significant figures, expressing the result in kg/m.

## C4 BOND TEST FOR CLASSIFICATION BY PERFORMANCE

### C4.1 Objective

The objective of the test is to demonstrate that reinforcing bars not complying with the requirements of Clause 7.4.2.4(a) will develop their specified characteristic yield stress (see Table 2) in a pull-out test with a free-end slip not greater than 0.2 mm.

## C4.2 Test pieces

The surface deformations of the bars to be tested shall comply with the steel producer's or steel processor's published specification, and shall be as near to the minimum values as possible. Six test pieces of each size shall be tested. The length of each test piece shall be such to allow attachment of the stressing system and measuring device, generally at least 250 mm longer than the length of the concrete test prism. All test pieces shall be wire brushed to remove loose rust and mill scale.

## C4.3 Test prisms or cylinders

For each of the test pieces, prepare a concrete test prism or cylinder having a square or circular cross-section of 150 mm width or diameter for bar sizes up to and including 20 mm, and 250 mm width or diameter for bar sizes over 20 mm. The length of the prism or cylinder ( $L$ ) in millimetres shall be calculated as follows:

$$L = \frac{0.45 d R_{ek,L}}{\sqrt{f_c}} \geq b \quad \dots \text{C4.3}$$

where

- $R_{ek,L}$  = the specified lower characteristic yield stress of the steel, in megapascals
- $d$  = the nominal bar size, in millimetres
- $b$  = Width of prism sides or diameter of cylinder, in millimetres
- $f_c$  = the compressive strength of the concrete at time of test, in megapascals

Prepare the prism or cylinder using a sand-cement mortar mix that gives a concrete having a cylinder compressive strength of between 32 MPa and 40 MPa at the time of the pull-out test. Support the test piece so that it is rigidly embedded in and passes completely through the prism or cylinder of concrete along its longitudinal axis protruding approximately 20 mm from the bottom as cast. Reinforce the prism or cylinder along the embedded length with a helix of 6 mm diameter plain mild steel having a pitch of 25 mm, the outer diameter of the helix being 5 mm less than the side of the concrete section.

## C4.4 Apparatus

The apparatus shall consist of a suitable testing device capable of accepting the test specimen and a suitable measuring device (see Figure C3).

## C4.5 Procedure

Mount the test specimen in the testing device so that the bar is pulled axially from the prism. Arrange the test prism so that the end of the bar at which tension is applied is that which is projected from the top end of the prism as cast. Place rubber or plywood packing and bearing plate with central hole  $2d$  diameter between the top end of the prism and the bearing surface of the testing device.

Mount a suitable measuring device so that the gauge records the relative slip between the unloaded end of the bar and the bottom end of the prism as cast.

A schematic arrangement of a specimen and testing device is shown in Figure C3.

During a period of approximately 2 min, steadily increase the axial force in the bar protruding from the top end of the prism until the tensile stress in the bar attains the specified lower characteristic yield stress ( $R_{ek,L}$ ) (see Table 2) for the grade of steel from which the bars are made. Maintain this axial force for a further 2 min, then record the free-end slip of the bar.

#### **C4.6 Free-end slip**

If the average free-end slip of the six test pieces does not exceed 0.2 mm, the surface geometry of reinforced steel represented by the test pieces shall be deemed to comply with the surface geometry requirements of this Standard.

#### **C4.7 Test report**

The test report shall contain the following:

- (a) Mill of manufacture.
- (b) Nominal diameter of test pieces.
- (c) Surface geometry.
- (d) Concrete compressive strengths at time of testing.
- (e) The bond classification determined.
- (f) Reference to this Australian/New Zealand Standard, i.e. AS/NZS 4671.
- (g) Reference to this test method, i.e. Appendix C.

NOTE: Further information may be included by agreement.

#### **C5 Mesh weld shear strength**

A1 | The weld shear strength of welded joints on mesh shall be determined in accordance with ISO 15630-2, except where it can be demonstrated by non-destructive means that the welded joints are capable of withstanding at least 5% more than the shear force specified in Clause 7.2.5 of this Standard.

In the event of a dispute, the ISO 15630-2 test procedure shall take precedence.

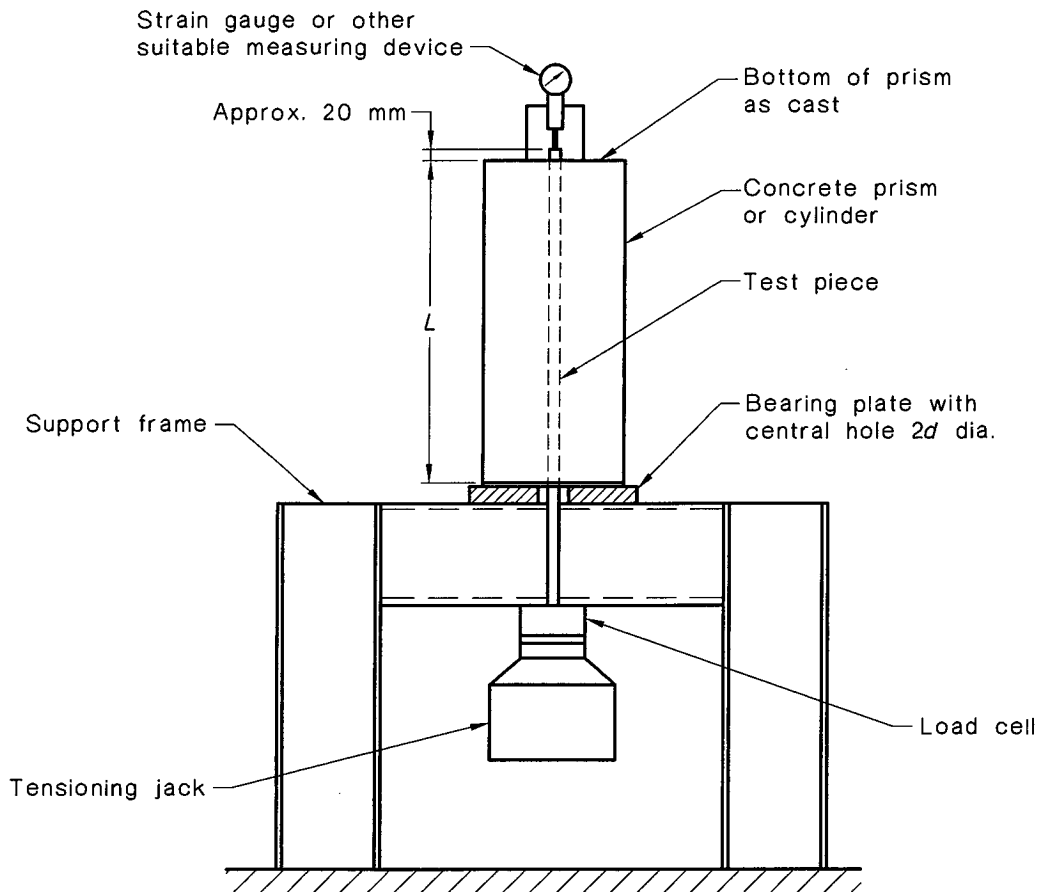


FIGURE C3 SAMPLE SCHEMATIC ARRANGEMENT OF BOND TEST EQUIPMENT AND TEST SPECIMEN

APPENDIX D  
PURCHASING GUIDELINES  
(Informative)

**D1 INFORMATION TO BE SUPPLIED BY THE PURCHASER**

The purchaser should supply the following information at the time of enquiry or order, after making due reference to the explanation, advice and recommendations contained in this Appendix:

- (a) Designation of grade and Standard number.
- (b) Quantity and delivery instructions.
- (c) Dimensions of steel, e.g. bar size and length, mass of bundle or coil.
- (d) Whether a test certificate or certificate of compliance is required.
- (e) Any information concerning processing or end-use that the purchaser considers would assist the steel producer or steel processor (see Note).
- (f) Whether it is the intention of the purchaser to inspect the steel at the steel producer's or steel processor's works.
- (g) Any exceptions to the Standard and any special or supplementary requirements.

NOTE: Some mechanical properties (e.g. uniform elongation ( $A_{gt}$ )) are quite sensitive to cold working. Hence, it is important that steel processors be aware that the properties of conforming batches of reinforcing steel may be rendered non-conforming by subsequent cold-working procedures, such as straightening, that are applied without due caution. The steel producer and steel processor should negotiate to ensure that the mechanical properties of the end product comply with the requirements of this Standard.

**D2 CERTIFICATES OF COMPLIANCE AND TEST CERTIFICATES****D2.1 Certificate of compliance**

A certificate of compliance states that the material has been tested and results comply with the appropriate material Standard.

**D2.2 Test certificate**

A test certificate shows such results as may be required by agreement between the purchaser and the steel producer or steel processor relating to—

- (a) tests performed by the steel producer or steel processor for the purpose of establishing compliance with the appropriate material Standard; or
- (b) additional tests as agreed between the purchaser and the steel producer or the steel processor.

**D3 INSPECTION**

If it is the purchaser's intention to undertake any of the following functions at the steel producer's or steel processor's works, this should be notified at the time of the enquiry or order, and should be accomplished in a manner that will not interfere with the operation of the works:

- (a) Inspect the steel during manufacture.
- (b) Select and identify test samples.
- (c) Witness the tests being made.

The steel producer or steel processor should provide all reasonable facilities to enable the purchaser to be satisfied that the steel is in accordance with this Standard.

**AMENDMENT CONTROL SHEET****AS/NZS 4671:2001**

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**Amendment No. 1 (2003)**

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**REVISED TEXT**

*SUMMARY:* This Amendment applies to the Preface, Clauses 2, 7.2.3, 7.5.8, Table 6A, Paragraphs B3, B6.1, C2.2.2 and C5.

Published on 5 June 2003.

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NOTES





### **Standards Australia**

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COUNTRY		Australia	Malaysia	Singapore	Thailand
STANDARD		AS 4671	MS 146	SS 2	TIS 24-2536
GRADE		500N Note - grades 500E and 250N also covered	500 Note - grade 460 also included	RB500W	SD50 Note - grades SD30 and SD40 also covered
CHEMICAL COMPOSITION	C	0.22 max	0.30 max	0.22 max	
	P	0.050 max	0.050 max	0.050 max	0.050 max
	Mn			1.60 max	1.80 max
	Si			0.60 max	
	S	0.050 max	0.050 max	0.050 max	0.050 max
	N		0.012 max	0.012 max	
	C <sub>eq</sub>	0.44 max	0.51 max	0.50 max	0.60 max
MECHANICAL PROPERTIES	Yield Stress	500 MPa Lower Cv 650 MPa Upper Cv	500 MPa Lower Cv	500 MPa Lower Cv	490 MPa min
	UTS			550 MPa Lower Cv	620 MPa min
	Ratio UTS/YS	1.08 Lower Cv	1.05 min	1.05 min	Not specified
	Elongation	5.0 % (Agt) Lower Cv	12 % (Total) min	14 % (Total) Lower Cv	13 % (Total) min
	Bend Test	4d mandrel. 90 degree bend angle for bar sizes 16mm and less. 180 degrees for bar 20mm and above	3d mandrel. 180 degree bend angle.	3d to 6d mandrel depending on bar size. 160 to 180 degree bend angle.	5d or 6d mandrel depending on bar size. 90 degree bend angle.
	Rebend Test	4d mandrel. 90 degree initial bend, then rebend 90 degrees in the reverse direction (after ageing).	5d mandrel. 45 degree initial bend, then rebend at least 23 degrees in the reverse direction (after ageing).	5d to 10d mandrel. 90 degree initial bend, then rebend 20 degrees in the reverse direction (after ageing).	Not required.
	DIMENSIONAL REQUIREMENTS	Preferred bar sizes, in mm	12, 16, 20, 24, 28, 32 & 36	8, 10, 12, 16, 20, 25, 32 & 40	6, 8, 10, 12, 13, 16, 20, 22, 25, 28, 32, 38 and 40. Common sizes are highlighted in italics.
Mass per metre tolerance		Plus or minus 4.5%	Plus or minus 4.5%	Plus or minus 5 or 4%, depending on bar size	Plus or minus 6, 5 or 4%, depending on bar size
General Geometry		Shall have 2 or more rows of transverse ribs with uniform spacing.	Transverse ribs to be uniformly spaced.	Shall have 2 or more rows of transverse ribs with uniform spacing.	Transverse ribs to be uniformly spaced.
Rib Height		0.05d to 0.10d	Not specified except as part of the rib area calculation.	0.05d min for uniform height ribs. 0.065d min for crescent-shaped ribs.	Varies with bar size but essentially 0.05d to 0.10d
Rib Spacing		0.5d to 1.0d	0.8d max	0.5d to 0.7d for uniform height ribs. 0.5d to 0.8d for crescent-shaped ribs.	0.7d max
Transverse Rib Inclination		Not less than 45 degrees	Not stated.	Not less than 35 degrees.	Not less than 45 degrees.
Projected Rib Area		0.056 min	0.15d mm <sup>2</sup> /mm	Not specified.	Not specified.
Transverse Ribless Perimeter		Not more than 25% of bar circumference	Not specified.	0.25d max	Not more than 25% of bar circumference

COUNTRY		Australia	Malaysia	Singapore	Thailand
STANDARD		AS 4671	MS 146	SS 2	TIS 24 2536
GRADE		500N Note - grades 500E and 250N also covered	500 Note - grade 460 also included	RB500W	SD50 Note - grades SD30 and SD40 also covered
<b>SAMPLING &amp; TESTING FREQUENCY</b>	Chemical Composition	One test per cast	One test per cast	One test per cast	One test per cast
	Mechanical Properties	For bar & coil - one test for each 50t but not less than 3 per batch. For decoiled product - one test per diameter per machine per week.	One test for every x tonnes, where x varies between 25 to 55 depending on bar size.	One test for 50t or fraction thereof.	3 tests per batch.
	Bending Properties	For bar & coil - one test per batch. For decoiled product - one test per diameter per machine per week.	One test for every x tonnes, where x varies between 50 to 110 depending on bar size.	One test for 50t or fraction thereof.	3 tests per batch.
	Mass per unit length	One test per batch	Not stated.	Not stated.	Five per batch.
	Surface Geometry	For bar & coil - one test per batch. For decoiled product - measure rib height once per day per machine and at each size change.	Not stated.	Not stated.	Five per batch.
	LTQ Determination	Results for YS, Agt and Ratio shall be collected from batch testing and their long-term Cv's determined statistically.	Not required.	According to ISO 10144	Not required.
<b>IDENTIFICATION</b>	Grade Identification	By alphanumeric marks on the bar surface or by 2 or more continuous longitudinal marks or a minimum of 2 short transverse markings.	Not required.	Suitable marks introduced during rolling.	By alphanumerics or markings on the bar surface.
	Identification of Steel Producer	Unique marks enabling the steel producer to be identified.	By rolled-on marks or thickened ribs.	Suitable marks introduced during rolling.	By alphanumerics or markings on the bar surface.
	Labelling of Product	Each coil or bundle to have a durable label including the name of the steel producer, the steel designation, the number of this standard, the heat number, bundle mass and a unique bundle number or mark.	Not stated.	Each coil or bundle to have a label including the name of the steel producer, the steel grade, the number of this standard, nominal diameter, the heat number and country of origin.	Each bundle to have a label including the grade, size designation, length, heat number and name of manufacturer.

COUNTRY	Australia	China	Japan	Korea	Taiwan	
STANDARD	AS 4671	GB 1499.2 (see Note 1)	JIS G 3112	KS D 3504	GNS 660 A2008 (see Note 2)	
GRADE	500N Note - grades 500E and 250N also covered	HRB500 Note - grades HRB335, HRB400, HRB335, HRBF400 and HRBF500 also covered. The three HRBF grades are fine grained steels.	SD 490 Note - grades SD 295 A & B, SD 345 and SD 390 also covered	SD500W Note - grades SD300, 350, 400, 500, 600, 700 and SD400W also covered	SD490 Note - grades SD230, SD280W, SD420 and SD420W also covered	
CHEMICAL COMPOSITION	C	0.22 max	0.25 max	0.22 max	0.32 max	
	P	0.050 max	0.045 max	0.040 max	0.050 max	
	Mn		1.60 max	1.80 max	1.60 max	
	Si		0.80 max	0.55 max	0.60 max	
	S	0.050 max	0.045 max	0.040 max	0.050 max	
	N				0.012 max (or higher if N-binding elements present)	
	C <sub>eq</sub> $C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/10$	0.44 max	0.60 max (C + Mn/6)	0.50 max	0.37 max C <sub>eq</sub> = C + Mn/6 + Cu/40 + Ni/20 + Cr/10 + Mo/50 + V/10	
MECHANICAL PROPERTIES	Yield Stress	500 MPa Lower Cv 650 MPa Upper Cv	500 MPa min	490 to 625 MPa	500 MPa min.	490 to 625 MPa
	UTS		630 MPa min	620 MPa min.	620 MPa min.	620 MPa min
	Ratio UTS/YS	1.08 Lower Cv				
	Elongation	5.0 % (Agt) Lower Cv	15 % A (total), 7.5 % Agt	12 % min. (test piece equivalent to no. 2)	12 % min. (test piece equivalent to no. 2)	12 % min. (test piece equivalent to no. 2)
	Bend Test	4d mandrel. 90 degree bend angle for bar sizes 16mm and less. 180 degrees for bar 20mm and above	For bar sizes 6-25mm: 6d For bar sizes 28-40mm: 7d For bar sizes >40-50mm: 8d Bend angle 90 degrees.	2.5d for bar sizes 25mm or less. 3d for bar sizes over 25mm. Bend angle 90 degrees.	2.5d for bar sizes 25mm or less. 3d for bar sizes over 25mm. Bend angle 90 degrees.	5d for bar sizes under 25mm. 6d for bar sizes over 25mm. Bend angle 90 degrees.
	Rebend Test	4d mandrel. 90 degree initial bend, then rebend 90 degrees in the reverse direction (after ageing).		Not required.	Not required.	Not required.
DIMENSIONAL REQUIREMENTS	Preferred bar sizes, in mm	12, 16, 20, 24, 28, 32 & 36	6, 8, 10, 12, 14, 16, 18, 20, 22, 25, 28, 32, 36, 40 & 50.	4, 5, 6, 8, 10, 13, 16, 19, 22, 25, 29, 32, 35, 38, 41, 51.	4, 5, 6, 8, 10, 13, 16, 19, 22, 25, 29, 32, 35, 38, 41, 43, 51, 57.	10, 13, 16, 19, 22, 25, 29, 32, 36, 39, 43, 50 and 57.
	Mass per metre tolerance	Plus or minus 4.5%		For bar sizes <10mm: +not specified/-8% For bar sizes 10-15mm: +/-6% For bar sizes 16-28mm: +/-5% For bar sizes 29 and over: +/-4%	For bar sizes <10mm: +not specified/-8% For bar sizes 10-15mm: +/-6% For bar sizes 16-28mm: +/-5% For bar sizes 29 and over: +/-4%	For bar sizes 10-13mm: +/-7% For bar sizes 16-25mm: +/-5% For bar sizes 29 and over: +/-4%
	General Geometry	Shall have 2 or more rows of transverse ribs with uniform spacing.		Shall have transverse ribs with uniform spacing, shape and dimensions.	Shall have transverse ribs with uniform spacing, shape and dimensions.	Shall have transverse ribs with uniform spacing, shape and dimensions.
	Rib Height	0.05d to 0.10d		For bar sizes <13mm: 0.04 to 0.08d For bar sizes 13-19mm: 0.045 to 0.09d For bar sizes over 19mm: 0.05 to 0.10d	For bar sizes <13mm: 0.04 to 0.08d For bar sizes 13-19mm: 0.045 to 0.09d For bar sizes over 19mm: 0.05 to 0.10d	For bar sizes <13mm: 0.04 to 0.08d For bar sizes 13-19mm: 0.045 to 0.09d For bar sizes over 19mm: 0.05 to 0.10d
	Rib Spacing	0.5d to 1.0d	0.70d max.	0.70d max.	0.70d max.	0.70d max.
	Transverse Rib Inclination	Not less than 45 degrees	Between 45 and 70 degrees.	Not less than 45 degrees	Not less than 45 degrees	Not less than 45 degrees
	Projected Rib Area	0.056 min		Not required.	Not required.	
	Transverse Ribless Perimeter	Not more than 25% of bar circumference		Not more than 25% of bar circumference	Not more than 25% of bar circumference	
				One test per cast	One test per cast	
SAMPLING & TESTING FREQUENCY	Chemical Composition	One test per cast		One test per cast	One test per cast	
	Mechanical Properties	For bar & coil - one test for each 50t but not less than 3 per batch. For decoiled product - one test per diameter per machine per week.		One test per batch or two for batches exceeding 50t.	One test per batch or two for batches exceeding 50t.	
	Bending Properties	For bar & coil - one test per batch. For decoiled product - one test per diameter per machine per week.		One test per batch or two for batches exceeding 50t.	One test per batch or two for batches exceeding 50t.	
	Mass per unit length	One test per batch		One test per batch	One test per batch	
	Surface Geometry	For bar & coil - one test per batch. For decoiled product - measure rib height once per day per machine and at each size change.		One test per batch	One test per batch	
LTQ Determination	Results for YS, Agt and Ratio shall be collected from batch testing and their long-term Cv's determined statistically.		Not required.	Not required.		



COUNTRY		Australia	China	Japan	Korea	Taiwan
STANDARD		AS 4671	GB 1499.2 (see Note 1)	JIS G 3112	KS D 3504	CNS 560 A2005 (see Note 2)
GRADE		S50N Note - grades S60E and S250N also covered.	HRB500 Note - grades HRB335, HRB400, HRBF335, HRBF400 and HRBF500 also covered. The three HRBF grades are fine grained steels.	SD 490 Note - grades SD 295 A & B, SD 345 and SD 390 also covered.	SD500W Note - grades SD300, 350, 400, 500, 600, 700 and SD400W also covered.	SD490 Note - grades SD250, SD280W, SD420 and SD420W also covered.
IDENTIFICATION	Grade Identification	By alphanumeric marks on the bar surface or by 2 or more continuous longitudinal marks or a minimum of 2 short transverse markings.		Grade SD490 is identified by three rolled in protrusions on the bar surface.	Rolled in markings to show country of origin, manufacturer, nominal diameter, grade and an asterisk if weldable.	
	Identification of Steel Producer	Unique marks enabling the steel producer to be identified.		Unique marks enabling the steel producer to be identified.	Rolled in company logo.	
	Labelling of Product	Each coil or bundle to have a durable label including the name of the steel producer, the steel designation, the number of this standard, the heat number, bundle mass and a unique bundle number or mark.		Each bundle shall be marked with grade, heat or inspection number, nominal diameter or designation and manufacturer's name.	Each bundle shall be tagged with grade, heat number, nominal diameter or designation and manufacturer's name.	

## Notes:

1. The only available copy of standard GB 1499.2 is in Chinese and therefore unable to translate many requirements.
2. The only available copy of standard CNS 560 is in Chinese and therefore unable to translate many requirements.

COUNTRY		Australia	Spain	Turkey
STANDARD		AS 4671	UNE 36-068	TS 708 (see Note 1)
GRADE		500N Note - grades 500E and 250N also covered	B500S Note - grade B400S also covered	VCH IV A Note - grades VCH I A and VCH III A also covered
CHEMICAL COMPOSITION	C	0.22 max	0.22 max	0.22 max
	P	0.050 max	0.050 max	0.050 max
	Mn			
	Si			
	S	0.050 max	0.050 max	0.050 max
	N		0.012 max (or higher if N-binding elements present)	0.012 max
	C <sub>eq</sub>	0.44 max	0.50 max	0.50 max
MECHANICAL PROPERTIES	Yield Stress	500 MPa Lower Cv 650 MPa Upper Cv	500 Lower Cv	500 min
	UTS		550 Lower Cv	550 min
	Ratio UTS/YS	1.08 Lower Cv	1.05 min	1.08 min
	Elongation	5.0 % (Agt) Lower Cv	12 % Lower CV (on 5d)	12 % on 10d (diam 6-28) 10 % on 10d (diam 32-50)
	Bend Test	4d mandrel. 90 degree bend angle for bar sizes 16mm and less. 180 degrees for bar 20mm and above	6d mandrel for bar sizes ≤12mm 8d mandrel for bar sizes >12 ≤16mm 10d mandrel for bar sizes >16 ≤25mm 12d mandrel for bar sizes >25 ≤40mm 90 degree bend angle	
	Rebend Test	4d mandrel. 90 degree initial bend, then rebend 90 degrees in the reverse direction (after ageing).	90 degree initial bend as per above, then rebend 20 degrees in the reverse direction (after ageing).	
DIMENSIONAL REQUIREMENTS	Preferred bar sizes, in mm	12, 16, 20, 24, 28, 32 & 36	6, 8, 10, 12, 14, 16, 20, 25, 32 and 40	8, 10, 12, 14, 16, 18, 20, 22, 24, 25, 26, 28, 30, 32, 40 and 50.
	Mass per metre tolerance	Plus or minus 4.5%	Plus or minus 4.5%	Plus 4% Minus 6%
	General Geometry	Shall have 2 or more rows of transverse ribs with uniform spacing.	One one side of the bar, the ribs shall have an equal angle of inclination of 60 degrees. On the other side, there shall be two series of ribs with differing angles of inclination.	
	Rib Height	0.05d to 0.10d	0.065d min	0.05d to 0.10d
	Rib Spacing	0.5d to 1.0d	0.45d to 0.75d (for bar sizes 10-40mm)	0.5d to 1.0d
	Tranverse Rib Inclination	Not less than 45 degrees	60 degrees on one side, one series at a max of 75 degrees with a second series at a min of 45 degrees on the other side of the bar.	
	Projected Rib Area	0.056 min	0.056 min (for bar sizes 12-40mm)	
	Tranverse Ribless Perimeter	Not more than 25% of bar perimeter	Not more than 20% of bar perimeter	
SAMPLING & TESTING FREQUENCY	Chemical Composition	One test per cast		
	Mechancial Properties	For bar & coil - one test for each 50t but not less than 3 per batch. For decoiled product - one test per diameter per machine per week.		
	Bending Properties	For bar & coil - one test per batch. For decoiled product - one test per diameter per machine per week.		

See Note 2

COUNTRY		Australia	Spain	Turkey
STANDARD		AS 4671	UNE 36-068	TS 708 (see Note 1)
GRADE		500N Note - grades 500E and 250N also covered	B500S Note - grade B400S also covered	VCH IV A Note - grades VCH II A and VCH III A also covered
	Mass per unit length	One test per batch	See Note 2.	
	Surface Geometry	For bar & coil - one test per batch. For decoiled product - measure rib height once per day per machine and at each size change.		
	LTQ Determination	Results for YS, Agt and Ratio shall be collected from batch testing and their long-term CV's determined statistically.		
IDENTIFICATION	Grade Identification	By alphanumeric marks on the bar surface or by 2 or more continuous longitudinal marks or a minimum of 2 short transverse markings.	Rib profile as noted above.	
	Identification of Steel Producer	Unique marks enabling the steel producer to be identified.	By a series of thickened ribs at defined intervals.	
	Labelling of Product	Each coil or bundle to have a durable label including the name of the steel producer, the steel designation, the number of this standard, the heat number, bundle mass and a unique bundle number or mark.	Not stated.	

## Notes:

1. A copy of Turkish Standard TS 708 was not available so the above information was taken from the website of steel producers.
2. In order to meet the requirements of the Spanish standard, the manufacturer must be in possession of the AENOR mark, i.e. product certification issued by the Spanish Association of Standardisation and Certification. Alternatively, the manufacturer must have each order sampled and tested by an authorised organisation. The frequency of sampling and testing is 15 samples per batch for mechanical and geometric properties and 2 per batch for product analysis.

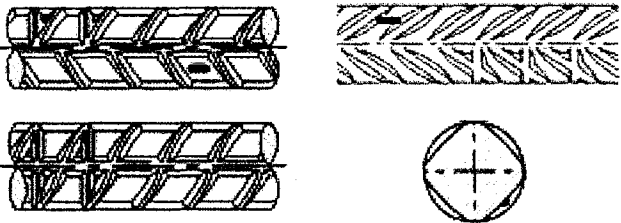
# RE DATA 4.0

ESSENTIAL TECHNICAL DATA ON STEEL REINFORCEMENT

Build with OneSteel Reinforcing

# 500PLUS® REBAR Identification Markings

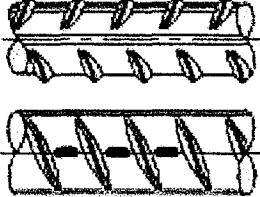
## Newcastle Rod Mill



The Newcastle Rod Mill section contains four diagrams. On the left, two cylindrical rebar segments are shown with a double-flute longitudinal profile. On the right, a longitudinal cross-section of a rebar shows a feathered surface texture. Below these, a circular cross-section of a rebar is shown with a crosshair marking.

500N MICROALLOY (MA)      CONTISTRETCH

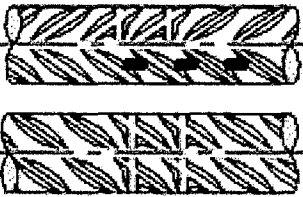
## Laverton Bar Mill



The Laverton Bar Mill section contains two cylindrical rebar segments. The top one has a longitudinal profile with several sharp, pointed protrusions. The bottom one has a longitudinal profile with several sharp, pointed protrusions and a central longitudinal groove.

500N TEMPCORE (TC)

## Laverton Rod Mill



The Laverton Rod Mill section contains two longitudinal cross-sections of rebar. The top one shows a feathered surface texture with a central longitudinal groove. The bottom one shows a feathered surface texture with a central longitudinal groove and a crosshair marking.

500N MICROALLOY (MA)



## 500PLUS® REBAR Identification Markings

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## 500PLUS REBAR

Identification markings are rolled into the different types of REBAR and the wire in REOMESH® so the manufacturing facility of origin and steel type can be identified. The identifiers for REBAR have been standardised as a combination of horizontal and/or diagonal marks placed between the ribs at intervals as shown pictorially for each mill:

**500PLUS**  
REBAR  
TEMPCORE

**500PLUS**  
REBAR  
MICROALLOY

**500PLUS**  
REBAR  
CONTISTRETCH

**poolsteel**

### Sydney Bar Mill



500N TEMPCORE (TC)

250N S12 POOLSTEEL

## REBAR & REO WIRE Product Designations

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AS/NZS 4671* Designation	OneSteel Designation**	Yield Stress (MPa)	Ductility Class***	Product Description	Source Material Type	Size Range
D500N_	N_	500	N	Hot rolled deformed rebar (500PLUS®REBAR)	TEMPCORE (TC) MICROALLOY (MA) CONTISTRETCH (CS)	N12 - N40 straight stock lengths N10, N12, N16 off coil
R250N_	R_	250	N	Hot rolled round rebar	Mild Steel	R6, R10, R12 off coil R16 -R28 straight stock lengths
D250N_****	S_	250	N	Hot rolled deformed rebar (POOLSTEEL®)	Mild Steel	S12
D500L_	RW_	500	L	Cold rolled ribbed wire	Mild Steel	RW5 - RW12 off coil
R500L_	W_	500	L	Cold drawn round wire	Mild Steel	W4 - W12 off coil

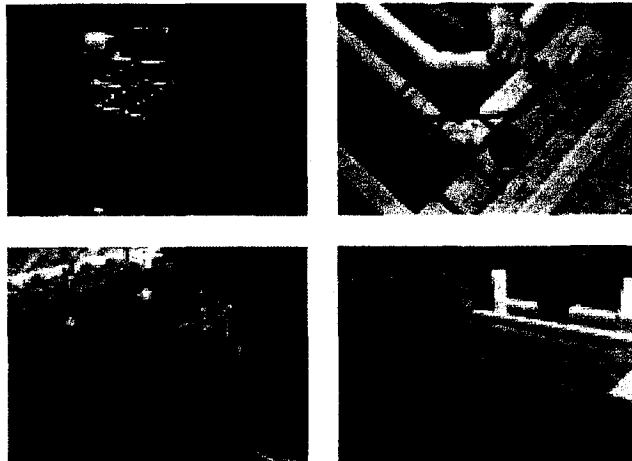
\* AS/NZS 4671 : 2001 Steel reinforcing materials, D = Deformed, R = Round, N = Normal Ductility, L = Low Ductility

\*\* \_ indicates bar diameter (mm), N = Normal, R = Round, S = Structural, RW = Ribbed Wire, W = Wire

\*\*\* Uniform Strain Limits N : Normal (≥5%) L : Low (≥1.5%)

\*\*\*\* POOLSTEEL®

## POOLSTEEL®



**poolsteel**

Specifically developed for use in concrete swimming pools, OneSteel Reinforcing's 250S Grade 12 mm POOLSTEEL® is a ductile steel that is preferred by steelfixers over other types of concrete pool reinforcing steels available.

Having a deformed profile enables a superior bond to be achieved with the concrete ensuring a quality result.

Ground movement can exert extreme forces on the walls of a swimming pool. The strength and ductility of POOLSTEEL® enables these forces to be resisted while controlling cracking, thereby contributing to the longevity of the pool structure.

- Provides maximum design flexibility
- Specially developed for concrete pool construction
- Independently certified by ACRS
- Easy to bend and form





## Heating & Welding 500PLUS® REBAR

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## 500PLUS REBAR

After heating, the resultant ambient temperature properties of reinforcing steels may be significantly altered. This is an important consideration if heat has been applied to assist with bending bars through welding or the effect of fire. To effectively control the temperature during the heating or welding process the use of temperature control crayons is recommended.

### Heating

Heating should be avoided if the original bar properties are required. Bending should always be around a former of the appropriate size (refer processing to AS 3600). AS 3600 : 2001 states in Clause 19.2.3.1 and AS 3600 : 2009 in Clause 17.2.3.1 that reinforcement may be bent hot, provided that all of the following are complied with:

- i) the steel is heated uniformly through & beyond the portion to be bent;
- ii) the temperature of the steel does not exceed 600°C;

- iii) the bar is not cooled by quenching; and
- iv) if during heating the temperature of the bar exceeds 450°C, the characteristic yield stress ( $f_{cy}$ ) of the steel after bending shall be taken as 250 MPa.

### Welding

500PLUS® REBAR produced by the TEMPCORE®, MICROALLOYED and CONTISTRETCH processes has maximum carbon equivalent (Ceq) of 0.44 and, as such, requires no pre-heating prior to welding.

Pre-heating is not required when bars are welded in accordance with AS/NZS 1554 Part 3. Hydrogen controlled electrodes are required for all weld types, and matching strength electrodes are required for butt welds.

**Note:** Some types of welded splices can reduce the ductility of the connected bars.

## OneSteel Reinforcing REOMESH® & REBAR are ACRS accredited

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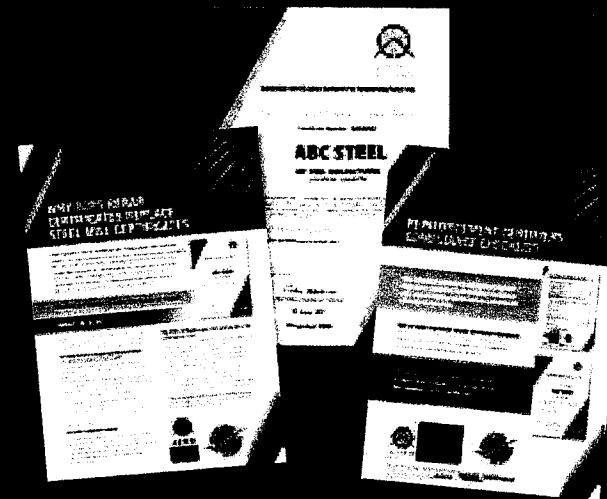
### ACRS - The Australian Certification Authority for Reinforcing Steels

- ACRS is an independent third party assessment body which checks Reinforcement for compliance to AS/NZS 4671 Steel Reinforcing Materials
- It tests both the steel supplied by the steel mills in Australia & overseas to Australian reinforcing mesh manufacturers, and the finished REBAR and REOMESH® products delivered to builders and concreters
- ACRS certification independently confirms the Standards compliance of the materials you buy
- Ask for proof that the reinforcing mesh you are supplied complies with AS/NZS4671 Steel Reinforcing Materials
- The easiest way to check this is ask to see your supplier's ACRS certificate.

Full details of ACRS can be found at [acrs.net.au](http://acrs.net.au)



INDEPENDENT THIRD PARTY  
CERTIFICATION OF  
REINFORCING STEELS  
COMPLIANCE TO  
AUSTRALIAN STANDARDS



# Product & Availability Guide

## Rebar, Rounds, Squares - NSW

### PRODUCT AVAILABILITY

Ex Stock Products											
Product Type	Size	Coils	Stretch Coils	Wild Coils	6m	9m	10m	12m	15m	Mass/M	Stocked Location
Coiled Rebar	N10			1.50T						0.617	Newcastle
	N12	3.00T								0.888	Newcastle
	N16	3.00T								1.58	Newcastle
Pool Steel	S12				2.00T	2.00T				0.888	Sydney
Straight Rebar	N12				2.00T	2.00T	2.00T	2.20T		0.888	Sydney
	N16				2.00T	2.00T	2.00T	2.20T		1.58	Sydney
	N20				2.00T	2.00T	2.00T	2.20T	2.70T	2.47	Sydney
	N24					2.00T	2.00T	2.20T	2.70T	3.55	Sydney
	N28					2.00T	2.00T	2.20T	2.70T	4.83	Sydney
	N32						2.00T	2.20T	2.70T	6.31	Sydney
	N36							2.20T	2.70T	7.99	Sydney
Rounds	N40							2.70T		9.86	Laverton
	R10				1.00T					0.616	Laverton
	R12				2.00T					0.887	Sydney
	R16				2.00T					1.58	Sydney
	R20				2.00T					2.46	Sydney
	R24				2.00T					3.55	Newcastle

- Nominal Weights
- N designated items are 500MPa class N reinforcing bar
- S designated items are 250MPa class N reinforcing bar
- R designated items are 300MPa round bar

### Ex-Rolling Products

#### Rebar and Rounds - Non Standard Lengths

OneSteel Rod and Bar rolls the majority of sizes on a four (4) or eight (8) week rolling cycle. Each non-standard section/length can be ordered from a rolling with a **Minimum Order Quantity of 26T** (or one full truckload for longer length sections). Orders must be despatched directly after rolling. Refer to OneSteel Steel in Concrete Delivery Programme or contact your OneSteel representative for the despatching week of ex rolling items.

Availability and delivery of rounds above 24mm in diameter are by enquiry to your OneSteel representative. Non-standard length rounds are available with a MOQ of 12T.

#### Length Range

Rebar minimum length 6m - maximum length 18m. Available in 0.05m increments (15m - 18m only available ex-Laverton, Sydney maximum length 15m). Rounds have a length range of 5m to 10m in 0.1m increments.

Lengths greater than 15m are supplied ex Laverton.

# Product & Availability Guide

## Rebar, Rounds, Squares - NSW

### Squares

The available sizes are 16mm SQ (mass/m 2.01), 20mm SQ (mass/m 3.14) and 25mm SQ (mass/m 4.91). All sizes are rolled on an eight (8) week rolling cycle. Products can be ordered from rollings with a Minimum Order Quantity of 2T.

Please contact Your OneSteel representative for availability.

### DELIVERY LEAD TIME

Delivery Location	Transport Mode	Source		
		Laverton	Newcastle	Sydney
Sydney/Newcastle/Wollongong	Road	3	2	2
Dubbo/Wagga/Canberra/ Bathurst	Road	3	3	3
Coffs Harbour/Lismore/Tamworth	Road	4	3	3

- Based off full loads from each source.
- Lead times based on working days
- Order must be received by OneSteel prior to 4.00pm NSW time on Day Zero

**Note:** Longer lead times for >12m up to 18m lengths

### DELIVERY LEAD TIME FOR >12M UP TO 18M LENGTHS

Delivery Location	>12m Delivery from Source Mill		
	Laverton	Sydney	Delivery Tolerance
Sydney/Newcastle	5	3	+0, -2

- Based off full loads from each source
- Lead times based on working days
- All other locations contact your OneSteel representative

### LENGTH SURCHARGES

The following freight surcharges will apply to lengths above 12m to the locations listed. The rate applicable to regional and other areas not listed will be as per the nearest major centre. Eg. Newcastle = Sydney.

Delivery Location	>12m - 15m	>15m - 18m
Sydney	\$20/T	\$80/T

### BUNDLE WEIGHT TOLERANCES

	Nominal Weight	Tolerance
Coiled Rebar - 10mm	1.5T	+/- 0.1T
Coiled Rebar - 12 & 16mm	3.0T	+/- 0.2T
Straight Rebar < 12m	2.0T	+/- 0.2T
Straight Rebar ≥ 12m < 15m	2.2T	+/- 0.2T
Straight Rebar > 15m	2.7T	+/- 0.2T
Rounds & Squares	2.0T	+/- 0.2T

**Note:** < 5% of bundles or coils may be supplied against any order at a minimum weight of 500kg.

# Product & Availability Guide

## Rebar, Rounds, Squares - NSW

### BUNDLE CONFIGURATION

Due to safety considerations, OneSteel will aim to keep protruding bars to within 100mm from the maximum position of the main bars. Should any issues arise please contact your OneSteel representative.

### LENGTH TOLERANCES

#### Rebar

The length tolerances that all mills currently use are as per AS 4671, i.e.

Length	Length Tolerance
<= 7m	+0, -40mm
> 7m, < 12m	+40, - 40mm
> 12m	+60, -40mm

Please note we attempt to minimise length variation in our processes to a tighter tolerance than the Australian Standard specifies.

For non-standard tolerance requests, please contact your OneSteel representative.

#### Rounds and Squares

Please refer to AS 3679.1

### SUPPLY TOLERANCE

Due to the different truck capacities the following delivery tolerances will be applied to all orders.

Order Quantity	Delivery Tolerance
<= 27T	+/-15%
> 27T, <= 46T	+/- 10%
> 46T	+/- 5%

### MINIMUM DESPATCH QUANTITY

The Minimum Despatch Quantity is dependent upon the transport mode and product length. The Minimum Despatch Quantity is one (1) full load from one supply mill per customer site. 15m and 18m length product is unable to be mixed with other lengths to make up a load.

Less than full truck load orders of round bar and pool steel are not subject to standard delivery times. Contact your OneSteel representative who will advise applicable delivery schedule.

### MINIMUM ITEM QUANTITY

The Minimum Item Quantity for a stocked product is two (2) bundles. The Minimum Order Quantity can be made up of any combination of stocked products. (Please note that straight bar and coiled products cannot be mixed).

Customers must consider the source mill before ordering products, to ensure the full load order is stocked and supplied from one location. If this is not possible the load will be delivered from the location that stocks the majority of the product and/or the order will be split between locations and delivered separately. In each case, the order shall be a full truck load from each despatch location, requiring the customer to supplement items to create a full truck load from each despatch location (Contistretch and Newcastle Rod Mill are separate mills and therefore their products are NOT able to be mixed).

# Product & Availability Guide Rebar, Rounds, Squares - NSW

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## **CERTIFICATION AND COMPLIANCE**

Reinforcing Bar is made in accordance with AS/NZ 4671 and is Australian Certification Reinforcing Steel (ACRS) accredited.

Rounds and Squares are made in accordance with AS/NZ 3679.1 and is ACRS accredited.

Customers can access test certificate via the OneSteel Ezycommerce website at:  
<http://ezycommerce.onesteel.com>.

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**PRODUCT & AVAILABILITY GUIDE REBAR, ROUNDS, SQUARES**

**EFFECTIVE FROM: JANUARY 2014 | CANCELS PREVIOUS GUIDE DATED: MARCH 2013  
ISSUE 5 | APPLICABLE FOR NEW SOUTH WALES**

**PAGE 4**



**onesteel**

### MICRO-ALLOYED AS/NZS 4671-500N

## REINFORCING STEELS

### Introduction

A high strength weldable deformed bar manufactured by micro-alloying. Supplied in coil form in diameters 10, 12 and 16mm.

### Typical Application

Reinforced concrete construction under AS3600 and other referenced standards. May also be used for strata control.

### Welding

All welding must conform to the requirements of AS/NZS1554.3. Preheat not required. Post heat not required.

Hydrogen controlled welding processes and electrodes such as GMAW, FCAW and low hydrogen MMAW must be used for all weld types. Matching strength W55x (E55xx) or W62x (E62xx) type consumables are required for all load bearing butt welds.

Interpass temperature should be limited to 200°C maximum for all joints.

### Chemical Analysis %

C	P	Mn
0.22x	0.050x	-

Si	S	CE
-	0.050x	0.44x

x - denotes maximum

### Chemical Formula

CE = C + $\frac{\text{Mn}}{6}$ + $\frac{\text{Cr}}{5}$ + $\frac{\text{Mo}}{5}$ + $\frac{\text{V}}{5}$ + $\frac{\text{Ni}}{15}$ + $\frac{\text{Cu}}{15}$					
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### CHARACTERISTIC Mechanical Properties

Yield (MPa)	UTS/YS Ratio Minimum	Uniform Elongation (%) Minimum
500 - 650	1.08	5

### Cold Bending Properties

Nominal Diameter (mm)	Mandrel Diameter	Bend Angle	Rebend Angle
$d \leq 16$	4d	90°	90°

Grade Colour Brand

Nil

### QST AS/NZS 4671-500N

## REINFORCING STEELS

### Introduction

A high strength weldable deformed bar manufactured using a quench and self temper process. Supplied in straight lengths in nominal diameters from 12 to 40mm.

### Typical Application

Reinforced concrete construction under AS3600 and other referenced standards. May also be used for strata control.

### Welding

All welding must conform to the requirements of AS/NZS1554.3. Preheat not required. Post heat not required.

Hydrogen controlled welding processes and electrodes such as GMAW, FCAW and low hydrogen MMAW must be used for all weld types. Matching strength W55x (E55xx) or W62x (E62xx) type consumables are required for all load bearing butt welds.

Interpass temperature should be limited to 200°C maximum for all joints.

### Chemical Analysis %

C	P	Mn
0.22x	0.050x	-

Si	S	CE
-	0.050x	0.44x

x - denotes maximum

### Chemical Formula

$$CE = C + \frac{Mn}{6} + \frac{Cr}{5} + Mo + V + \frac{Ni}{15} + Cu$$

### CHARACTERISTIC Mechanical Properties

Yield (MPa)	UTS/YS Ratio Minimum	Uniform Elongation (%) Minimum
500 - 650	1.08	5

### Cold Bending Properties

Nominal Diameter (mm)	Mandrel Diameter	Bend Angle	Rebend Angle
$d \leq 16$	4d	90°	90°
$d \geq 16$	4d	180°	NA

Grade Colour Brand

Nil



### CONTISTRETCH AS/NZS 4671-500N

#### REINFORCING STEELS

##### Introduction

A high strength weldable deformed bar manufactured by a continuous cold stretching process. Supplied in compact spool form in diameters 12 and 16mm.

##### Typical Application

Reinforced concrete construction under AS3600 and other referenced standards. May also be used for strata control.

##### Welding

All welding must conform to the requirements of AS/NZS1554.3. Preheat not required. Post heat not required.

Hydrogen controlled welding processes and electrodes such as GMAW, FCAW and low hydrogen MMAW must be used for all weld types. Matching strength W55x (E55xx) or W62x (E62xx) type consumables are required for all load bearing butt welds.

Interpass temperature should be limited to 200°C maximum for all joints.

##### Chemical Analysis %

C	P	Mn
0.22x	0.050x	-

Si	S	CE
-	0.050x	0.44x

x - denotes maximum

##### Chemical Formula

$$CE = C + \frac{Mn}{6} + \frac{Cr}{5} + \frac{Mo}{5} + \frac{V}{5} + \frac{Ni}{15} + \frac{Cu}{15}$$

##### CHARACTERISTIC Mechanical Properties

Yield (MPa)	UTS/YS Ratio Minimum	Uniform Elongation (%) Minimum
500 - 650	1.08	5

##### Cold Bending Properties

Nominal Diameter (mm)	Mandrel Diameter	Bend Angle	Rebend Angle
$d \leq 16$	4d	90°	90°

##### Spool Dimensions

Inside diameter	600mm
Outside diameter	1250mm max.
Height	700mm
Mass	3.0 tonnes nominal
Orientation	Bore vertical

Grade Colour Brand	Nil
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### AS/NZS 4671-250N

## REINFORCING STEELS

### Introduction

A readily weldable, hot rolled reinforcing steel complying with AS/NZS 4671-250N. Available in 12mm deformed bar only.

### Typical Application

Reinforcement of concrete swimming pools.

### Welding

Any electrode type or welding process is satisfactory. For more information please see WTIA Technical Note No 1. Group Number 4.

### Chemical Analysis %

<b>C</b>	<b>P</b>	<b>Mn</b>
0.22x	0.050x	-
<b>Si</b>	<b>S</b>	<b>CE</b>
-	0.050x	0.43x

x - denotes maximum

### Chemical Formula

$$GF = \frac{C}{r} + \frac{Mn}{F} + \frac{Cr}{IF} + \frac{Ni}{IF} + \frac{Cu}{IF}$$

## CHARACTERISTIC Mechanical Properties

Yield (MPa) Minimum	UTS/YS Ratio Minimum	Uniform Elongation (%) Minimum
250	1.08	5

### Cold Bending Properties

Minimum Mandrel Diameter – 4d (where d is the nominal bar diameter, in millimetres).

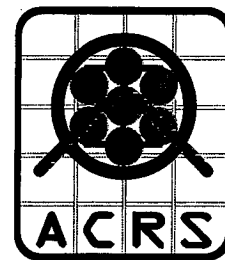
Bend Angle – 90° initial bend, followed by ageing then rebent in the reverse direction through 90°.

Grade Colour Brand

Nii

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**2014**

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[www.steelcertification.com](http://www.steelcertification.com)

**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**

## *Certificate of Product Performance*

**Certificate Number: 31101**

# **onesteel**

**m a n u f a c t u r i n g**

**ONESTEEL MANUFACTURING  
ROOTY HILL, NSW, AUSTRALIA**


*has satisfied the Authority that it complies with the rules of the ACRS Scheme. Where appropriate, and as listed below, it has further satisfied the Authority that it manufactures and/or supplies products that conform consistently with the standards listed below and is entitled to use the ACRS mark in relation to the products listed on this certificate.*

### *Scope of Certification*

**Reinforcing Bar Manufactured to AS/NZS 4671**

Full details of the products for which certification has been achieved should be viewed at: [www.steelcertification.com](http://www.steelcertification.com)

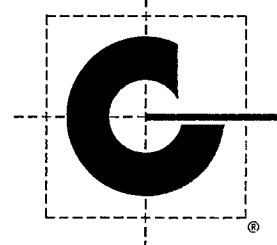
By authority of  
ACRS Board:

  
**Philip Sanders, Executive Director**

Valid until: **31 December 2014**

First certified: **November 2003**

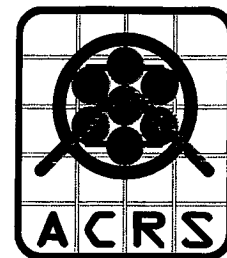
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**2014**

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[www.steelcertification.com](http://www.steelcertification.com)

**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**  
*Products assessed by ACRS to AS/NZS 4671*

To be read in conjunction with  
 Certificate Number: 31101

**onesteel**  
 manufacturing

**ONESTEEL MANUFACTURING**  
 ROOTY HILL, NSW, AUSTRALIA

has satisfied the Authority that it complies with the relevant ACRS Quality and Operations Assessment Procedures. Where appropriate, and as listed below, it manufactures products as indicated by "✓", below and is entitled to use the ACRS mark with these products.

**Products manufactured :**

*AS/NZS 4671 Grade 500N Ribbed Bar*

<b>N-Grade Bar</b>	12, 16 mm	✓
	20, 24, 28 mm	✓
	32, 40 mm	✓
<b>Thread Bar</b>	16 mm	✓
	20, 25 mm	✓
	32 mm	✓

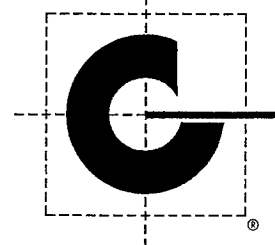
*AS/NZS 4671 Grade 250N Ribbed Bar*

<b>Bar</b>	12 mm	✓
------------	-------	---

*Bar Markings*

<p><b>D500N Straight Bar</b></p> <p>Two enlarged longitudinal ribs</p> <p>Standard Sydney Bar Mill mark</p>	
<p><b>D250N Straight Bar</b></p> <p>Modified Mill mark centre strand only</p>	

**JAS-ANZ**

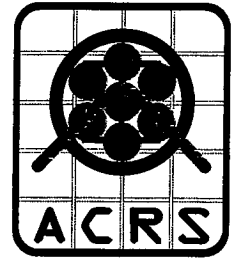


[www.jas-anz.org/register](http://www.jas-anz.org/register)

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[www.steelcertification.com](http://www.steelcertification.com)

**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**

## *Certificate of Product Performance*

**Certificate Number: 31102**

# **onesteel**

**m a n u f a c t u r i n g**

**ONESTEEL MANUFACTURING  
LAVERTON, VIC, AUSTRALIA**

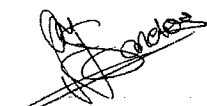
*has satisfied the Authority that it complies with the rules of the ACRS Scheme. Where appropriate, and as listed below, it has further satisfied the Authority that it manufactures and/or supplies products that conform consistently with the standards listed below and is entitled to use the ACRS mark in relation to the products listed on this certificate.*

### *Scope of Certification*

**Reinforcing Bar Manufactured to AS/NZS 4671**

Full details of the products for which certification has been achieved should be viewed at: [www.steelcertification.com](http://www.steelcertification.com)

By authority of  
ACRS Board:

  
**Philip Sanders, Executive Director**

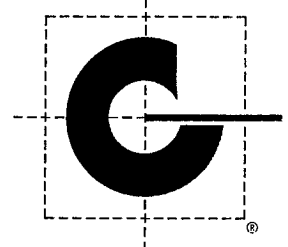
Valid until:

**31 December 2014**

First certified:

**November 2003**

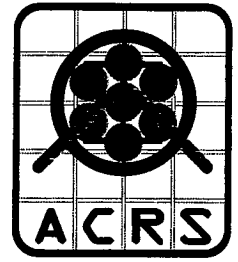
**JAS-ANZ**



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[www.steelcertification.com](http://www.steelcertification.com)

**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**  
*Products assessed by ACRS to AS/NZS 4671*

To be read in conjunction with  
Certificate Number: 31102

**onesteel**  
manufacturing

**ONESTEEL MANUFACTURING**  
LAVERTON, VIC, AUSTRALIA

has satisfied the Authority that it complies with the relevant ACRS Quality and Operations Assessment Procedures. Where appropriate, and as listed below, it manufactures products as indicated by "✓", below and is entitled to use the ACRS mark with these products.

**Products manufactured :**

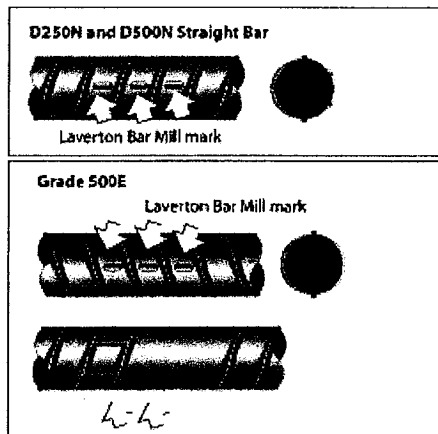
*AS/NZS 4671 Grade 500N Ribbed Bar*

Bar	12, 16 mm	✓
	20, 24, 28 mm	✓
	32, 36, 40 mm	✓

*AS/NZS 4671 Grade 500E Ribbed Bar*

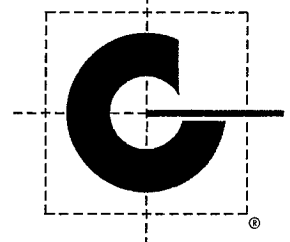
Bar	16 mm	✓
	20, 25 mm	✓
	32 mm	✓

*Bar Markings*



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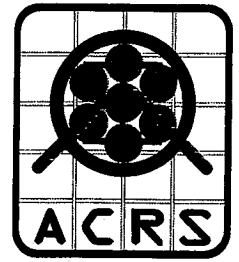
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[www.steelcertification.com](http://www.steelcertification.com)

**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**

## *Certificate of Product Performance*

*Certificate Number: 311021*

**onesteel**  
m a n u f a c t u r i n g

**ONESTEEL MANUFACTURING**  
LAVERTON, VIC, AUSTRALIA

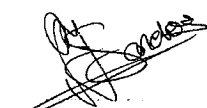
*has satisfied the Authority that it complies with the rules of the ACRS Scheme. Where appropriate, and as listed below, it has further satisfied the Authority that it manufactures and/or supplies products that conform consistently with the standards listed below and is entitled to use the ACRS mark in relation to the products listed on this certificate.*

### *Scope of Certification*

*Reinforcing Bars in Coil Manufactured to AS/NZS 4671*

Full details of the products for which certification has been achieved should be viewed at: [www.steelcertification.com](http://www.steelcertification.com)

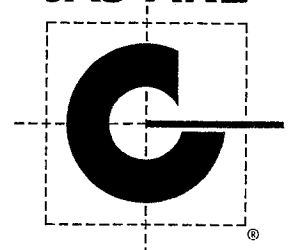
By authority of  
ACRS Board:

  
Philip Sanders, Executive Director

Valid until: 31 December 2014

First certified: November 2003

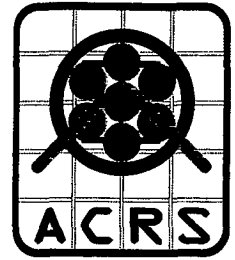
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**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**  
*Products assessed by ACRS to AS/NZS 4671*

To be read in conjunction with  
Certificate Number: 311021

**onesteel**  
manufacturing

**ONESTEEL MANUFACTURING**  
LAVERTON, VIC, AUSTRALIA

has satisfied the Authority that it complies with the relevant ACRS Quality and Operations Assessment Procedures. Where appropriate, and as listed below, it manufactures products as indicated by "✓", below and is entitled to use the ACRS mark with these products.

**Products manufactured :**

AS/NZS 4671 Grade 500N Ribbed Bar

Coil      10, 12 and 16 mm      ✓

AS/NZS 4671 Grade 250N Plain Bar

Coil      10 mm      ✓

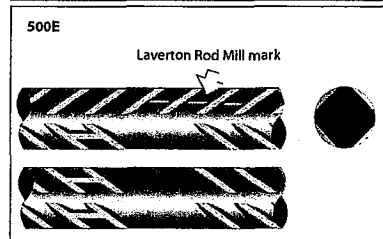
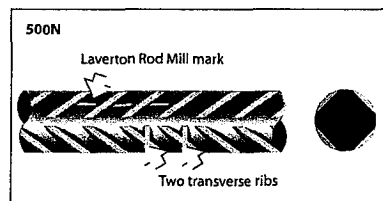
AS/NZS 4671 Grade 500N Plain Bar

Coil      10 mm      ✓

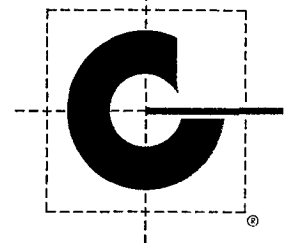
AS/NZS 4671 Grade 500E Plain Bar

Coil      12 and 16 mm      ✓

**Bar Markings**



**JAS-ANZ**

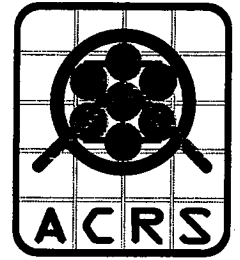


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**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**

## *Certificate of Product Performance*

Certificate Number: 31103

**onesteel**  
m a n u f a c t u r i n g

**ONESTEEL MANUFACTURING**  
MAYFIELD, NSW, AUSTRALIA

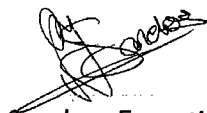
has satisfied the Authority that it complies with the rules of the ACRS Scheme. Where appropriate, and as listed below, it has further satisfied the Authority that it manufactures and/or supplies products that conform consistently with the standards listed below and is entitled to use the ACRS mark in relation to the products listed on this certificate.

### *Scope of Certification*

**Reinforcing Bars in Coil Manufactured to AS/NZS 4671**

Full details of the products for which certification has been achieved should be viewed at: [www.steelcertification.com](http://www.steelcertification.com)

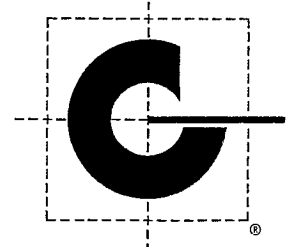
By authority of  
ACRS Board:

  
Philip Sanders, Executive Director

Valid until: 31 December 2014

First certified: November 2003

**JAS-ANZ**

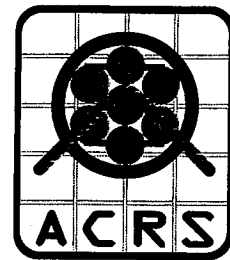


[www.jas-anz.org/register](http://www.jas-anz.org/register)

AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS LTD

VALID TO 31 DEC  
**2014**

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[www.steelcertification.com](http://www.steelcertification.com)

**Australasian Certification Authority for Reinforcing and Structural Steels Ltd**  
*Products assessed by ACRS to AS/NZS 4671*

To be read in conjunction with  
Certificate Number: 31103

**onesteel**  
manufacturing

**ONESTEEL MANUFACTURING**  
MAYFIELD, NSW, AUSTRALIA

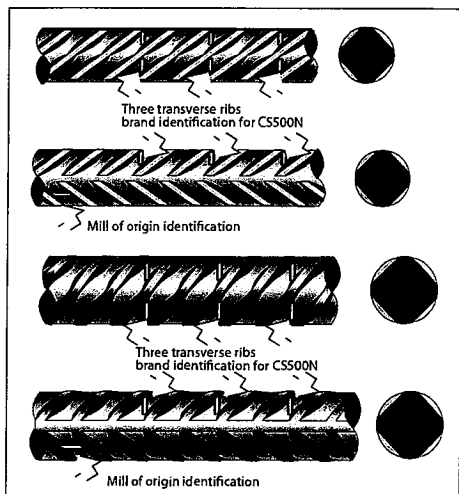
has satisfied the Authority that it complies with the relevant ACRS Quality and Operations Assessment Procedures. Where appropriate, and as listed below, it manufactures products as indicated by "✓", below and is entitled to use the ACRS mark with these products.

**Products manufactured :**

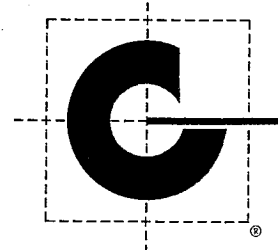
AS/NZS 4671 Grade 500N Ribbed Bar

Coil	10 mm	✓
	12 and 16 mm	✓

**Bar Markings**



**JAS-ANZ**



[www.jas-anz.org/register](http://www.jas-anz.org/register)

AUSTRALASIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS LTD

**CUSTOMS TARIFF  
SCHEDULE 3**

Non-Confidential Attachment A-3.2

Section 15  
Chapter 72/14

Reference Number	Statistical Code/Unit	Goods	Rate #
7213		<b>BARS AND RODS, HOT-ROLLED, IN IRREGULARLY WOUND COILS, OF IRON OR NON-ALLOY STEEL:</b>	
7213.10.00	42 t	- Containing indentations, ribs, grooves or other deformations produced during the rolling process	5% DCS:Free
7213.20.00	43 t	- Other, of free-cutting steel	5% DCS:Free
7213.9		- Other:	
7213.91.00	44 t	-- Of circular cross-section measuring less than 14 mm in diameter	5% DCS:Free
7213.99.00	45 t	-- Other	5% DCS:Free
7214		<b>OTHER BARS AND RODS OF IRON OR NON-ALLOY STEEL, NOT FURTHER WORKED THAN FORGED, HOT-ROLLED, HOT-DRAWN OR HOT-EXTRUDED, BUT INCLUDING THOSE TWISTED AFTER ROLLING:</b>	
7214.10.00	46 t	- Forged	5% DCS:Free
7214.20.00	47 t	- Containing indentations, ribs, grooves or other deformations produced during the rolling process or twisted after rolling	5% DCS:Free
7214.30.00	48 t	- Other, of free-cutting steel	5% DCS:Free
7214.9		- Other:	
7214.91.00	49 t	-- Of rectangular (other than square) cross-section	5% DCS:Free
7214.99.00	50 t	-- Other	5% DCS:Free
7215		<b>OTHER BARS AND RODS OF IRON OR NON-ALLOY STEEL:</b>	
7215.10		- Of free-cutting steel, not further worked than cold-formed or cold-finished:	
7215.10.10	51 t	--- "Flattened circles" and "modified rectangles" as defined in Note 1(m) to Chapter 72	5% DCS:Free
7215.10.90	52 t	--- Other	5% DCS:4% DCT:5%

# Unless otherwise indicated NZ, PG, FI, DC, LDC and SG rates are Free.

1/1/12

Unless otherwise indicated general rate applies for CA.

Unless indicated in Schedules 5, 6, 7 or 8 rates for US, Thai, Chilean and AANZ originating goods, respectively, are Free.

DCS denotes the rate for countries and places listed in Part 4 of Schedule 1 to this Act.

DCT denotes the rate for HK, KR, SG and TW.

If no DCT rate shown, DCS rate applies. If no DCT or DCS rate shown, general rate applies.

**CUSTOMS TARIFF  
SCHEDULE 3**

Section 15  
Chapter 72/22

Reference Number	Statistical Code/Unit	Goods	Rate #
7227		<b>BARS AND RODS, HOT-ROLLED, IN IRREGULARLY WOUND COILS, OF OTHER ALLOY STEEL:</b>	
7227.10.00	37 t	- Of high speed steel	Free
7227.20		- Of silico-manganese steel:	
7227.20.10	38 t	--- "Flattened circles" and "modified rectangles" as defined in Note 1(l) to Chapter 72	5% DCS:4% DCT:5%
7227.20.20	39 t	--- Goods, NSA, as follows: (a) containing less than 0.35% of carbon; (b) containing more than 1.2% of manganese	5% DCS:Free
7227.20.90	40 t	--- Other	5% DCS:4% DCT:5%
7227.90		- Other:	
7227.90.10	69 t	--- Goods, as follows: (a) of high alloy steel; (b) "flattened circles" and "modified rectangles" as defined in Note 1(l) to Chapter 72	5% DCS:4% DCT:5%
7227.90.90	42 t	--- Other	5% DCS:Free
7228		<b>OTHER BARS AND RODS OF OTHER ALLOY STEEL; ANGLES, SHAPES AND SECTIONS, OF OTHER ALLOY STEEL; HOLLOW DRILL BARS AND RODS, OF ALLOY OR NON-ALLOY STEEL:</b>	
7228.10.00	43 t	- Bars and rods, of high speed steel	5% DCS:4% DCT:5%
7228.20		- Bars and rods, of silico-manganese steel:	
7228.20.10	44 t	--- "Flattened circles" and "modified rectangles" as defined in Note 1(m) to Chapter 72	5% DCS:4% DCT:5%
7228.20.2		--- Goods, NSA, as follows: (a) containing less than 0.35% of carbon; (b) containing more than 1.2% of manganese:	
7228.20.21	45 t	---- Not further worked than cold-formed or cold-finished	5% DCS:4% DCT:5%
7228.20.29	46 t	---- Other	5% DCS:Free
7228.20.90	47 t	--- Other	5% DCS:4% DCT:5%

# Unless otherwise indicated NZ, PG, FI, DC, LDC and SG rates are Free.

1/1/12

Unless otherwise indicated general rate applies for CA.

Unless indicated in Schedules 5, 6, 7 or 8 rates for US, Thai, Chilean and AANZ originating goods, respectively, are Free.

DCS denotes the rate for countries and places listed in Part 4 of Schedule 1 to this Act.

DCT denotes the rate for HK, KR, SG and TW.

If no DCT rate shown, DCS rate applies. If no DCT or DCS rate shown, general rate applies.

**CUSTOMS TARIFF  
SCHEDULE 3**

Section 15  
Chapter 72/23

(Chapter 73 follows)

R.5

Reference Number	Statistical Code/Unit	Goods	Rate #
7228.30		- Other bars and rods, not further worked than hot-rolled, hot-drawn or extruded:	
7228.30.10	70 t	--- Goods, as follows: (a) of high alloy steel; (b) "flattened circles" and "modified rectangles" as defined in Note 1(m) to Chapter 72	5% DCS:4% DCT:5%
7228.30.90	49 t	--- Other	5% DCS:Free
7228.40		- Other bars and rods, not further worked than forged:	
7228.40.10	71 t	--- Goods, as follows: (a) of high alloy steel; (b) "flattened circles" and "modified rectangles" as defined in Note 1(m) to Chapter 72	5% DCS:4% DCT:5%
7228.40.90	51 t	--- Other	5% DCS:Free
★★ 7228.50.00	54 t	- Other bars and rods, not further worked than cold-formed or cold-finished	5% DCS:4% DCT:5%
7228.60		- Other bars and rods:	
7228.60.10	72 t	--- Goods, as follows: (a) of high alloy steel; (b) "flattened circles" and "modified rectangles" as defined in Note 1(m) to Chapter 72	5% DCS:4% DCT:5%
7228.60.90	55 t	--- Other	5% DCS:Free
7228.70.00	56 t	- Angles, shapes and sections	5% DCS:4% DCT:5%
7228.80.00	23 t	- Hollow drill bars and rods	5% DCS:4% DCT:5%
7229		<b>WIRE OF OTHER ALLOY STEEL:</b>	
7229.20.00	57 t	- Of silico-manganese steel	5% DCS:4% DCT:5%
7229.90		- Other:	
7229.90.10	58 t	--- Of high speed steel	Free
7229.90.90	59 t	--- Other	5% DCS:4% DCT:5%

# Unless otherwise indicated NZ, PG, FI, DC, LDC and SG rates are Free.

★★ S Operative 11/12

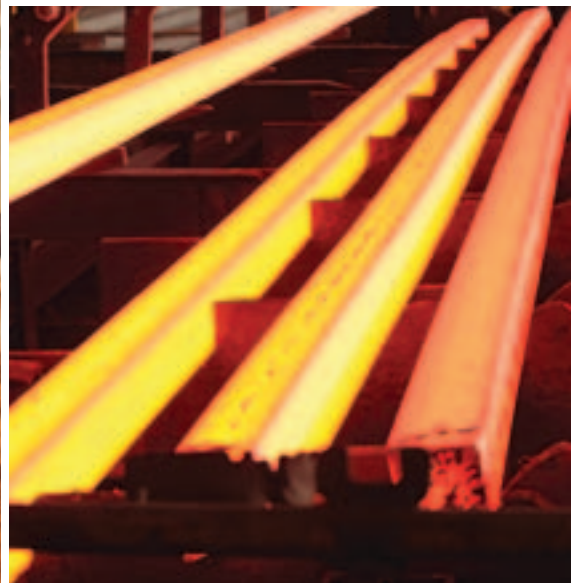
Unless otherwise indicated general rate applies for CA.

Unless indicated in Schedules 5, 6, 7 or 8 rates for US, Thai, Chilean and AANZ originating goods, respectively, are Free.

DCS denotes the rate for countries and places listed in Part 4 of Schedule 1 to this Act.

DCT denotes the rate for HK, KR, SG and TW.

If no DCT rate shown, DCS rate applies. If no DCT or DCS rate shown, general rate applies.



# REALISING VALUE FROM GROWTH

2013 ANNUAL REPORT



**Arrium Limited is an international diversified mining and materials company with three business segments: Arrium Mining, Arrium Mining Consumables and Arrium Steel**



# ARRIUM LIMITED

**Arrium Mining** is an exporter of hematite iron ore and also supplies iron ore feed to Arrium's integrated steelworks at Whyalla. Arrium's mining operations are located in South Australia. In June, the business achieved a major milestone with sales being ramped up to a run rate of 12Mtpa, effectively marking the on time and on budget delivery of the expansion to double the size of the business. Arrium Mining also has its own export port facilities at Whyalla. These facilities were also expanded during the year, with the port's capacity now 13Mtpa.

**Arrium Mining Consumables** supplies resource companies with a range of key mining consumables, including grinding media, wire ropes and rail wheels. The business is the largest supplier of grinding media in the world, with leading market positions in South America, North America and Australasia.

**Arrium Steel** comprises the Steel and Recycling businesses. In May, the company announced that it was combining its Steel Manufacturing and Steel Distribution businesses to form a single Steel business. The Steel business is Australia's only manufacturer of steel long products and Australia's leading steel distributor and reinforcing steel supplier. The Recycling business supplies and exports scrap metal with operations in Australia, Asia and America.

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Image courtesy of the Australian Steel Institute

## Annual General Meeting

Arrium's 2013 Annual General Meeting will be held on Monday 18 November 2013, at the Four Seasons Hotel, 199 George Street, Sydney NSW 2000, commencing at 2.30 pm AEDT.

## Arrium Limited

ABN 63 004 410 833

Arrium listed on the Australian Securities Exchange (ASX) on 23 October 2000 (ASX:ARI).

Original image of Gavin Hobart, General Manager Development - Arrium Mining on the front cover courtesy of Mark Brake, News Corp Australia



# ABOUT ARRIUM

Our vision is to be a leading mining and materials company which delivers superior returns for our shareholders. We aim to achieve this through:

- A portfolio of mining and materials businesses that are diversified across commodities, geographies and markets
- Utilising our unique infrastructure, capabilities, customer relations and market positions
- Investing in opportunities that provide the best return on shareholder funds

## FY13 performance summary

### Performance highlights<sup>1</sup>

- Transformational year
- Doubled Mining business and Whyalla Port on time and on budget
- Continued strong growth in Mining Consumables
- Strong cash flow

### Progress on strategic initiatives

#### Arrium Mining<sup>2</sup> – delivered expansion on time and on budget

- Iron ore sales rate doubled to target of 12Mtpa in June 2013
- 2H13 sales volumes 4.9Mt, up 42% on 1H13
- Whyalla Port capacity doubled to 13Mtpa in July 2013
- New blended products launched

#### Arrium Mining Consumables – continued strong year on year growth

- EBITDA up 15% from prior financial year to \$197 million
- Sales volumes up 8% pcp
- Expansion in Lima, Peru complete and Cilegon, Indonesia tracking to plan
- Expansion at Kamloops, Canada commenced

#### Arrium Steel – formation of a single Steel business

- Steel business maintained the significant improvement delivered in FY12
- Non-integrated businesses and properties held for sale
- Steel and Recycling businesses both EBITDA and cash positive

## Investment merits

### Arrium Mining

- Australia's fourth largest iron ore producer
  - Export sales rate ~12Mtpa in June 2013
  - Port capacity ~13Mtpa in July 2013
- Port owned and operated by Arrium
- Reasonable aspirations for ~12Mtpa x 10 years
- Ferrous and non-ferrous exploration

### Arrium Mining Consumables

- Grinding media
  - Global leader (Moly-Cop)
  - Strong earnings and cash generation
  - Stable margins
  - Strong demand growth profile
  - Positioned in key growth and low cost regions
  - Sustainable competitive advantage
- Mine ropes – global leader in dragline ropes
- Rail wheels – #1 in Australia

### Arrium Steel

- Leading market positions in Australia
  - #1 in general Australian steel distribution
  - #1 in Australian reinforcing
  - #1 in Australian wire
  - #2 in Australian recycling
- Difficult external environment but substantial cost reductions and operational improvements achieved
- Well positioned with significant leverage to even a modest improvement in demand and a sustained lower AUD

## Arrium business segments



<sup>1</sup> Unless otherwise stated, certain financial measures referred to in this Annual Report, including underlying results and ratios based on underlying results, are non-statutory financial measures, which have not been audited or reviewed as part of KPMG's report on the 2013 Financial Report. However, KPMG has undertaken a set of procedures to agree the financial information in this Annual Report to underlying information supplied by the company. The Directors believe that using these non-statutory financial measures appropriately represent the financial performance of the Group's total operations including continuing and discontinued operations. Details of the reconciliation of non-statutory to statutory results can be found on page 32 of this Annual Report.




<sup>2</sup> Segment results referred to throughout this Annual Report are those reported in the 2013 Financial Report. They are equivalent to segment underlying results. For a reconciliation of consolidated results, refer to page 32 of this Annual Report.

# MILESTONES – 2013 FINANCIAL YEAR

## 2012

<p><b>July</b></p> <ul style="list-style-type: none"> <li>• Change of name from OneSteel Limited to Arrium Limited</li> <li>• 2012 Safety Awards</li> </ul>	<p><b>August</b></p> <ul style="list-style-type: none"> <li>• FY12 results announcement</li> </ul>	<p><b>September</b></p> <ul style="list-style-type: none"> <li>• Arrium Mining assumed responsibility for all sales agency services in Australia and North Asia</li> </ul>	
<p><b>October</b></p> <ul style="list-style-type: none"> <li>• Commenced sale of first ores from Peculiar Knob (Southern Iron)</li> <li>• Sale of 50.3% shareholding in Steel and Tube Holdings</li> </ul>		<p><b>November</b></p> <ul style="list-style-type: none"> <li>• 2012 Annual General Meeting</li> <li>• Announced plans for CEO succession</li> <li>• Contract mining services transitioned to BGC Contracting at the South Middleback Ranges operations</li> </ul>	<p><b>December</b></p> <ul style="list-style-type: none"> <li>• Received and transhipped first ores from Southern Iron through the new Whyalla Port facilities</li> </ul>

## 2013

<p><b>January</b></p> <ul style="list-style-type: none"> <li>• Steel business signed two year agreement for supply of steel into the Lend Lease Barangaroo project</li> </ul>		<p><b>February</b></p> <ul style="list-style-type: none"> <li>• 1H13 results announcement</li> <li>• Andrew Roberts appointed Arrium designate MD and CEO</li> <li>• Australian Tube Mills business held for sale</li> </ul>	<p><b>March/April</b></p> <ul style="list-style-type: none"> <li>• 200th iron ore cape vessel loaded at Whyalla</li> </ul>
	<p><b>May</b></p> <ul style="list-style-type: none"> <li>• Announced Andrew Roberts, to commence as new MD and CEO, 1 July 2013</li> <li>• Announced formation of a single Steel business</li> <li>• Commenced sale of new iron ore blended products (Whyalla blend and Opal blend)</li> <li>• Arrium Mining sold first cargo outside of China</li> </ul>		<p><b>June</b></p> <ul style="list-style-type: none"> <li>• Successfully refinanced US\$800 million debt facilities</li> <li>• Arrium Mining achieved sales run rate of 12Mtpa, marking doubling of the Mining business</li> </ul>

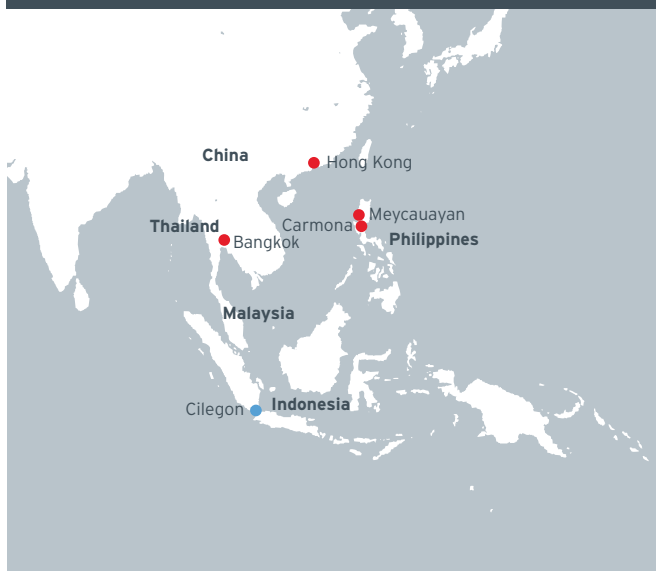
# MAP OF OPERATIONS

In addition to our Australian operations, Arrium operates 25 facilities overseas, with the majority of these including major Mining Consumables and Recycling sites in North and South America and Asia.

## AUSTRALIA



## ASIA



Southern Iron ore en route to Whyalla Port for export



**Key**

- Iron Ore Mine Sites
- Mining Consumables Sites
- Key Steel Sites
- Key Recycling Sites



## CHAIRMAN'S REVIEW



**PETER SMEDLEY**  
Chairman

I am pleased to report on another very significant year in our growth as a mining and materials company.

Financially, the company delivered an underlying net profit after tax of \$168 million. Statutory net profit after tax was a loss of \$695 million, and includes asset impairments and restructuring costs of \$961 million.

A significant contributor to the extent of the asset impairment charge for the year was our decision to hold the non-integrated Steel businesses for sale.

Strategically, we continued to deliver on our commitments in relation to growing our Mining and Mining Consumables businesses and to improving the performance of our Steel business. We are well positioned to realise the value from these strategic investments.

**Our most recent milestone was achieved this year with the doubling of our Mining business, which I am pleased to advise was completed on time and on budget – uncommon in the resources sector in recent years**

### Delivering on strategy

In last year's Chairman's Review, I explained how the company had transformed from being solely an Australian domestic steel long products producer and steel distributor at the time of being spun out from BHP in 2000, to its position today as an international diversified mining and materials company.

This transition included major milestones such as the commencement of Project Magnet in 2005, which led to the creation of a new export iron ore revenue stream; the acquisition of Smorgon Steel in 2007 which, in addition to providing us with domestic and international grinding media businesses, delivered \$150 million in synergy benefits and helped us weather the GFC period; and the acquisition of Moly-Cop at the end of 2010, which made us the largest supplier of grinding media in the world with leading market positions in key growth areas such as North and South America.

Our most recent milestone was achieved this year with the doubling of our Mining business, which I am pleased to advise was completed on time and on budget – uncommon in the resources sector in recent years. This included doubling our rate of iron ore sales to 12Mtpa in June this year, and doubling the capacity of our Whyalla Port in July to 13Mtpa; both 1Mtpa more than the target that I advised last year.

While the benefits of this transformation are clearly evident through the strong earnings contributions of the Mining and Mining Consumables businesses, our level of debt – which reflects our recent growth investments – is above where we would prefer it to be in this environment. We now have debt reduction and improving our leverage as a key focus for enhancing shareholder value.

We expect to achieve this through the earnings and cash benefits from our Mining and Mining Consumables growth, improved earnings and cash generation in Steel, and from the divestment of non-integrated Steel businesses and properties.

Over the short to medium term, we continue to have good growth opportunities in our Mining and Mining Consumables businesses, which do not require significant capital investment. These include utilising the full capacity of the Whyalla Port, and capturing at least our share of the expected strong growth in grinding media.

### Performance highlights

Our Mining and Mining Consumables businesses continued to perform strongly. The Mining business contributed a very solid \$340 million of EBITDA after recording a record 8.2Mt of iron ore sales for the year, reflecting the ramp up of the Southern Iron operation and operational improvements at the Middleback Ranges operation.

The Mining Consumables business continued to grow strongly and is now a business of scale. EBITDA for the year was up 15% to \$197 million, with sales volumes up 8% on the prior financial year.

In Arrium Steel, cost reductions and operational improvements helped deliver a further lift to the earnings performance of the Steel business despite a weaker external environment. In Recycling, the adverse impact of weaker scrap prices more than offset the benefit of cost and operational improvements. Arrium Steel was again EBITDA and cash positive for the year, and has significant leverage to a sustained Australian dollar and even a modest improvement in demand.

The Steel business remains a key part of our business portfolio. However, going forward the company's focus will be on its integrated Steel value chain, which is where it has competitive advantage. Its non-integrated businesses are now being held for sale.

Late May, the company announced that it was forming a single Steel business through combining its Steel Manufacturing and Distribution businesses. This is expected to reduce complexity and cost and help to further improve the earnings and cash performance of the Steel business.

Cash generation was also a highlight for the year. Statutory operating cashflow was very strong at \$590 million, up 26% compared to the prior financial year.

Despite further improvements in our safety practices and key safety performance metrics, sadly, the company experienced a fatality at one of its Steel distribution sites. The company is furthering its safety endeavours to prevent a recurrence of such a tragedy.

Comments on the outlook for our businesses are provided on page 13 of the Annual Report.

### **New Managing Director and Chief Executive Officer**

In February, the Board was delighted to announce that Mr Andrew Roberts had been appointed to succeed Mr Geoff Plummer as Managing Director and Chief Executive Officer. The Board was pleased to have been able to appoint Mr Roberts from a strong pool of both internal and external candidates. Mr Roberts has extensive experience across all our business segments, most recently as Chief Executive of Mining Consumables, and has been a key figure in the development and implementation of Arrium's transformation strategy.

The succession included a transition period with Mr Plummer during which Mr Roberts was responsible for planning the company's strategy, operations and organisation from the 2014 financial year. Pleasingly, this enabled a very smooth and seamless succession to Mr Roberts, which became effective 1 July.

I would like to thank Geoff Plummer for his outstanding contribution during his tenure as our Managing Director and Chief Executive Officer. The company is now well positioned to take advantage of our new growth platforms.

### **Remuneration Report**

Commencing on page 50 is our Remuneration Report, including a letter from me that provides an overview of the key elements of the Report. In particular, I note that in considering the Report, it is important to have regard to the significant strategic and organisational transition that the company is making, as well as the business performance and results. I also note that the Board, supported by its internal advisers, had regard to contemporary practices, feedback from external stakeholders and to ensuring that remuneration processes and outcomes are aligned to company objectives and the interests of shareholders. I hope you find this year's Report informative.

### **Dividend**


I was pleased to announce on behalf of the Board a final dividend of 3 cents per share unfranked. This brings the total dividend for the year to 5 cents per share unfranked.

As an alternative to receiving cash dividends, eligible shareholders may elect to participate in the dividend reinvestment plan (DRP). The DRP enables shareholders to use cash dividends to purchase fully paid ordinary shares. A DRP will operate for the final dividend, with no discount applicable.

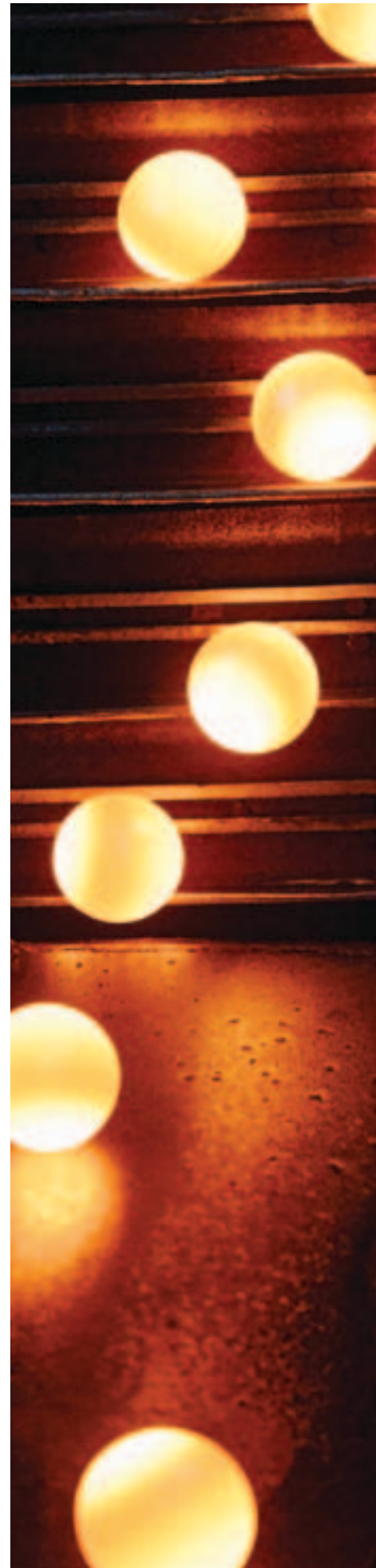
### **Thank you**

On behalf of Arrium's Board of Directors, I would like to thank all of our shareholders for their continuing support in what has been a transformational year for the company. We are now very well placed to realise the benefits from our recent investments in this transformation.

I would also like to thank Arrium's Managing Director and Chief Executive Officer, Mr Andrew Roberts, the executive management team and all of our employees for their dedication and performance, their commitment to performing their duties safely, and ensuring a safe environment for their colleagues and visitors to our sites.



**Peter Smedley**  
Chairman





# MANAGING DIRECTOR'S REVIEW



**ANDREW ROBERTS**  
Managing Director and CEO

I am pleased to present Arrium's financial results for the year ended 30 June 2013, a transitional year for the company and one in which we continued to deliver on our strategic commitments. This included doubling the size of our Mining business on time and on budget, continued strong growth in our Mining Consumables business, further improvement in the Steel business and very strong cash generation.

Underlying net profit after tax (NPAT) was \$168 million compared to \$195 million for the previous financial year, significantly weighted to the second half due to the ramp up of iron ore sales related to our Mining business expansion. Statutory NPAT for the year was a loss of \$695 million compared to a profit of \$58 million for the previous financial year, and includes asset impairment and restructuring costs of \$961 million. A significant contributor to the extent of the asset impairment charge for the year was our decision to hold the non-integrated steel businesses for sale.

Statutory operating cash flow was strong, up 26% to \$590 million for the year.

Statutory net debt at year end was in line with guidance at \$2,115 million. This was lower than its position at both the half year and prior financial year despite the impact of a sharp fall in the AUD/USD exchange rate towards the end of the financial year. Statutory gearing was up 3.9 percentage points to 36.2% and includes an increase of 5.1 percentage points related to the asset impairments and restructuring costs.

## Market conditions

In Mining, demand for iron ore remained strong throughout the year underpinned by high levels of crude steel production in China. Average iron ore prices remained above long-term historical levels, but were down 16% compared to the prior financial year. In Mining Consumables, strong levels of mining activity continued, particularly copper and gold production in North and South America as producers looked to maximise output despite recent price volatility. In our Steel and Recycling businesses, there was further weakness in the external environment, including some deterioration in domestic demand and lower international steel and steel raw material prices.

## Operational performance

Both our Mining and Mining Consumables businesses continued to perform very well during the year and were substantial contributors to earnings, while our Steel business built on the significant improvement achieved in the prior year despite weaker domestic and international steel markets.

Arrium Mining again delivered a strong result with EBITDA and EBIT \$340 million and \$249 million respectively. Revenue increased 19% to \$977 million as the impact of lower iron ore prices was more than offset by a 32% increase in sales volumes to 8.2Mt – a record for the business, largely reflecting the ramp up of our Southern Iron expansion in the second half.

During the year, Arrium assumed full responsibility for all marketing and sales agency activities with marketing teams based in Australia and North Asia. The business also sold its first cargo outside of China, and launched two new blended fines products (Whyalla blend and Opal blend) which have been well received by the evolving iron ore market.

I mentioned earlier that our Mining expansion to double the size of the business was delivered on time and on budget. This included reaching an iron ore sales rate of 12Mtpa in June, and increasing the capacity of our Whyalla Port to 13Mtpa in July. The expansion included many significant milestones, including: commencing the sale of first ores from Southern Iron in October, only 53 weeks after "turning first dirt"; receiving and transshipping first ores from Southern Iron through the expanded Whyalla Port in December; and then receipt in May of first ores from the Middleback Ranges mines on the new narrow gauge rail for blending with Southern Iron ores.

Arrium Mining Consumables continued to deliver strong earnings growth with EBITDA up 15% to \$197 million and EBIT up 13% to \$153 million, reflecting increased contributions from North America, South America and Australasia. Revenue increased 2% compared to the prior year to \$1,567 million, reflecting volume growth of 8%, partly offset by a lower average sales price due to the impact of lower raw material costs over the year.

The Moly-Cop grinding media business again performed very well, as did the Australasian rail wheels and ropes businesses. All these businesses recorded increased contributions compared to the prior year.

Our grinding media capacity expansions in Lima, Peru and Cilegon, Indonesia have been tracking to plan. The additional 40,000 tonnes of capacity at Lima was completed on time and on budget, while the additional 50,000 tonnes of capacity at Cilegon is progressing well, with completion expected at the end of the March 2014 quarter. We have also announced that work has commenced on adding 120,000 tonnes of capacity at Kamloops, Canada.

This business is a strong generator of cash, and is able to contribute cash back to the Arrium Group even after funding its own growth.

In Arrium Steel, the Steel business continued to be challenged by the difficult external environment including the high Australian dollar and generally weak construction and manufacturing markets. However, our focus on cost reductions and operational improvements helped lift EBITDA to \$76 million for the year, a 15% improvement over the prior year.

In Steel, we are focused on cash generation through improved earnings from cost reductions, driving down working capital, as well as divesting non-integrated Steel businesses and properties. In line with this focus, the company announced at the end of May that it was combining its Steel Manufacturing and Distribution businesses to form a single Steel business, which is expected to deliver annualised savings of approximately \$40 million, of which \$30 million is expected in the 2014 financial year.

In Recycling, the business was adversely impacted by weaker ferrous and non-ferrous scrap prices. EBIT for the year was a loss of \$8 million, but included a breakeven result in the second half driven by cost and operational improvements.

The continued focus on cost reductions in both the Steel and Recycling businesses has resulted in a further lowering of their breakeven point and an increase to their already significant leverage to an improvement in demand or a sustained lower Australian dollar.

#### Strategic focus

As the Chairman outlined, our strategic focus has been on growing our Mining and Mining Consumables businesses and improving the performance of our Steel businesses. We have had considerable success in the execution of this strategy, and now that we have completed our most recent significant investment through doubling the size of the Mining business, our primary

focus is to reduce debt and improve our leverage (EBITDA/net debt) to enhance shareholder value.

We are well positioned to achieve this aim through our growth investments in Mining and Mining Consumables, and initiatives in Steel, which are expected to result in growing earnings and cash generation and the divestment of the non-integrated Steel businesses and properties.

#### Thank you

I would like to extend my gratitude to all of Arrium's employees for their significant efforts and dedication during this transformation period, as well as their commitment to conducting their duties safely and keeping the safety of others as a priority, and remaining dedicated to our customers.

To the management team, thank you for your dedication and contributions made throughout the year, and towards the successful delivery of our strategic commitments.

To Arrium's Chairman and Board of Directors, thank you for your support and guidance throughout the year.

I would also like to thank Mr Geoff Plummer for his support which ensured the transition period was a smooth and seamless one.

Finally, I would like to thank Arrium shareholders and customers for your support and confidence in the company.



**Andrew Roberts**  
Managing Director and CEO

**Now that we have completed our most recent significant investment (doubling the size of the Mining business), our primary focus is to reduce debt and improve our leverage to enhance shareholder value**





# OPERATING AND FINANCIAL REVIEW



Iron ore mining at Peculiar Knob -  
Southern Iron operation

## COMPANY OVERVIEW

The company delivered an underlying net profit after tax (NPAT) for the year ended 30 June 2013 of \$168 million<sup>1</sup>, compared to \$195 million for the previous financial year. Statutory NPAT for the year was a loss of \$695 million compared to a profit of \$58 million for the previous financial year, and includes asset impairments of \$895 million, restructuring costs of \$66 million and tax adjustments of \$97 million.

The decrease in underlying NPAT for the year was primarily due to the impact of lower iron ore prices in the Mining business, which more than offset the benefit from increased iron ore sales volumes, and higher earnings in the Mining Consumables and Steel businesses.

In June, the Mining business reached a sales rate of 12Mtpa, marking the on time and on budget delivery of the expansion to double the size of the business.

Operationally, the ramp up in iron ore sales led to underlying earnings for the year being heavily weighted to the second half, in line with guidance. Both our Mining and Mining Consumables businesses continued to perform very well during the year and were substantial contributors to earnings, while our Steel business maintained the significant improvement achieved in the prior year despite weaker domestic and international steel markets.

Sales revenue for the year was \$6,841 million, down 10% on sales revenue for the previous financial year due mainly to lower iron ore and international steel prices and lower sales volumes in Steel and Recycling.

Underlying earnings before interest, tax, depreciation and amortisation (EBITDA) increased 2% compared to the previous financial year, to \$590 million, due to improvements in the Mining Consumables and Steel businesses, partly offset by lower earnings in the Mining and Recycling businesses.

The sales margin for the year decreased marginally to 4.6% from 4.7% in the prior financial year due to lower sales margins in the Mining and Recycling businesses, more than offsetting improvements in Mining Consumables and Steel.

Finance costs were \$118 million, down from \$121 million in the prior corresponding year, mainly due to lower average interest rates.

Underlying earnings per share for the year (weighted average) was 12.7 cents, down from 14.6 cents for the prior corresponding year.

The underlying effective tax rate of 14% largely reflects the company tax rate of 30% less the benefit of research and development tax allowances and overseas tax rate differences.

Statutory operating cash flow for the year was strong at \$590 million, up 26% compared to the previous financial year. The continued focus on cash generation, including initiatives in the Steel business such as driving down working capital and the sale of the company's 50.3% share of Steel and Tube Holdings Limited during the first

half, helped lower net debt to \$2,115 million. Gearing increased 3.9 percentage points to 36.2%, including 5.1 percentage points related to the impairment of assets and restructuring costs. The underlying interest cover was 5.0 times<sup>2</sup>.

The lower net debt of \$2,115 million was after \$459 million of capital expenditure during the year, including \$218 million related to expansion of the Mining business.


Total liabilities increased 10% compared to the previous financial year, to \$4,878 million, largely reflecting the increase in restructuring and tax provisions, and the impact of a lower Australian dollar at year end on US dollar debt.

The company successfully refinanced US\$800 million of debt facilities during the year. At year end, total facilities were \$3.5 billion, with approximately \$940 million being available undrawn facilities. The average interest rate for total drawn and undrawn funding is approximately 4%.

Total assets decreased 4% compared to the previous financial year, to \$8,612 million, largely reflecting impairments and divestments made during the year.

<sup>1</sup> A reconciliation of non-statutory to statutory results can be found on page 32.

<sup>2</sup> Underlying interest cover reflects underlying EBITDA divided by finance costs, on an actual 12-month rolling basis.



**In June, the Mining business reached a sales rate of 12Mtpa, marking the on time and on budget delivery of the expansion to double the size of the business**

## SEGMENT OVERVIEW

The company has three segments, **Arrium Mining, Arrium Mining Consumables and Arrium Steel. The Arrium Steel segment is comprised of the Steel and Recycling businesses.**

### Arrium Mining

Revenue increased 19% compared to the prior financial year to \$977 million due to an increase in iron ore sales volumes from 6.29Mt to 8.28Mt, partly offset by lower average iron ore prices. The record sales volumes includes 1.6Mt related to the successful ramp up of the new Southern Iron operation, and improved volumes from the Middleback Ranges operation largely related to recent supply chain improvements.

Market conditions were, on occasion, volatile, with iron ore prices declining steeply through the first quarter, reaching their lowest level post the GFC in September at US\$87/t (CFR 62% Fe fines), before improving strongly and reaching US\$160/t at the end of the March quarter. The average Platts 62% dmt fines benchmark price for the year was 16% lower at US\$127/t compared to US\$151/t for the prior financial year.

EBIT for the year was strong at \$249 million, but down on EBIT for the prior financial year of \$303 million. The decrease was due to lower average iron ore prices and increased depreciation and amortisation related to the higher level of investment in Southern Iron and the Whyalla Port expansion, partly offset by the higher level of sales volumes.

In June, the business achieved a major milestone for its Mining expansion, with sales being ramped up to a run rate of 12Mtpa, effectively marking a doubling of the business. The year incorporated a number of significant achievements towards delivering this outcome, including commencing the sale of first ores from Peculiar Knob in October (53 weeks after “turning first dirt”), receiving and transshipping first ores from Southern Iron through the new Whyalla Port facilities in December, and then receipt in May of first ores from the Middleback Ranges mines on the new narrow gauge rail for blending with Southern Iron ores. The new higher capacity shiploader was commissioned in early July. The capacity of the Whyalla Port has now also been doubled to 13Mtpa.

Both the Southern Iron and Whyalla Port expansion projects were delivered on time and on budget; a pleasing achievement.

### Arrium Mining Consumables

Revenue increased 2% compared to the prior year to \$1,567 million, reflecting 8% growth in sales volumes partly offset by a lower average net sales price. The lower sales price reflects lower raw material costs over the year.

Despite some softening in commodity prices, strong levels of copper, gold and iron ore mining activity in North America, South America and Australasia continued to underpin robust demand for our mining consumables products, particularly grinding media.

The business continued to deliver strong earnings growth, with EBITDA of \$197 million compared to \$172 million for the prior financial year, reflecting increased contributions from North America, South America and Australasia. In North America and South America, the Moly-Cop grinding media businesses again performed very well. In Australasia, the grinding media, rail wheels and ropes businesses all recorded stronger performances.

The Moly-Cop grinding media businesses have leading market positions in some of the world's key growth and low cost regions for copper, gold and iron ore mining. Its “value in use” proposition, underpinned by its ball quality, supply chain and technical support is widely recognised by its high quality customer base, and has helped deliver a history of relatively stable margins.

The capacity expansion at Lima, Peru is currently being commissioned, while the Cilegon, Indonesia expansion is progressing well, with completion expected at the end of the March 2014 quarter. Work has also commenced on a 120,000 tonne capacity expansion at Kamloops, Canada.

### Arrium Steel

The Steel business continued to be challenged during the year by the difficult external environment, including the high Australian dollar and generally weak construction and manufacturing markets. Domestically, large infrastructure projects in the engineering construction sector continued to support strong demand for steel reinforcing products, but deterioration in commodity prices adversely affected demand from the resource sector (particularly coal, gas and iron ore) as companies reduced maintenance and some project expenditure. In the non-residential and residential construction sectors, activity levels remained generally weak due to credit availability issues and soft business and consumer sentiment.

The business continued to focus on cash generation, including delivering cost and operational improvements. EBITDA for Steel was \$76 million, a 15% increase over the improved performance achieved in the prior financial year.

In the Recycling business, the adverse impact of lower sales volumes, as well as weaker ferrous and non-ferrous scrap prices more than offset the benefit of cost and operational improvements.

Arrium Steel's focus is cash generation through improved earnings from cost reductions, driving down working capital, as well as divesting non-integrated Steel businesses and properties. The company recently announced that, in line with this focus, it was combining its Steel Manufacturing and Distribution businesses to form a single Steel business (expected to deliver additional annualised cost savings of \$40 million (~\$30 million in FY14)), undertaking additional rationalisation work predominantly in its Recycling business, as well as holding its non-integrated Merchandising, Australian Tube Mills and US Recycling businesses for sale.

In **Steel**, revenue decreased 14% to \$3,486 million compared to the prior financial year due to an 8% decrease in sales volumes and a lower average net sales price. Volumes were lower due to some further weakness in domestic demand and the impact of a major rail contract with ARTC being completed in the first half. EBIT for the year was a loss of \$43 million compared to an EBIT loss of \$56 million in the prior financial year, with cost reductions and operational improvements contributing to this result.

In the **Recycling** business, total revenue decreased 15% to \$1,350 million compared to the prior financial year due to lower average prices and lower volumes for ferrous scrap. EBIT for the year was a loss of \$8 million, reflecting a breakeven result for the second half driven by cost and operational improvements.

The Steel and Recycling businesses are positioned with significant leverage to an improvement in demand and a lower Australian dollar.

# The Moly-Cop grinding media business has leading market positions in some of the world's key growth and low cost regions for copper, gold and iron ore mining



# OUTLOOK

## Arrium Mining

Economic growth in China is expected to continue at high levels despite recent downward revisions in the rate of growth, and this is expected to underpin continued strong demand for iron ore. We expect volatility in prices to continue, but on average to remain at solid levels, particularly given the impact of the lower Australian dollar.

Earnings for FY14 are expected to significantly benefit from the completion of our expansion that led to iron ore sales doubling to a rate of ~12Mtpa at end FY13. We expect an average Fe grade ~60% and loaded cost ~\$50/wmt<sup>1</sup> at 12Mtpa rate.

We are continuing to assess opportunities to increase sales above 12Mtpa and utilise the full capacity of the recently expanded Whyalla Port. We also expect to further diversify our customer base into North Asia.

We have reasonable aspirations of being able to maintain sales at the rate of 12Mtpa for at least 10 years based on our reserves and resources, beneficiation of low grade ore and our ongoing ferrous exploration program.

## Arrium Mining Consumables

We expect demand for grinding media to remain strong, driven by high levels of copper and gold production, particularly in North and South America, despite commodity prices coming off their recent highs.

Over the medium to longer term, demand for grinding media is expected to grow strongly at a compound annual growth rate of approximately 8% (FY13-FY17) in both North and South America. The business is well placed through its ball quality, supply chain, technical support, and its strategy of expanding capacity ahead of demand to capture at least its high market share of this growth.

In mining ropes and rail wheels, demand in the first half of FY14 is expected to be adversely impacted by some miners in Australia (coal and iron ore) reducing inventory levels.

## Arrium Steel

We expect generally weak domestic and international steel markets to continue through the first half. However, domestic construction markets are expected to slowly recover in FY14 after experiencing the impact of weaker activity in the resource and non-residential construction sectors in the prior half.

Earnings in FY14 for Steel and Recycling are expected to benefit from further cost reductions and operational improvements, as well as from the impact of a sustained lower Australian dollar. We expect the full benefit of a sustained lower Australian dollar from the second quarter.

Arrium Steel has significant leverage to improved demand, particularly from domestic construction.

Over the medium to longer term, we remain confident we will see improvements in the fundamentals for key domestic and international steel markets as economic conditions improve.

<sup>1</sup> Includes mining, crushing, beneficiation, rail, road haulage and transshipping costs. Excludes capitalised costs (infrastructure, pre-stripping and mining licences) and depreciation and amortisation charges in respect of those costs, royalties, sales and marketing and corporate costs. Includes deferred stripping costs which, from 1 July 2013 will instead be capitalised under IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine.

## Financial Ratios - Year ended 30 June

	FY13 (\$m)	FY12 (\$m)	CHANGE (%)
Sales revenue	6,841	7,595	(10%)
Other revenue/income	114	122	(7%)
Total income	6,955	7,717	(10%)
Gross profit	1,051	1,198	(12%)
EBITDA	590	581	2%
Depreciation and amortisation	(274)	(221)	24%
EBIT	316	360	(12%)
Finance costs	(118)	(121)	(2%)
Profit before tax	198	239	(17%)
Tax expense	(28)	(38)	(26%)
Profit after tax	170	201	(15%)
Non-controlling interests	(2)	(6)	(67%)
Net profit after tax	168	195	(14%)
Total assets*	8,612	8,931	(4%)
Total liabilities*	4,878	4,431	10%
Total equity*	3,734	4,501	(17%)
Net debt*	2,115	2,143	(1%)
Funds employed*	5,848	6,644	(12%)
Number of shares on issue (millions)	1,355	1,346	1%
Operating cash flow	596	519	15%
Free cash flow	131	69	90%
Capital and investment expenditure	459	719	(36%)

	FY13	FY12	CHANGE
Return on equity (%) (PAT/average total equity)	4.1	4.5	(0.4) pp
Return on funds employed (%) (EBIT/average funds employed)	5.1	5.6	(0.5) pp
Sales margin (%)	4.6	4.7	(0.1) pp
Gross profit margin (%)	15.4	15.8	(0.4) pp
Earnings per share (cents)	12.7	14.6	(13%)
Dividends per share (cents)	5.0	6.0	(1) cents
Dividend payout ratio (%)	40.2	41.4	(1.1) pp
Gearing (%) (net debt/net debt + equity)	36.2	32.3	3.9 pp
Interest cover (times EBITDA, 12 months rolling basis)	5.0	4.8	0.2 times
Net tangible assets per share (\$)	1.25	1.20	4%
Employees	10,078	11,007	(8%)
Sales per employee (\$000s)	679	690	(2%)
Iron ore tonnes sold (mt)	8.28	6.29	32%
Raw steel production (mt)	2.50	2.50	-
Steel tonnes despatched (mt)	3.55	3.68	(4%)

Details of the reconciliation of non-statutory to statutory results can be found in the reconciliation attached to this document.

\* Based on statutory balances.

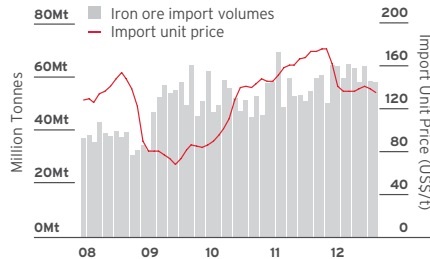
# KEY BUSINESS DRIVERS

The information included in the following charts illustrates trends in some of the major drivers of Arrium's businesses, including iron ore demand, world copper and gold production, key sectors of the Australian economy, domestic steel prices, international steel prices and key inputs into steelmaking. The strength in the markets of our international and resource focused businesses and the weakness in the markets of our Australian steel businesses are evident in the charts.

**FIGURE 1**

### Iron Ore Imports into China

January 2008 to June 2013



Source: TEX Report

#### Iron ore imports into China

Figure 1 shows the volume of iron ore that was imported by China. China imported 763 million tonnes of iron ore in FY13. This imported volume is 6.1% above the volume imported in FY12.

**FIGURE 2**

### Iron Ore Fines (62% Fe) – Spot Prices (cfr N China)

July 2004 to June 2013



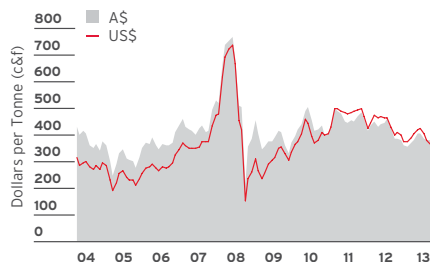
Source: CRU, Platts

Figure 2 represents the movement in spot iron ore fines (62% Fe) prices in both US and Australian dollars. Platts 62% Fe average spot prices in US dollar terms for FY13 decreased by 16% compared to FY12. Platts 62% Fe prices were stronger in the second half, with daily prices reaching a high US\$160/t and a low of US\$110/t whereas the highest price in the first half was US\$145/t and lowest was US\$89/t.

**FIGURE 6**

### Korean HM1 Scrap Price (c&f)

July 2004 to June 2013



Source: TEX Report

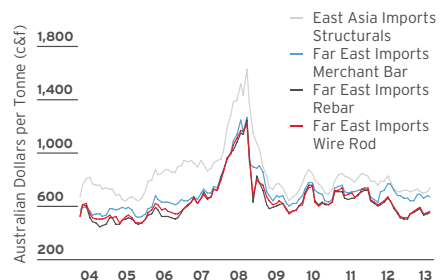
#### Scrap prices

Figure 6 shows prices for Korean ferrous scrap in US and Australian dollars. In FY13, OneSteel Recycling sold 1.63 million tonnes of ferrous scrap to internal and external customers, compared to 1.86 million tonnes in FY12. Non ferrous sales in FY13 were 0.26 million tonnes compared to FY12 at 0.25 million tonnes. The Korean benchmark average price for HM1 scrap in US dollar terms decreased by 15.0% in FY13 compared to FY12. Scrap prices in Australian dollar terms decreased by a slightly lower amount. In FY13, scrap prices ranged from US\$360/t to US\$435/t as opposed to a larger range in FY12 of a low of US\$392/t and a high of US\$499/t. Average scrap prices in FY13 have been lower, which is in line with the lower iron ore and coking coal prices.

**FIGURE 7**

### Long Products International Prices

July 2004 to June 2013



Source: CRU (Merchant Bar, Rebar, Wire Rod), SBB (Beams)

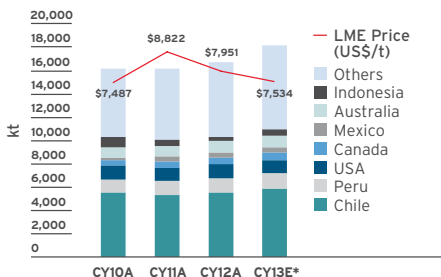
#### Long products international prices

Figure 7 presents the international benchmark prices for structural beams, merchant bar, reinforcing bar and wire rod. In FY13, average prices in Australian dollar terms for structurals decreased by 11%, merchant bar decreased by 6% and reinforcing bar and wire rod decreased by 17% compared to the previous year. Prices have been affected by lower raw material costs and over-supply of steel, as well as weak demand in the Asian region.

**FIGURE 3**

**World Copper Concentrate and Leach Production (kt) and Copper Prices**

January 2010 to December 2013



Source: Wood Mackenzie

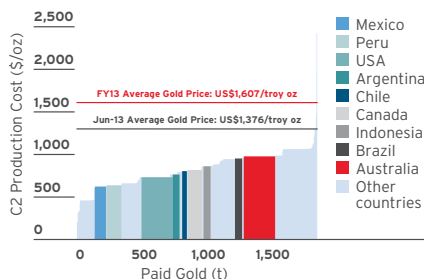
\* Copper production (kt) based on Wood Mackenzie's forecasts. LME prices reflect actual average prices Jan-June13

**World copper production**

Figure 3 shows world copper production and LME prices in US dollars. Copper production is a key driver of grinding media demand. Arrium has grinding media operations in Canada, Australia, Chile, the USA, Peru, Mexico and Indonesia. Copper production in these countries is about 62% of total world production. Even though CY12 copper prices have been lower than CY11 prices, copper production in CY12 was slightly higher than CY11.

**FIGURE 4**

**2012 Gold Mine Composite C2 Production Cost Grouped By Country and Ranked By Production Cost (C2)**



Source: Wood Mackenzie, Ltd, Dataset: 2013 Q2

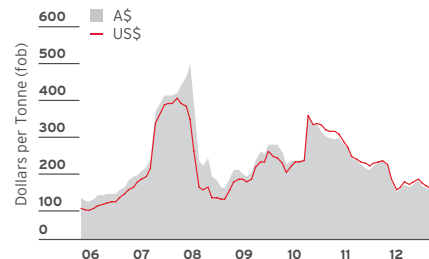
**World gold production**

Figure 4 shows the production costs (C2) for gold mines by country and the FY13 average gold price. Average monthly gold prices have been above US\$1,500/oz from July 2012 to March 2013 before prices started to fall from April. The June 2013 average price was US\$1,376/oz. Gold production is a key driver of grinding media demand. Based on Wood Mackenzie data, Arrium's gold mine customers' production costs (C2) are estimated to range from US\$650/oz to US\$960/oz. A significant proportion of these customers are in the lower cost countries shown in Figure 4.

**FIGURE 5**

**Hard Coking Coal Price (fob)**

September 2006 to June 2013



Source: CRU

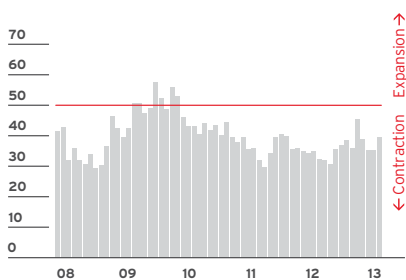
**Coal prices**

Figure 5 represents the movement in spot hard coking coal prices in both US and Australian dollars. Average spot prices in US dollar terms for FY13 decreased by 34% compared to FY12. Coal prices in FY13 ranged from US\$136/t to US\$214/t as compared to a range of US\$210/t to US\$305/t in FY12. The price drops were attributed to weak demand and plenty of supply in the seaborne market.

**FIGURE 8**

**Australian Performance of Construction Index (PCI)**

July 2008 to June 2013



Source: Australian Industry Group

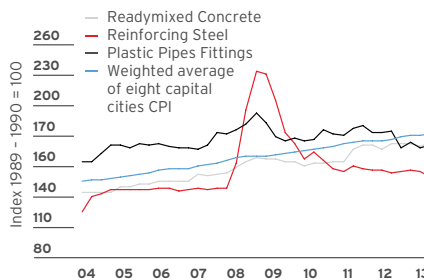
**Australian Performance of Construction index**

Figure 8 shows that the Australian Performance of Construction Index (PCI) has continued to be in the "contraction" zone for the whole of the FY13 period. PCI dropped to a low of 30.9 in September 2012, a level that last occurred in September 2011. PCI went to a high of 45.6 in February 2013 (highest level since mid-2010) driven by expansions in house building and engineering construction.

**FIGURE 9**

**Prices for Steel Residential Construction Materials**

June quarter 2004 to June quarter 2013



Source: ABS

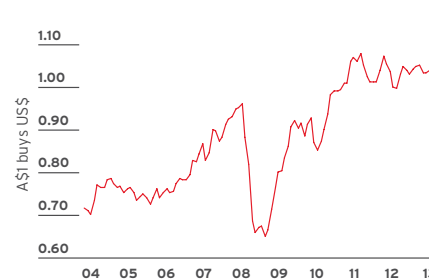
**Prices for steel residential construction materials**

Figure 9 represents the movement in prices of residential construction materials indexed to 1989/90 prices. The index for reinforcing steel had decreased by 2.4% in the June 2013 quarter compared to the June 2012 quarter.

**FIGURE 10**

**Australian versus US dollar (Monthly Average)**

July 2004 to June 2013



Source: RBA

**US dollar exchange rates**

Figure 10 represents the Australian dollar exchange rates against the US dollar. In FY13, the daily exchange rates ranged from \$0.92 to \$1.06. The average exchange rate during the year averaged \$1.03, down by 0.5% compared to the FY12 average exchange rate. The Australian dollar averaged at 1.04 in the first half of FY13 and it dropped to 1.02 in the second half. The Australian dollar was below parity from mid May to the end of the financial year.

# STRATEGIC FRAMEWORK AND SCORECARD

Our vision is to be a leading mining and materials company which delivers superior returns for our shareholders. We aim to achieve this through a portfolio of mining and materials businesses that are diversified across commodities, geographies and markets, and by utilising our unique infrastructure, capabilities, customer relations and market positions, as well as by investing in opportunities that provide the best return on shareholder funds.

The strategy for our businesses to deliver this vision has been focused on growing our Mining and Mining Consumables businesses, and addressing the performance of our Steel and Recycling businesses. The strategy and performance scorecard for each of these businesses for the year are detailed below.

Our level of debt reflects recent investments to significantly grow the Mining and Mining Consumables businesses. We now have debt reduction as a key priority for enhancing shareholder value, and expect to achieve this through cash generation from these expanded businesses, as well as from initiatives to improve returns and cash generation in Steel, including the divestment of non-integrated Steel businesses and properties.

The company has good growth opportunities from its current projects in Mining and Mining Consumables, including utilising the full capacity of the expanded Whyalla Port, and from capturing at least its market share of expected strong growth in grinding media.

## Arrium Mining

### Strategy

- Growing the volume of our iron ore exports
- Leveraging our unique infrastructure assets in South Australia, utilising the Whyalla Port
- Pursuing exploration and development activities to replace mined reserves and increase reserves and resources to support and grow sales
- Pursuing exploration of non-ferrous ore opportunities

### Performance

- Record level of iron ore sales for the year - up 32% to 8.28 Mt
- Expansion to double iron ore sales to a rate of 12Mtpa completed on time and on budget
- Expansion to double the capacity of the Whyalla Port completed on time and on budget
- New blended iron ore products launched - made possible through Southern Iron
- Exploration and development activities resulted in identified hematite reserves increasing 5.9Mt to 66.7Mt, after additions of 19.3Mt and depletions and removal of 13.4Mt during the year

## Arrium Mining Consumables

### Strategy

- Building on our position as the leading global supplier of grinding media to the mining industry
- Investing in capacity close to our customers
- Growing our competitive advantage through superior quality, supply assurance and technical support for customers
- Pursuing medium-term opportunities to expand into new geographies within current product ranges
- Pursuing medium to long-term opportunities to expand into new products

## Performance

- Through Moly-Cop, the business continued to build on its position as the global leader in the supply of grinding media to the mining industry
- Strong earnings growth - EBITDA up 15% to \$197 million compared to \$172 million in the prior financial year
- Increased earnings contributions from North America, South America and Australasia grinding media businesses, and from the rail wheels and ropes businesses
- Sales volumes up 8% compared to prior financial year
- Capacity expansion (40kt) at Lima, Peru to meet growing demand for grinding media completed on time and on budget
- Capacity expansion (50kt) at Cilegon, Indonesia to meet growing demand tracking to plan for completion expected in March 2014 quarter
- Commenced work on (120kt) capacity expansion at Kamloops, Canada to meet growing demand

## Arrium Steel

### Strategy

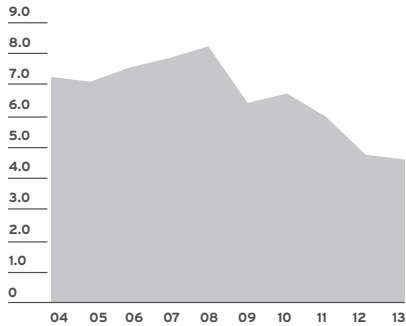
- Focusing on markets in which we have a sustainable competitive advantage
- Building our leading market positions
- Having flexible capacity to meet demand cycles
- Delivering returns throughout the cycle
- Continually reducing our cost to serve to ensure competitiveness of our offer

### Performance

- Improved performance in Steel business despite further weakness in external environment
- Steel EBITDA up 15% to \$76 million
- Steel and Recycling cash positive for year
- Increased leverage to even a modest improvement in demand or sustained lower Australian dollar
- Formed a single Steel business (expected annualised cost savings ~\$40 million (~\$30 million in FY14))
- Focus on integrated steel businesses - divesting non-integrated businesses and properties
- Recycling result reflects significant deterioration in prices for ferrous and non-ferrous scrap and lower volumes
- Continued focus on earnings improvement and cash generation

**SALES MARGIN - UNDERLYING**

Percent (%)



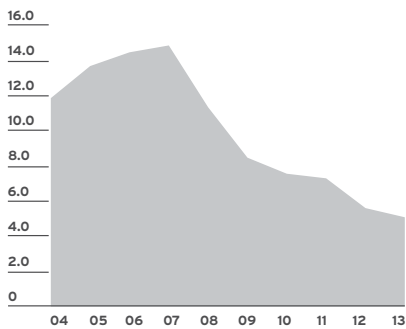
# Iron ore sales set a new record of 8.28Mt

# 32%

IRON ORE SALES INCREASE

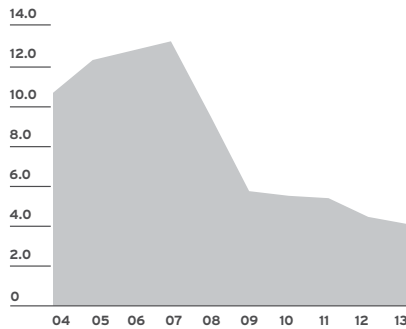
**ROFE - UNDERLYING**

Percent (%)



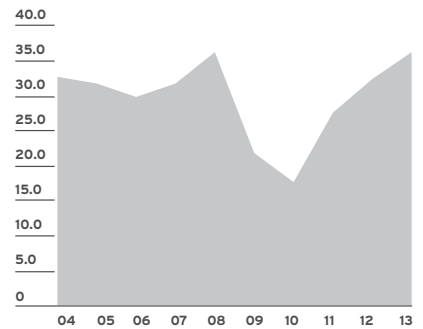
**ROE - UNDERLYING**

Percent (%)



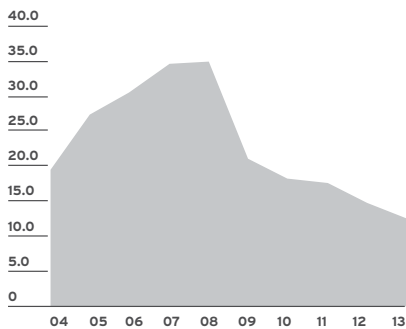
**GEARING - STATUTORY**

Percent (%)



**EPS - UNDERLYING**

Cents per Share



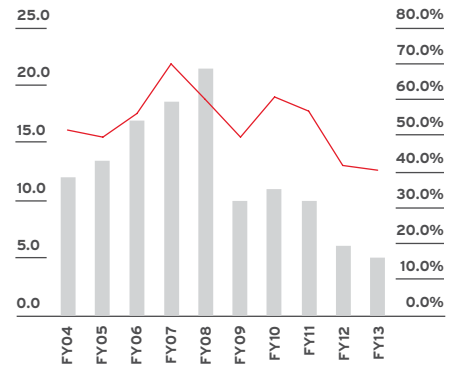
**INTEREST COVER (TIMES EBITDA, 12M ROLLING BASIS)**

Cents per Share



**DIVIDENDS AND PAYOUT RATIO - UNDERLYING**

■ Cents per Share  
— Percent (%)





## ARRIUM MINING

Arrium's mining operations are located in South Australia: the Middleback Ranges, approximately 60 kilometres from the Whyalla township; and Southern Iron, which includes the Peculiar Knob tenement, located approximately 90 kilometres from the Coober Pedy township.



**GREG WATERS**  
Chief Executive Mining

The Arrium Mining business has been focused on doubling its export sales of iron ore to a run rate of 12Mtpa, and achieved this in June this year, on time and on budget. Separately, the business also provides iron ore feed to the Whyalla Steelworks.

Arrium Mining has its own export port facilities at Whyalla. These facilities were expanded during the year, with the Port's capacity now double at 13Mtpa. This project was completed on time and on budget.

### Operational performance

Revenue for the year increased 19% to \$977 million due to higher sales volumes offset by lower iron ore prices compared to the prior financial year. Sales volumes increased by 32% to 8.28 million tonnes. Iron ore continues to be sold through a combination of sales to long-term contract customers (approximately 70%) and spot customers (approximately 30%).

During the year, Arrium assumed responsibility for all marketing and sales agency activities from BHP Billiton that had been in existence since 2005. Customer and pricing support was very strong under the new internal arrangements, which include a marketing team in North Asia.

EBIT for the year was \$249 million, but lower than the prior financial year EBIT of \$303 million due to lower iron ore prices, a stronger Australian dollar and higher depreciation and amortisation costs associated with the commissioning of Southern Iron assets and the building of the Southern Iron and Whyalla Port infrastructure. Average prices in the first half were impacted by a price collapse in September, before steadily improving through quarters 2 and 3, before declining in quarter 4 in the lead up to the summer maintenance period and slower steel demand. Overall, Arrium Mining again provided significant earnings contribution to the company.

Mining costs for our Middleback Ranges operation increased by \$1/t to \$42 per tonne (wmt, average loaded mining cost excluding royalties and depreciation) due to general industry cost increases and a higher proportion of materials from the ore beneficiating plants. New mining contractors (BGC Contracting) commenced mining services in November 2012 with very little operational or cost impacts. BGC has a five-year contract for mining services in the South Middleback Ranges. Southern Iron costs reflect the costs associated with the ramp up and commissioning of the expanded full supply chain.



Trucking ore from Peculiar Knob – Southern Iron operation

The businesses' exploration and drilling program predominantly focused on firming up hematite ore reserves at both the Middleback and the Southern Iron operations during the year. This enabled the business to ascertain which materials were best suited for its export plan over the medium term. At Middleback Ranges, 11.6Mt of reserves were either depleted (exported) or removed from the reserve statement. This was offset by additions of 9.4Mt, resulting in a net 2.2Mt reduction from the previous year, which delivered total reserves of 42.2Mt at just over 58% Fe. At Southern Iron, rigs continued to infill drill at Peculiar Knob to optimise the pit configuration. The Federal Department of Defence gave approval to explore Hawks Nest in November 2012. Work associated with this exploration has added 9.9Mt of ore reserves at just over 60% Fe. With export and other depletions totalling 1.8Mt, the net increase of reserves at Southern Iron was 8.1Mt. Overall reserves increased to 66.7Mt at approximately 60% Fe, an increase of 5.9Mt compared to reserves at the end of the prior financial year.

Exploration for non-ferrous materials will commence early in the 2014 financial year, and include targets at the Windy Valley and Mt Brady tenements within the Southern Iron operations.

Further information in relation to our reserves and resources for the Middleback Ranges and Southern Iron operations can be found in our Reserves and Resources Statement on pages 131 and 132.



Loading a cape vessel with iron ore for export



Revenue increased 19% to

**\$977M**

MINING REVENUE



## ARRIUM MINING

continued



South Australian Government Minister, Hon. Tom Koutsantonis, MP (right) with Arrium management at the official opening of the expanded Whyalla Port in July 2013

# Major achievements for the year included completion of our new Southern Iron and Whyalla Port expansion projects on time and on budget

### Growth

Major achievements for the year included completion of our new Southern Iron and Whyalla Port expansion projects on time and on budget.

The Southern Iron mine and rail infrastructure was completed in October 2012.

The inaugural export shipment from the expanded Whyalla Port was made in December 2012. The second export shed was commissioned in April, and other infrastructure was delivered during the fourth quarter in line with plan. A higher capacity ship loader was commissioned in the first week of July, increasing capacity of the Whyalla Port from 12Mtpa to 13Mtpa.

Just over 1.6Mt was exported from the new Southern Iron operation during the year as its infrastructure and the expanded Whyalla Port were ramped up through the second half. We expect sales from the Southern Iron operation to increase to just under 4Mt in financial year 2014.

The Middleback Ranges operation continued to perform well during the year, breaking many operational records from mining to crushing and railing, resulting in the moving of 7.4Mt to both the Inner and Outer Harbours. Both beneficiation plants also performed very well, producing above planned volumes and yield.

### Safety performance

Results for the year were 0.4 LTIFR and 4.0 MTIFR compared to the prior year's 0.5 LTIFR and 3.2 MTIFR. These results were pleasing, given that the business had an additional 700 contractors working at any one time building the new Southern Iron and Port infrastructure, and that the business was operating two major supply chains compared to one in the prior year. The adverse movement in MTIFR was associated with the significant increase in activity through the Southern Iron construction phase. This measure has now reduced following completion of the Southern Iron expansion towards the end of 2012.

### Community and sustainability

We continue to build strong relationships with the local communities in Whyalla and Coober Pedy, providing sponsorship to local events and community groups, as well as providing significant direct and indirect employment opportunities. We have a key focus on assisting the youth community and the underprivileged.

A key milestone during the year was the signing of the Indigenous Land Use Agreement (ILUA) with the Barnjarla people at Middleback Ranges. This agreement, which is now progressing through the registration process, will enable Arrium Mining to undertake exploration work in previously restricted locations in the Middleback Ranges, and is a reflection of the strong relationship between the Barnjarla people and Arrium.

In line with Arrium's Sustainability Principles, the business continues to progress water saving initiatives such as the reuse of tailings water (over 100 million litres reclaimed), dust suppressants on roads, and other water collection activities.

The Whyalla Port expansion project included two new iron ore storage sheds with the ability to harness dust. The new storage sheds, combined with the new higher capacity ship loader, result in noise levels being reduced to well under the standards required.

### Outlook

Economic growth in China is expected to continue at high levels despite recent downward revisions in the rate of growth, and this is expected to underpin continued strong demand for iron ore. We expect volatility in prices to continue, but to on average remain at solid levels, particularly given the impact of the lower Australian dollar.

Earnings for FY14 are expected to significantly benefit from the completion of our expansion that led to iron ore sales doubling to a rate of ~12Mtpa at the end of FY13. We expect an average Fe grade of ~60% and a loaded cost of ~\$50/wmt<sup>1</sup> at the 12Mtpa rate.

We are continuing to assess opportunities to increase sales above 12Mtpa and utilise the full capacity of the recently expanded Whyalla Port. We also expect to further diversify our customer base into North Asia.

We have reasonable aspirations of being able to maintain sales at the rate of 12Mtpa for at least 10 years based on our reserves and resources, beneficiation of low grade ore and our ongoing ferrous exploration program.

<sup>1</sup> Includes mining, crushing, beneficiation, rail, road haulage and transshipping costs. Excludes capitalised costs (infrastructure, pre-stripping and mining licences) and depreciation and amortisation charges in respect of those costs, royalties, sales and marketing and corporate costs. Includes deferred stripping costs which, from 1 July 2013 will instead be capitalised under IFRIC 20 *Stripping Costs in the Production Phase of a Surface Mine*.

### Mining - Historical Information

	FY13	FY12 <sup>1</sup>	FY11	FY10	FY09
Total revenue/income (\$m)	<b>976.9</b>	819.0	948.4	782.3	598.5
EBITDA (\$m)	<b>339.6</b>	343.7	554.2	361.2	138.0
EBIT (\$m)	<b>248.5</b>	302.9	523.5	333.4	113.0
Sales margin (%)	<b>25.4</b>	37.0	55.2	42.6	18.9
Assets (\$m)	<b>2,159.1</b>	1,685.9	948.4	816.7	769.2
Funds employed (\$m)	<b>1,658.5</b>	1,379.7	776.3	717.4	688.9
Return on funds employed (%)	<b>16.4</b>	28.1	70.1	47.4	19.6
Employees (number)	<b>571</b>	532	367	339	357
External lump and fines iron ore sales (Mt)	<b>8.28</b>	6.29	6.04	6.03	5.07
Pellets, other ore and by-products (Mt) <sup>2</sup>	<b>0.57</b>	0.44	0.72	0.81	0.69

<sup>1</sup> These statistics include results relating to the WPG subsidiaries acquired on 6 October 2011.

<sup>2</sup> Ore by-products include dolomite, centrix, filter cake and pellet chips.



Camp facilities - Southern Iron operation



## ARRIUM MINING CONSUMABLES



**JOHN BARBAGALLO**  
Chief Executive Mining Consumables

Arrium Mining Consumables employs 2,031 people globally, delivering reliable and high quality mining consumable products to the mining industry from its 11 facilities. The business produces grinding media, grinding rods, wire rope, railway wheels and axles, bar stock (grinding media feed), rebar and chemicals.

Sales revenue increased to \$1,567 million, with continued strong demand across all products due to strong mining activity, particularly copper and gold production in North and South America.

The business continued to deliver strong year-on-year earnings growth with EBITDA of \$197 million, up 15% on the prior financial year, reflecting increased contributions from North America, South America and Australasia. In North and South America, the Moly-Cop grinding media business again performed very well. In Australasia, the grinding media, rail wheels and ropes businesses also recorded stronger performances compared to the prior financial year.

During the year, capacity expansions continued in Lima, Peru and Cilegon, Indonesia grinding media facilities, consistent with the company's growth strategy. These expansions will add a further capacity of approximately 90,000 tonnes per annum, with both plants expected to start up as planned in FY14. In addition, Arrium's Board has approved a 120,000 tonne expansion in Kamloops, Canada with start up expected to be in 2015.

Arrium Mining Consumables comprises the Moly-Cop grinding media business, Moly-Cop Ropes, AltaSteel Steel Mill and Waratah Steel Mill, with businesses located in Canada, the USA, Mexico, Peru, Chile, Indonesia and Australia.





## Sales revenue increased to \$1,567 million, with continued strong demand across all products due to strong mining activity

### Mining Consumables - Historical Information

	FY13	FY12	FY11 <sup>2</sup>	FY10 <sup>1</sup>	FY09 <sup>1</sup>
Total revenue/income (\$m)	<b>1,566.7</b>	1,540.6	1,079.3	680.1	659.8
EBITDA (\$m)	<b>197.2</b>	171.6	97.7	83.2	41.7
EBIT (\$m)	<b>152.6</b>	135.2	65.3	62.3	22.8
Sales margin (%)	<b>9.7</b>	8.8	6.1	9.2	3.5
Assets (\$m)	<b>2,460.5</b>	2,310.3	2,286.4	1,158.5	1,125.0
Funds employed (\$m)	<b>2,071.6</b>	1,947.5	1,944.9	1,053.6	1,040.1
Return on funds employed (%)	<b>7.6</b>	6.9	4.4	6.0	2.2
Employees (number)	<b>2,031</b>	1,973	1,864	924	910
External tonnes despatched (Mt) <sup>3</sup>	<b>1.14</b>	1.06	0.73	-	-
Internal tonnes despatched (Mt)	<b>0.09</b>	0.09	0.09	0.10	0.05
Steel tonnes produced (Mt)	<b>0.51</b>	0.50	0.40	0.24	0.24

1 The FY08-FY10 results have been restated to reflect changes in organisation structure following the formation of the new Mining Consumables segment as a result of the acquisition of the Moly-Cop Group. The Waratah, Newcastle facilities, which include the grinding media and rail wheel businesses, the grinding media businesses in the United States and Indonesia, and the wire ropes business at Newcastle, previously reported as part of the Steel segment, now form part of the Mining Consumables segment.

2 These statistics include the results of the Moly-Cop Group from 31 December 2010. Assets and liabilities have been restated to reflect the final fair value adjustments arising on acquisition of the Moly-Cop Group in December 2010.

3 Excludes scrap sales.





## ARRIUM MINING CONSUMABLES

continued

### Moly-Cop

During the year, Arrium Mining Consumables continued to execute its long-term growth strategy for creating shareholder value.

Sales of grinding media for the year increased approximately 7% compared to the previous financial year. Solid global demand for copper and gold continued to drive the demand for grinding media. Moly-Cop is strategically positioned to extract value from these growth markets from its facilities located in North America, South America and Australasia. Moly-Cop has the capacity to produce approximately 1.3 million tonnes per annum of grinding media, including both roll formed and forged grinding media products, in a range of different sizes. The Moly-Cop businesses service their customers from operations in Canada, the USA, Chile, Peru, Mexico, Australia and Indonesia.

### Moly-Cop Ropes

Moly-Cop Ropes produces a range of wire rope products predominantly for mining rope and industrial ropes markets. Moly-Cop Ropes has a long and proud history of ropemaking in Australia, with more than 85 years of experience as a trusted manufacturer and supplier to the global mining industry. The business has capacity to produce approximately 20,000 tonnes per annum.

Through its innovation and new product development program, Moly-Cop Ropes released the new RAPTEK Dump rope system during the year, which has been well received by customers.

### AltaSteel

AltaSteel is a leading supplier of heat-treated grinding rod to America's mining industry and grinding media bar feed for the production of forged grinding balls, predominantly to Moly-Cop Canada. AltaSteel has capacity to produce around 350,000 tonnes of product per annum.

AltaSteel operates from its production facility in Edmonton, Canada. The business provides grinding media bar feed, grinding rod and rebar products to customers in Canada, the USA, Mexico and Chile. AltaSteel's facility comprises steelmaking, bar rolling mills and heat treating operations.

AltaSteel's main steelmaking input is scrap, supplied through its recycling businesses, Maple Leaf Metals (100% ownership) and GenAlta (50% joint venture), and through external suppliers located in Edmonton, Canada.

During the year, AltaSteel continued to work closely with the Moly-Cop businesses on product development initiatives as part of Moly-Cop's research and development program.

### Waratah Steel Mill (including Rail and Forge)

Waratah Steel Mill is a ferrous scrap based producer of high quality steel products operating in Newcastle, NSW. It is a leading domestic supplier of rail wheels, axles and wheel sets for the rail transport and mining sectors. Annual steelmaking capacity is approximately 300,000 tonnes. The steel mill processes ferrous scrap metal through the electric arc furnace (EAF), converting the steel into a wide range of products including grinding media bar feed for grinding media, rail wheels and axles, bar products, cold mill rolls and ingots.

The Waratah Steel Mill includes the Moly-Cop Australia grinding media facilities, with capacity to manufacture approximately 250,000 tonnes of grinding media per annum.

Comsteel Railway Wheels & Forge is a supplier of rail wheel products to the Australian and select international rail markets. Operating for more than 80 years, the business provides a range of wheels, axles and wheel sets predominantly for heavy haul rail systems. The business is at the forefront of high hardness heavy haul wheel technology, where Comsteel railway wheels are subject to the highest axle loads in some of the world's most demanding environments.

Railway wheel volumes remained solid during the year, driven by demand in capital wagon builds and ongoing wheel maintenance market segments.

**The business continued to deliver strong earnings growth with EBITDA of \$197 million**

# 15%

**MINING CONSUMABLES EBITDA INCREASE**

**Safety**

There was a 35% improvement in MTIFR performance for the year, compared to the prior financial year. The business is continuing to focus on eliminating both high consequence and high frequency risk.

**Outlook**

We expect demand for grinding media to remain strong driven by high levels of copper and gold production, particularly in North and South America, despite commodity prices coming off their recent highs.

Over the medium to longer term, demand for grinding media is expected to grow strongly at a compound annual growth rate of approximately 8% (FY13-FY17) in both North and South America. The business is well placed through its ball quality, supply chain, technical support, and its strategy of expanding capacity ahead of demand to capture at least its high market share of this growth.

In mining ropes and rail wheels, short-term demand is expected to be adversely impacted by some miners in Australia (coal and iron ore) reducing inventory levels.





# ARRIUM STEEL



**STEVE HAMER**  
Chief Executive Steel



**GEOFF FEURTADO**  
Chief Executive Recycling

The Arrium Steel segment is comprised of the Steel and Recycling businesses.

In May, the company announced that it was combining its Steel Manufacturing and Steel Distribution businesses to form a single Steel business.

Overall, Steel continued to be challenged by the difficult external environment, including the high Australian dollar and generally weak construction and manufacturing markets. Domestically, large infrastructure projects in the engineering construction sector continued to support strong demand for steel reinforcing products, but deterioration in commodity prices adversely affected demand from the resources sector as companies reduced maintenance and some project expenditure. In the non-residential and residential construction sectors, activity levels remained generally weak due to credit availability issues and soft business and consumer sentiment.

Total Steel revenue decreased 14% to \$3,486 million compared to the prior financial year due to an 8% decrease in sales volumes and a lower average net sales price. Volumes were lower due to some further weakness in domestic demand and the impact of a major rail contract with ARTC being completed in the first half. Underlying EBIT for the year was a loss of \$43 million compared to an EBIT loss of \$56 million in the prior financial year.

The business continued to focus on cash generation, including delivering cost and operational improvements. EBITDA for Steel was \$76 million, a 15% increase over the improved performance achieved in the prior financial year.

In addition to combining the Steel Manufacturing and Steel Distribution businesses (expected to deliver annualised cost savings of \$40 million (~\$30 million in FY14)), the company also announced that, as part of its focus on cash generation, it was holding its non-integrated Merchandising and Australian Tube Mills businesses for sale.

Arrium Steel, excluding the businesses being held for sale includes:

**Manufacturing facilities:** Whyalla Steelworks, two electric arc furnaces, several rolling mills and wire mills.

The **Whyalla Steelworks** is located at Whyalla, South Australia, approximately 400 kilometres north-west of Adelaide. It is an integrated steelworks using iron ore-based feed, sourced from Arrium's iron ore mines in the region. It produces billet for rolling in other OneSteel Manufacturing sites, together with rail and structural steel products.

It produces common and special grade billet as feedstock for the downstream rod and bar mills, as well as producing rail and structural steel products for sale and, on an opportunistic basis, sales of slab and billet to external customers. Raw steel production from Whyalla during the year was 1.1 million tonnes.

Billets produced from Whyalla and the Sydney and Laverton electric arc furnaces are rolled into a wide range of long products that are sold directly to external customers as well as to Arrium's internal customers: the Distribution business and the Wire business.



The **Rod and Bar** business produces a wide range of products and services for a diverse range of markets including the construction, rural, mining and manufacturing segments. Products include bar and rod for the reinforcing market, merchant bar, and rod feed for the wire industry.

These products are produced from facilities in Sydney and Newcastle, NSW and Laverton, VIC. The EAF and billet casting facilities at the Laverton and Sydney steel mills have a combined capacity of approximately 1.3 million tonnes per annum. Additionally, approximately 650,000 tonnes of billet is supplied from the Whyalla Steelworks.

Sales volumes of reinforcing bar improved on the prior financial year, but sales volumes in Rod and Bar overall were lower due to further market weakness.

The **Wire** business consists of wire mills in Newcastle and Jindera, NSW and Geelong, VIC. The business predominantly services the rural fencing markets through its Waratah and Cyclone brands, domestic reinforcing and manufacturing segments, as well as Arrium's Moly-Cop Ropes business. Wire sales volumes decreased compared to the prior year, driven by unfavourable market conditions.

The down stream (retail) business includes OneSteel Metalcentre and Reinforcing. These businesses serve the construction, manufacturing and resources markets with a diverse range of steel and metal products including structural steel sections, steel plate, angles, channels, reinforcing steel and flat products. The business distributes products sourced from its manufacturing businesses as well as externally purchased products.



### Outlook

We expect generally weak domestic and international steel markets to continue through the first half. However, domestic construction markets are expected to slowly recover in FY14 after experiencing the impact of weaker activity in the resource and non-residential construction sectors in the prior half.

Earnings in FY14 are expected to benefit from further cost reductions and operational improvements, as well as from the impact of a sustained lower Australian dollar. We expect the full benefit from the lower Australian dollar from the second quarter.

The Steel businesses have significant leverage to improved demand, particularly from domestic construction.

Over the medium to longer term, we remain confident we will see improvements in the fundamentals for key domestic and international steel markets as economic conditions improve.

**OneSteel Metalcentre:** This business processes and distributes a broad range of structural steel and related steel products and is the leading steel distribution business in Australia (the business was rebranded from OneSteel Metaland | Steel & Tube during the year). There are 75 outlets that service mining projects and non-residential and engineering construction, fabrication, manufacturing and agricultural segments.

Sales volumes decreased compared to the prior financial year due to softer demand from markets exposed to the resources sector in Queensland and Western Australia.

**Reinforcing:** Reinforcing steel is used for concrete reinforcement, mining strata control, agriculture and industrial mesh products, as well as reinforcing steel fibres. It is supplied to large and small builders, concreters, form-workers, pre-casters and mining companies.

Reinforcing is represented by two separate and competing businesses. OneSteel Reinforcing offers the construction and mining segments, in particular, a range of innovative reinforcing solutions. ARC (the Australian Reinforcing Company) has leading market positions in most segments complemented by strong customer relationships and flexible offers.

Sales volumes across Reinforcing were significantly higher compared to the prior financial year due to increased activity levels related to a number of large infrastructure projects.

## Steel maintained the significant improvement delivered in the prior year

### Steel - Historical Information

	FY13 <sup>2</sup>	FY12 <sup>2</sup>	FY11 <sup>2</sup>	FY10 <sup>1</sup>	FY09 <sup>1</sup>
Total revenue/income (\$m)	<b>3,485.8</b>	4,058.8	3,950.4	4,993.5	6,424.9
EBITDA (\$m)	<b>75.8</b>	65.9	(37.1)	188.3	499.9
EBIT (\$m)	<b>(43.0)</b>	(56.4)	(164.6)	56.8	372.0
Sales margin (%)	<b>(1.2)</b>	(1.4)	(4.2)	1.1	5.8
Assets (\$m)	<b>2,505.5</b>	3,534.5	3,966.9	4,132.9	4,125.5
Funds employed (\$m)	<b>1,778.2</b>	2,821.8	3,171.9	3,183.0	3,326.5
Return on funds employed (%)	<b>(1.9)</b>	(1.9)	(5.2)	1.7	11.0
Employees (number)	<b>5,946</b>	6,164	6,922	7,020	7,408
External tonnes despatched (Mt)	<b>2.36</b>	2.57	2.44	2.36	2.43
Steel tonnes produced (Mt)	<b>1.99</b>	2.00	1.92	1.91	1.79

<sup>1</sup> Steel historical information has been derived by adding together the Manufacturing and Distribution segments. Transactions between these segments have not been eliminated.

<sup>2</sup> Steel information for FY11, FY12 and FY13 excludes transactions between entities previously in the Manufacturing and Distribution segments and includes discontinued operations.



## ARRIUM STEEL

continued

The OneSteel Recycling business supplies steelmaking raw materials to domestic and international steel mills, as well as non ferrous metals for recycling. The business operates in nine countries through a combination of physical operations in the form of collection sites and trading offices that supply raw materials to foundries, smelters and steel mills in Australia and globally.

### Recycling

Recyclable material is sourced from the rural, mining, demolition and manufacturing industries and the general public. The OneSteel Recycling business also sells raw materials to the Steel segment. All sales between the OneSteel Recycling and the Steel businesses are conducted on commercial terms equivalent to those negotiated with external parties.

In Australia, the OneSteel Recycling business is principally an east coast focused business operating from 25 locations, including four ferrous shredder production facilities. OneSteel Recycling's Asian non ferrous business operates in three countries and carries out the Group's global non ferrous trading. Operations in the United States consist of 11 locations throughout the north east and south east, including a ferrous shredder in Tampa, Florida.

### Market conditions

During the year, significant price and foreign exchange volatility continued due to factors including continuing poor global economic activity, uncertainty over US monetary policy and concerns of China slowing. This led to significant changes in global scrap flows as scrap providers attempted to find new channels and steel mills arbitrated supply from different markets. Ferrous prices were down 22% from the previous year, while volatility was particularly dramatic with significant fluctuations in both the second and fourth quarters of the financial year, decreasing 16% in the last quarter of the financial year. Non ferrous markets weakened throughout the year, with nickel and copper LME down 15% and 6% respectively over the year. The availability of scrap arisings continues to be tight in Australia due to weak manufacturing and construction activity.

### Operational performance

Total revenue decreased 15% to \$1,350 million compared to the prior financial year due to lower average prices and lower volumes for ferrous scrap. Underlying EBIT for the year was a loss of \$8 million, reflecting weaker ferrous and non-ferrous margins due to subdued market conditions and tight scrap arisings, offset by significant cost reduction initiatives. Cost reductions and operational improvements helped underpin a breakeven EBIT result for the second half.

The Recycling business is positioned with significant leverage to an improvement in demand and a lower Australian dollar.

### Initiatives

The business continued to focus on productivity and efficiency initiatives. This included the closure of loss-making operations, with four yards closed and another five yards to be exited in the first quarter of the 2014 financial year. The Asian business successfully broadened its channel to market in the stainless segment and closed two non-performing operations. Downstream recovery system upgrades were made to three shredders and, combined with other non-capital initiatives for other shredders, delivered a significant uplift in metal recoveries.

The business is continuing to be reshaped with a primary focus on the east coast of Australia, leveraging its Asian physical and trading businesses. In line with this direction, the company has announced that it is holding its US Recycling business for sale.

### Safety

Risk reduction program, focused injury prevention, targeted leadership competencies and safe work initiatives helped underpin MTIFR down 24% compared to the prior financial year, to 8.6. The company's US Maine operation is the first scrap facility in the New England area to receive a SHARP (Safety & Health Achievement Recognition Programme) award from OSHA (Occupational Safety and Health Administration).





## Lower scrap prices and volumes more than offset the benefit from cost reductions and operational improvements

### Outlook

We expect the current challenging external environment to stabilise over the near term, with less volatility and increasing market consensus of upward price bias in the second half of FY14.

The Australian business is better positioned to face these conditions, and its focus has moved to in-market trading effectiveness and strategies to increase market share while maintaining continued strong cost and cash discipline.

The Asian business is focused on continuing to broaden its customer and product profile, strengthening non-ferrous sales strategies with Australia and maximising opportunities across its trading platform to maximise returns.

The business is expected to benefit from recovery in international ferrous and non-ferrous prices.

### Recycling - Historical Information

	FY13 <sup>1</sup>	FY12	FY11	FY10	FY09
Total revenue/income (\$m)	<b>1,349.5</b>	1,589.7	1,507.2	1,123.7	1,124.0
EBITDA (\$m)	<b>7.5</b>	24.1	37.6	22.9	(21.8)
EBIT (\$m)	<b>(8.3)</b>	6.6	20.9	7.7	(38.6)
Sales margin (%)	<b>(0.6)</b>	0.4	1.4	0.7	(3.4)
Assets (\$m)	<b>479.8</b>	675.3	652.5	710.7	614.1
Funds employed (\$m)	<b>365.2</b>	567.4	554.3	618.4	537.7
Return on funds employed (%)	<b>(1.8)</b>	1.2	3.6	1.3	(6.7)
Employees (number)	<b>849</b>	973	1,033	1,019	1,016
Ferrous tonnes - external (Mt)	<b>0.81</b>	1.01	0.95	0.75	0.89
Ferrous tonnes - internal (Mt)	<b>0.82</b>	0.85	0.96	0.94	0.77
Non-ferrous tonnes (Mt)	<b>0.26</b>	0.25	0.25	0.19	0.14

<sup>1</sup> Includes discontinued operations.

# RISK MANAGEMENT

Arrium manages its exposure to key financial risks, including interest rate and currency risk, in accordance with its financial risk management policy.

The objective of the policy is to support the delivery of the Group's financial targets whilst protecting future financial security.

## Debt management

Arrium's statutory gearing level at the end of June 2013 was 36.2%. Arrium's core debt facilities at the end of June 2013 comprised \$2,588 million of syndicated loans provided by a group of banks, with tranches expiring from 2015 to 2018, \$331 million of bi-laterals expiring in 2015 to 2016, and \$594 million of US privately placed debt, with tranches expiring from 2015 to 2023. At the end of June 2013, net debt was \$2,115 million.

## Interest rate management

Arrium's objective when managing interest rate risk is to minimise interest expense while ensuring that an appropriate level of flexibility exists to accommodate changes in funding requirements. To achieve this, Arrium uses a mix of "fixed" and "floating" interest rate instruments where "fixed" is defined as 12 months or longer. Further information regarding Arrium's interest rate management can be found in Note 32 to the Financial Statements on page 119.

## Foreign exchange exposure

The Group's primary sources of foreign currency risk are sales of product, including iron ore; purchases of inventory and commodity inputs in foreign currency or based on foreign currency prices; capital expenditure in foreign currency; foreign currency denominated debt, and its net investment in foreign currency denominated operations.

The Group seeks to minimise its exposure to foreign currency translation risk arising on USD and CAD denominated operations using USD and CAD denominated debt as a net investment hedge. To manage foreign currency exposure arising on foreign currency denominated debt not designated as hedge of net investments, the Group uses cross currency interest rate swaps. To manage foreign currency transaction risk, the Group enters into forward exchange or option contracts.

## Financial reporting control assurance

The company executes a risk-based process for assessing the effectiveness of internal controls. The control focused financial reporting process includes:

- Identifying and analysing the key financial processes
- Assessing the inherent and residual risk of each key financial process
- Identifying key financial controls where a risk gap indicates significant reliance on internal controls
- Performing Control Self Assessment tests of key financial controls and Stewardship reviews on a regular basis.

This process is based on:

- ISO 31000/COSO risk-based identification of key financial controls
- The company's internal auditors' verification of the effectiveness of key financial controls
- Management sign-off to support the Chief Executive Officer and Chief Financial Officer sign-offs.

## Risk management at Arrium

Arrium has an established business risk profiling system for identifying, assessing, monitoring and managing material risk. The system is based on ISO 31000/COSO, and provides ongoing risk management that is capable of responding promptly to emerging and evolving risks. The company's risk management system includes comprehensive practices that help ensure that:

- Key risks are identified and mitigating strategies are put in place
- Management systems are monitored and reviewed to achieve high standards of performance and compliance in areas such as safety and environment
- Capital expenditure above a certain threshold obtains prior Board approval
- Internal control weaknesses are identified and reported monthly through the outstanding audit issues scorecard until they are remediated and closed
- Financial exposures are controlled, including the use of derivatives
- Business transactions are properly authorised and executed.

## Internal and external audit

Arrium's Internal Audit, Control and Risk (IACR) function is headed by a General Manager reporting to the Chief Financial Officer, with the execution of the internal audit function primarily managed internally.

The internal audit program is aimed at providing assurance to management and the Board over the effectiveness of the company's enterprise risk management system, comprising business risk management, compliance and control assurance, and the effectiveness of its implementation. The internal audit function works with the company's external auditor, KPMG, to minimise duplication of effort and to maximise knowledge sharing between the assurance providers.



### Arrium material business risks

The following key business risks have been identified as having the potential to impact on the company's earnings stream. Arrium is taking the necessary steps to ensure that these risks are appropriately managed.

#### Domestic and global economic environment and capital market conditions

Arrium's financial performance and market capitalisation will fluctuate due to: movements in capital markets; broker analyst recommendations; interest rates; exchange rates; inflation; economic conditions; changes in Government fiscal, monetary and regulatory policies; commodity prices; construction, mining and manufacturing industry activity levels; scrap metal prices; global geopolitical events and hostilities and acts of terrorism; investor perceptions and other factors that may affect Arrium's financial position and earnings.

#### Adverse impact of certain commodity price and demand fluctuations

Arrium is a seller of iron ore and steel and a buyer of various commodities, including coking coal, hot rolled coil and zinc. Significant fluctuations in the iron ore price and demand will impact Arrium's profitability and balance sheet. In addition, supply/demand levels for commodities such as gold, copper etc. could have direct effects on Arrium's Mining Consumables business.

#### Adverse impact of foreign currency exchange rates

Arrium has exposure to foreign exchange translation risk. Fluctuations in foreign currency exchange rates, in particular, volatility of the US dollar against most major currencies and strengthening of the Australian dollar against the US dollar may have a material adverse impact on the financial position and performance of Arrium.

#### Operational risk

Arrium Mining's operational risks relate to the continual operation and successful expansion of its supply chain infrastructure.

The production of iron and steel products involves a number of inherent risks relating to the operation of Arrium's manufacturing facilities that involve the use of energy and infrastructure resources, including electricity, gas and water, the production and movement of liquid metal, the hot rolling and cold forming of steel sections and, at times, complicated logistical processes. Operational risks exist with respect to the major units at Whyalla, including electric arc furnaces and rolling mills.

The OneSteel Recycling business is also exposed to operational risks relating to its supply chain.

#### Cyclical nature of our industries

Arrium's revenues and earnings are sensitive to the level of activity in the Australian construction, manufacturing, mining, agricultural and automotive industries and are also sensitive to the level of activity in the global mining and rail industries.

#### Competition

Arrium faces import and domestic competition across our product range. A significant increase in competition, including through imports, could materially affect the future financial position and performance of Arrium by putting downward pressure on steel prices or by reducing Arrium's sales volumes.

#### Dependence on key customer and supplier relationships

Arrium relies on various key customer and supplier relationships, and the loss or impairment of any of these relationships could have a material adverse effect on Arrium's operations, financial condition and prospects.

#### Carbon Tax

The Carbon Tax commenced on 1 July 2012, applying a fixed carbon price of \$23 per tonne of carbon dioxide equivalent (CO<sub>2</sub>-e), increasing to \$24.15 per tonne from 1 July 2013.

Arrium successfully advocated that the Government take a sectoral approach for the steel industry that takes into account the unique aspects of steelmaking technology and its markets to avoid damaging the competitiveness of the industry. Arrium believes that the sectoral approach implemented by the Australian Government for the steel industry, including the provision of assistance via the Jobs & Competitiveness Program and the introduction of the Steel Transformation Plan (STP) is both appropriate and sensible. Arrium's concerns about the adverse impacts of the Carbon Tax on our competitive position have been recognised and substantially addressed, at least over the four-year life of the STP.

In the event of any future amendments to the carbon pricing legislation, Arrium will continue to advocate the need for appropriate assistance arrangements.

#### Insurance

Arrium seeks to maintain a range of insurance covers for business operations including business interruption, property damage, goods in transit and public and product liability. However, Arrium's insurance will not cover every potential risk associated with its operations and, in some cases, will be subject to large deductibles. An ongoing gap analysis is conducted to identify uninsured risks and the potential insurance solutions to address these issues. The occurrence of a significant adverse event, the risks of which are not fully covered by insurance, could have a material adverse effect on Arrium's financial condition and financial performance.

#### Occupational Health and Safety (OHS)

Arrium has been granted self-insurance status for workers' compensation in all eligible Australian states. Arrium's continued safety performance and compliance with OHS systems and practices is a key component to maintaining self-insurance status. If Arrium fails to maintain adequate occupational health and safety systems and practices, Arrium may lose its self-insurance status, which may have a material adverse effect on the financial performance of Arrium.

#### Product risk

Arrium maintains an internal risk management process and also follows quality assurance procedures in relation to the manufacture of its products and materials. For example, Arrium's steel mills are accredited to internationally recognised standard ISO9001. However, due to the nature of its operations, it is possible that claims against Arrium could arise from defects in materials or products manufactured and/or supplied by Arrium.

# RECONCILIATIONS

Unless otherwise stated, financial measures referred to in this document, including underlying results and ratios, are non-statutory financial measures, which have not been audited or reviewed as part of KPMG's report on the full year financial statements. However, KPMG has undertaken a set of procedures to agree the financial information in this document to underlying information supplied by the company. The Directors believe that using these non-statutory financial measures appropriately represent the financial performance of the Group's total operations including continuing and discontinued operations.

## Reconciliation between Underlying and Statutory Results

YEAR ENDED 30 JUNE 2013	STATUTORY RESULTS			UNDERLYING RESULTS			
	Continuing operations	Discontinued operations	Total operations Statutory	Restructuring costs <sup>1</sup>	Impairment <sup>2</sup>	Tax adjustments and other items <sup>3</sup>	Total operations Underlying
Reconciliation between underlying and statutory results	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Sales revenue	6,084.9	756.1	<b>6,841.0</b>	-	-	-	<b>6,841.0</b>
Other revenue/income	92.5	21.4	<b>113.9</b>	-	-	-	<b>113.9</b>
Total revenue/income	6,177.4	777.5	<b>6,954.9</b>	-	-	-	<b>6,954.9</b>
Gross profit/(loss)	1,069.7	(18.3)	<b>1,051.4</b>	-	-	-	<b>1,051.4</b>
EBITDA	626.0	(129.5)	<b>496.5</b>	93.8	-	(0.7)	<b>589.6</b>
Depreciation and amortisation	(257.2)	(16.8)	<b>(274.0)</b>	-	-	-	<b>(274.0)</b>
Impairment	(245.5)	(684.7)	<b>(930.2)</b>	-	930.7	-	<b>0.5</b>
EBIT	123.3	(831.0)	<b>(707.7)</b>	93.8	930.7	(0.7)	<b>316.1</b>
Finance costs	(117.4)	(0.7)	<b>(118.1)</b>	-	-	-	<b>(118.1)</b>
Earnings before tax	5.9	(831.7)	<b>(825.8)</b>	93.8	930.7	(0.7)	<b>198.0</b>
Tax expense/(benefit)	64.6	68.6	<b>133.2</b>	(28.1)	(35.4)	(97.3)	<b>(27.6)</b>
Profit/(loss) after tax	70.5	(763.1)	<b>(692.6)</b>	65.7	895.3	(98.0)	<b>170.4</b>
Non-controlling interests	(2.1)	-	<b>(2.1)</b>	-	-	-	<b>(2.1)</b>
Net profit/(loss) after tax	68.4	(763.1)	<b>(694.7)</b>	65.7	895.3	(98.0)	<b>168.3</b>

1 Related to redundancies from organisational changes and other direct expenditure associated with business restructures.

2 Impairment of property, plant and equipment and intangible assets associated with Recycling and Steel segments.

3 Relates to tax adjustments related to prior years, the net impact of the Mineral Resource Rent Tax, gain on disposal of Steel and Tube Holdings and other non-recurring items.

## Reconciliation between Underlying and Statutory Results

YEAR ENDED 30 JUNE 2012	STATUTORY RESULTS			UNDERLYING RESULTS				
	Continuing operations	Discontinued operations	Total operations Statutory	Transaction costs <sup>1</sup>	Restructuring costs <sup>2</sup>	Impairment <sup>3</sup>	Tax adjustments and other items <sup>4</sup>	Total operations Underlying
Reconciliation between underlying and statutory results	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Sales revenue	6,314.8	1,279.7	<b>7,594.5</b>	-	-	-	-	<b>7,594.5</b>
Other revenue/income	100.4	21.4	<b>121.8</b>	-	-	-	-	<b>121.8</b>
Total revenue/income	6,415.2	1,301.1	<b>7,716.3</b>	-	-	-	-	<b>7,716.3</b>
Gross profit	1,120.3	77.4	<b>1,197.7</b>	-	-	-	-	<b>1,197.7</b>
EBITDA	620.7	(122.8)	<b>497.9</b>	26.6	47.0	-	9.5	<b>581.0</b>
Depreciation and amortisation	(194.3)	(26.5)	<b>(220.8)</b>	-	-	-	2.8	<b>(218.0)</b>
Impairment	(3.4)	(138.8)	<b>(142.2)</b>	-	-	138.8	-	<b>(3.4)</b>
EBIT	423.0	(288.1)	<b>134.9</b>	26.6	47.0	138.8	12.3	<b>359.6</b>
Finance costs	(117.7)	(3.4)	<b>(121.1)</b>	-	-	-	-	<b>(121.1)</b>
Earnings before tax	305.3	(291.5)	<b>13.8</b>	26.6	47.0	138.8	12.3	<b>238.5</b>
Tax expense/(benefit)	(9.0)	58.8	<b>49.8</b>	(7.9)	(17.2)	(13.4)	(48.8)	<b>(37.5)</b>
Profit/(loss) after tax	296.3	(232.7)	<b>63.6</b>	18.7	29.8	125.4	(36.5)	<b>201.0</b>
Non-controlling interests	(5.9)	-	<b>(5.9)</b>	-	-	-	-	<b>(5.9)</b>
Net profit/(loss) after tax	290.4	(232.7)	<b>57.7</b>	18.7	29.8	125.4	(36.5)	<b>195.1</b>

1 Direct costs related to the acquisition of WPG Resources Limited subsidiaries in October 2011 and the sale of the Piping Systems business.

2 Related to redundancies from organisational changes and other direct expenditure associated with business restructures.

3 Impairment of property, plant and equipment and intangible assets associated with the Oil and Gas Pipe and LiteSteel™ Technologies businesses and land and buildings at Acacia Ridge.

4 Relates to tax adjustments related to prior years, the net impact of the Mineral Resource Rent Tax, gain on disposal of Piping Systems and other non-recurring items.

# SUSTAINABILITY

Arrium continually seeks to improve business sustainability by valuing environmental, social, economic and ethical considerations across all of its operations. The following sustainability section is an extract from Arrium's full 2013 Sustainability Report.

The Report and information on Arrium's Sustainability Principles can be viewed online at [www.arrium2013.sustainability-report.com.au](http://www.arrium2013.sustainability-report.com.au) from November 2013.





# SAFETY

“We will not compromise on safety” is one of only two core values of the organisation and, as a result, a focus on the health and safety of employees, contractors, customers and visitors underpins each of Arrium’s activities.

### Our approach to safety

Arrium is committed to achieving the highest performance in workplace health and safety, believing that all injuries, occupational illnesses, and incidents are preventable. At Arrium, workplace health and safety is everyone’s responsibility.

Our goal is to establish a workplace free from injuries, incidents and illness and there are six Safety Principles which outline the philosophy guiding Arrium’s approach:

#### ARRIUM SAFETY PRINCIPLES

- All injuries can be prevented
- Working safely is a condition of employment
- Employee involvement is essential
- Management is accountable for safety
- All operating exposures can be safeguarded
- Training employees to work safely is essential

The role of management is to provide direction, set the safety standards and drive improvement within the business to encourage all employees, contractors and visitors in working towards the goal of ZERO incidents, injuries and occupational illnesses.

### Our safety performance

Arrium’s Lost Time Injury Frequency Rate (LTIFR) in the 2013 financial year was 1.3. This represents an improvement of 23% on the previous year. The Medical Treatment Injury Frequency Rate (MTIFR) in the 2013 financial year was 6.1. This represents a 13% improvement on the previous year. Despite further improvements in our safety practices and key safety performance metrics, sadly, the company experienced a fatality at one of its Steel distribution sites. The company is furthering its safety endeavours to prevent a recurrence of such a tragedy.

### Focus on significant risks

In the 2013 financial year, Arrium further enhanced its proactive approach to target significant safety risks, with an emphasis on involvement by senior management. Each Chief Executive has developed a significant risk reduction program, and delivery against this program is a key component in assessment of their performance.

### Workplace harmonisation

The harmonisation of work health and safety (WHS) laws, regulations and guidelines has been occurring over several years. The intent of these changes is to remove inconsistency between jurisdictions and improve the efficiency of implementing WHS across multiple jurisdictions. By FY13, all states in which Arrium has major operations, with the exception of Victoria, had commenced their respective harmonised WHS Act and Regulation with appropriate transitional arrangements. Where applicable, these changes have been considered by Arrium, and internal systems, tools and processes have been adjusted to enable continued compliance.

### Arrium Safety Excellence Awards

The annual Arrium Safety Excellence Awards are an opportunity to recognise and reward those employees, contractors and suppliers who made an outstanding contribution towards our goal of injury prevention and the reduction of significant incidents. These Awards also provide a platform to encourage sharing of best practice across the organisation.

In 2013, the Awards received a total of 118 nominations from across Arrium. Every winner and highly commended entry received a cash prize that was donated to a charity of their choice. In total, \$14,000 were donated to various charities as a result of the 2013 Safety Excellence Awards.

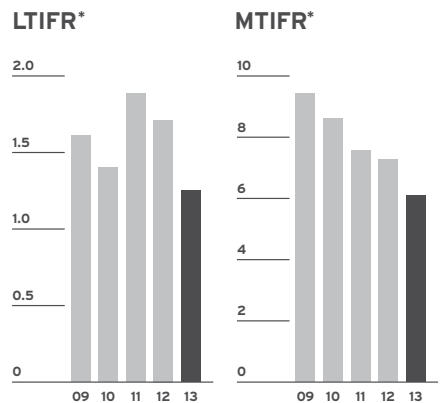
Arrium sites also enter external health and safety award programs from time to time and last year the Mining Consumables site at Cilegon, Indonesia, was awarded the Cilegon (Regional), Banten (State) and Indonesian (National) award for ZERO Accidents. In addition, Arrium’s Recycling operation in Maine, USA, was the first scrap facility in the New England area to receive the SHARP (Safety and Health Achievement Recognition) award from OSHA (Occupational Safety and Health Administration).

### Workers compensation

Driven by legislative reforms, strong return to work outcomes and fewer injuries, Arrium’s Australian operations have seen a 17% reduction in workers’ compensation claims and an \$8 million reduction in self-insured workers’ compensation provisions over the year.



Paul Smith (L) winner of the Safety Front Line Leader Award, Bryan Davis and John Barbagallo



\* The FY11 figures have been restated to include the Moly-Cop Group businesses’ safety performance as if they were part of Arrium from 1 July 2010.

# CUSTOMERS

We are committed to meeting our promise to customers and dedicated to servicing their requirements today and in the future. "Customer" as a core value is actively embedded throughout Arrium.

Nowhere is the "Customer" core value more evident than where Arrium and customers work in partnership to achieve an outcome that adds significant value to both organisations. Outstanding examples of such partnerships were seen in the 2013 financial year through improvements in the Moly-Cop Wire Ropes Total Rope Management program and in OneSteel Wire's support of the WA State Barrier Fence project.

### Arrium and BMA partner to eliminate rope wastage

Since 2000, Arrium has partnered with BMA, the largest coal miner in Queensland's Bowen Basin, to provide Total Ropes Management (TRM). Through TRM, Moly-Cop Ropes not only manufactures and supplies the steel wire mining ropes used on BMA's draglines and shovels, but also manages rope inventory, reduces rope usage rates and delivers rope cost savings across all BMA sites. Recently, Arrium extended this offering to include recycling of worn mining ropes. Previously worn ropes were usually disposed of to landfill or left on-site, but by involving the OneSteel Recycling business, it is now possible to recover and recycle those ropes. This has further reduced costs for BMA and created a new stream of scrap steel for OneSteel Recycling, as well as diverting scrap rope from landfill.

### Waratah Fencing Products provides customised fencing for the WA State Barrier Fence

The WA State Barrier Fence (also called the "Emu Fence") is 1,170km long and designed to minimise emu impact on cropping areas. In 2012, Waratah Fencing Products was asked to tender for a large portion of this fence and investigated changes that could be made to standard products to meet the needs of the customer, the WA Department of Agriculture and Food. As a result of various changes that Waratah Fencing Products was able to make, including to the length and height of pre-fabricated rolls of fencing wire, changes to strainer assemblies and posts, and even providing appropriate clip guns to the customer, Waratah Fencing Products was subsequently awarded the contract for supplying a significant length of fencing for this project.

The mining rope recycling and State Barrier Fence are just two examples of projects that were submitted for the second annual Arrium OSCAs awards.

### The Arrium "OSCA's"

The Arrium OSCAs, or "Outstanding Service to Customer Awards" are designed to reinforce "Customer" as a core value across Arrium.

The OSCAs identified, recognised and rewarded employees and work teams who achieved an improved business outcome through the delivery of an enhanced customer experience. The criteria against which nominations were assessed were as follows:

- Creating a new customer promise
- Consistent customer service at an exceptional level
- Proactively mitigating risk
- Creating permanent behaviour change within Arrium
- Development of a competitive advantage or best practice outcome.

In 2013, there were in excess of 90 entries for the award categories of Individual, People's Choice and Work Team. Nominations are open to all employees globally.

### 2012 Winners of the Arrium OSCAs

INDIVIDUAL AWARD	WORK TEAM AWARD	PEOPLE'S CHOICE AWARD
John Higgins	The Mining Rope Recycling Team (Grant Millard, Darryl Bolton, Chris Black, Marc Steer and Brad Reed)	Kerryn Rodda
For improvement of the Whyalla Condition Monitoring Team performance	For new arrangement with BMA for the recovery and recycling of used mining rope	For the "Tracking on Track" project that resulted in an 80% reduction in train tracking errors



Kerryn Rodda receives the People's Choice Award from Geoff Plummer



Part of the State Barrier Fence (Emu Fence) in Western Australia (Courtesy of C. Robins, Department of Agriculture and Food, WA.)

## PEOPLE

Arrium employs approximately 10,000 people globally. The company's Australian operations account for around 8,500 employees (two thirds of whom are engaged in Steel), while operations outside Australia (predominantly in Mining Consumables and Recycling) directly employ around 1,500 employees. Australian Mining and South American Mining Consumables operations also rely significantly on additional labour under contracts for services with third parties.

Arrium operates according to a principle that leaders are responsible for the performance, development and retention of their teams. The Human Resources (HR) function works in partnership with leaders to coach and support them in carrying out these responsibilities. Having applied a decentralised model for the delivery of HR support for a number of years (embedding key HR resources at an operational level, but reporting functionally), Arrium has moved to strengthen line accountability of the function, with HR professionals now reporting directly through to Chief Executives under a Portfolio Model.

With a continued focus on building capability, leading transformation, operational improvement and growth initiatives, and facilitating sustained cost improvement in line with business strategies, HR managers continue to leverage the benefits of close networking relationships, cross-function development and resource sharing, as well as leveraging a small cost-effective shared services group of remuneration, recruitment and talent pipelining, and payroll specialists.

The past year has seen a substantial commitment from Arrium's HR team to support the refocusing of the Arrium Steel portfolio. This work has involved the divestment program for non-integrated businesses, the ongoing restructuring of the integrated steel businesses, the consolidation of the Manufacturing and Distribution businesses into a single Steel business and a review of Arrium's functional support teams.

To better support Arrium's changing employee footprint and to facilitate leaders spending time on quality direct engagement with their employees, HR has undertaken a number of system-related projects including: extending the reach of Learning Management systems; consolidation of Workers Compensation systems to deliver a single national platform; payroll simplification and consolidation; and the review and alignment of international HR processes.

Underpinned by the Arrium Capability Framework, the last year has also seen a continued emphasis on Leadership Development with a further eight Leading People to Safety programs, numerous in-business Front Line Leader programs, the launch of the Arrium Orientation program (targeting 50 entry level leaders/professionals from around Australia and overseas), and additional cohorts of our senior manager Arrium Insight Program.

The following are examples of the many initiatives pursued across the company over the last year.

### Arrium Operating System

Arrium's Australian manufacturing operations are being transformed through the innovative Arrium Operating System. With its genesis in Arrium's 2010 benchmarking of world-class manufacturing, Arrium Operating System is the product of collaboration between Arrium and Frontline Planning. The initiative brings together managers, supervisors and shop-floor

employees to develop their technical and social capabilities, resulting in improvements in safety and environment, process efficiency, equipment reliability, quality and meeting of promises to customers. Combined with investments in a national qualifications framework in steelmaking knowledge and new approaches to trapping and sharing technical know-how, Arrium Operating System is building new capabilities at all levels of the workforce while delivering tangible business improvement.

As at the end of FY13, realised benefits of Arrium Operating System initiatives in the company's Grinding Media operations at Waratah alone include the achievement of zero medical treatment injuries, zero high potential incidents, zero environmental complaints, improved Quality Management Systems (ISO 9001 re-accreditation), and a reduction in conversion costs.

### Building capability in mining

As Arrium Mining moves from a strong focus on project execution and capital program management, to one of ensuring ongoing sustainable and consistent operational performance, the business has embarked on a program to build capability, particularly with respect to requisite commercial knowledge and the application of sustainable commercial tools and processes to drive shareholder outcomes. With the Mining Lead Team both leading and participating, the program is supported by internal and external subject matter champions.

### Diversity

As an equal opportunity employer, Arrium values diversity and has an extensive policy framework in relation to equality, bullying and harassment. The Diversity Policy and its 2012 Gender Equality Report are available on Arrium's website. It focuses on three key objectives relating to recruitment, development and retention. Progress on these is monitored and assessed on an annual basis through the Arrium Board. Solid progress has been made and they are being supported by a number of new initiatives.

We have this year launched the "Women at Arrium" program, which provides nominated high performing female leaders with the opportunity to develop and network, as well as providing the organisation with feedback about improving our gender diversity strategies.

Other diversity-related initiatives include partnering with the University of Newcastle's Industry Advisory Committee to gain insight into Arrium's scope to deliver its gender diversity objectives. We have also redesigned our exit survey to better elicit employee views on the organisation's approach to cultural and gender diversity/inclusion, and the continued push to see greater representation of females in non-traditional roles. With such an emphasis, we have seen a number of women promoted into positions such as key technical and engineering roles across our Sydney and Newcastle steel mills.

# COMMUNITY

Arrium recognises that achieving positive sustainable relationships within the communities in which we operate is imperative to doing business.

## Our approach to community

At Arrium, we have fostered a responsible approach to demonstrating social responsibility by promoting values and initiatives, such as investment and engagement, that show respect for the people and communities associated with our business.

There are a number of key initiatives and consultation-based programs that have been formed or further strengthened to reflect key issues that affect our local communities. In addition, Arrium and its employees pride themselves on physically and/or financially supporting regional and local activities through providing education and training, donations and sponsorships through to charity fundraising events, all of which require personal commitment and the dedication of individuals.

To monitor the ongoing impact of Arrium's operations, we invest, inform, consult and develop relationships with local communities to work towards mutually beneficial outcomes and to continually earn our social licence to operate.

## Community financial support

Arrium and our employees provide community financial support through two key mechanisms: Arrium's workplace giving program "OneCommunity" and other community investments outside of this program.

## OneCommunity

Arrium's OneCommunity Workplace Giving Program supports 12 charities and is the primary mechanism through which Arrium and its employees contribute to charities. The program was established to provide employees with an easily accessible way to donate to a range of charities. Arrium matches employee contributions up to \$250,000 per annum. The current charities supported through OneCommunity are Alzheimer's Australia, The Cancer Council, CARE Australia, Guide Dogs, Hunter Medical Research Institute, Landcare Australia, Lifeline, Royal Flying Doctor Service, the RSPCA, The Smith Family, The Salvation Army and the Westpac Rescue Helicopter Service.

Arrium and its employees have assisted these charities by donating approximately \$230,000 this year. Arrium is also attempting to facilitate employee volunteering opportunities with our partner charities to provide employees with another avenue to positively engage with their communities and those in need.

## Other community support

This year, financial donations and support in addition to the OneCommunity program were \$215,000. This included support through community fundraising events, sponsorships, scholarship programs and other donations mainly within regional Australia.

The company wishes to thank all employees who have participated for their support.

## Community involvement in South Australia

Arrium Mining has continued to work with the local community in South Australia to further develop an ongoing partnership. This has seen Arrium undertake significant projects to reduce/remove its impact on local amenities, assist the community, particularly those in need through Arrium's Community Support Program, and help indirectly through our employees who are actively involved as volunteers.

Significant business, community engagement and environmental achievements during the past year include:

- Signing of the Indigenous Land Use Agreement (ILUA) with the Barnjarla people at Middleback Ranges. This agreement, which is now progressing through the registration process, will enable Arrium Mining to undertake exploration work in previously restricted locations in the Middleback Ranges. The agreement is a reflection of the continued strong relationship between the Barnjarla people and Arrium.
- Hummock Hill Project - Arrium has teamed up with Whyalla City Council and Stuart High School with the primary focus of revegetating and restoring Hummock Hill.
- Continued funding our Community Improvement Program focused on addressing the impact of fugitive dust on the community.

## Community involvement overseas

We also strive to achieve positive sustainable relationships in the communities in which we operate overseas. Examples of our community engagement and support include:

- In our North American Moly-Cop business, we are a financial supporter of the Whatsoever Community Centre and Sheffield Place in Kansas City in the United States, and have representation on the Board of Directors for each group. The Whatsoever Community Centre, which is based in a very economically challenged part of Kansas City, provides day care for children and food for needy families, as well as other services. Sheffield Place is the only treatment and transitional living centre in Kansas City that focuses exclusively on homeless families. In Mexico, MolyCop financially supports a Nursing Home in El Salto.
- In our South American Moly-Cop business, we are a founding member of the Mejillones Industrial Association focused on social responsibility and sustainability for Mejillones residents. Its initiatives include implementing a significant female health program with a particular focus on the early detection of breast cancer.



# ENVIRONMENT

Arrium is committed to pursuing a high standard of environmental management throughout its operations.

Arrium strives for continual improvement in environmental performance, the efficient use of resources, and the minimisation or prevention of pollution. The full Arrium environment policy can be found at [www.arrium.com](http://www.arrium.com).

The following section details our performance in environmental areas as the organisation seeks to use energy, fresh water and other resources more efficiently.

## Energy

Total global energy consumption for Arrium in the 2013 financial year was 43.69 petajoules. The majority of this energy was consumed at Arrium's steelmaking facilities at Whyalla, Sydney, Waratah and Laverton in Australia and Edmonton in Canada.

Arrium discloses energy and greenhouse gas data under various global, national and regional schemes. At a global level, Arrium provides energy and greenhouse data to the Carbon Disclosure Project ([www.cdproject.net](http://www.cdproject.net)). At an Australian national level, Arrium submits annually a detailed National Greenhouse and Energy Reporting Scheme (NGERS) Report to the Australian Government. Arrium also participates in the Energy Efficiency Opportunities (EEO) program.

## Emissions

Approximately 85% of Arrium's global greenhouse gas emissions derive from the steelmaking and hot roll/forging operations in Whyalla in South Australia, Sydney and Newcastle in New South Wales, Laverton in Victoria and Edmonton in Alberta, Canada.

## Water

In the 2013 financial year, townswater use by Arrium globally was approximately 8,585 million litres, of which approximately 93% was used at the five main manufacturing and ore processing sites.

The largest use of townswater within Arrium occurs at the Whyalla Steelworks and the ore processing operations within the South Middleback Ranges.

In FY13, townswater use at the Whyalla Steelworks and Middleback Ranges mines was 6,440 million litres. This represents an increase of 12.1% on the previous year, and this increase is predominantly due to increased mining production and commencement of operation of the Iron Barron Mine and ore beneficiation plant which uses a wet process to beneficiate lower grade hematite.

Despite this increase in the last year, between financial years 2008 and 2013 Whyalla Steelworks and the Middlebank Ranges operation have reduced their Murray River water consumption by approximately 360 million litres. This was achieved by a variety of measures despite the increase in magnetite feed rate to the steelworks and the increase in hematite for export during the same period.

OneSteel Whyalla Steelworks and Arrium Mining Whyalla continue to work towards minimising their use of Murray River water, through an active water efficiency program, ongoing use of desalinated water, use of recycled Municipal Water Treatment Plant water, reuse of process and tailings water, and use of seawater for cooling.

## Recycled materials

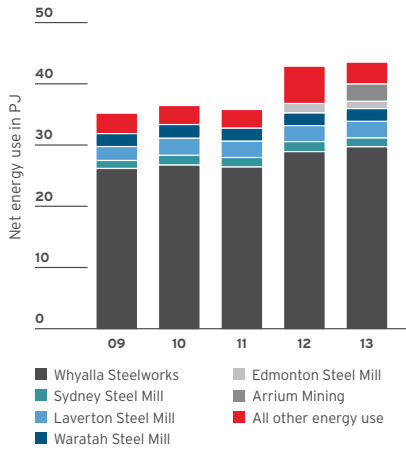
During the 2013 financial year, Arrium collected almost two million tonnes of scrap metal globally. Steel is highly recyclable and utilises the embodied energy within scrap. Arrium trades ferrous scrap and also uses it as an input in the manufacture of steel in both the BOS and EAF processes. Approximately 64% of Arrium's global steelmake is produced from recycled steel, including internal site scrap.

## 2013 Direct, indirect and total greenhouse gas emissions

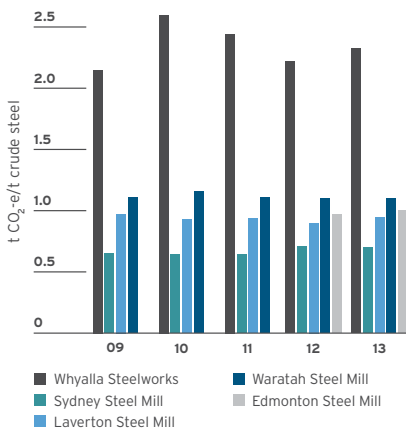
	Scope 1 million tonnes CO <sub>2</sub> -E	Scope 2 million tonnes CO <sub>2</sub> -E	Total million tonnes CO <sub>2</sub> -E
Whyalla Steelworks	2.53	0.13	<b>2.66</b>
Electric arc furnaces (Sydney, Laverton, Waratah)	0.22	0.79	<b>1.01</b>
Arrium Mining	0.16	0.08	<b>0.24</b>
Remainder of Arrium Australian operations	0.09	0.21	<b>0.30</b>
<b>Total Arrium Australian operations</b>	<b>3.00</b>	<b>1.21</b>	<b>4.21</b>
AltaSteel EAF Edmonton, Canada	0.08	0.20	<b>0.28</b>
Remainder of non-Australian operations	0.06	0.07	<b>0.13</b>
<b>Total Arrium non-Australian operations</b>	<b>0.14</b>	<b>0.27</b>	<b>0.41</b>
<b>Total Arrium greenhouse gas emissions</b>	<b>3.14</b>	<b>1.48</b>	<b>4.62</b>



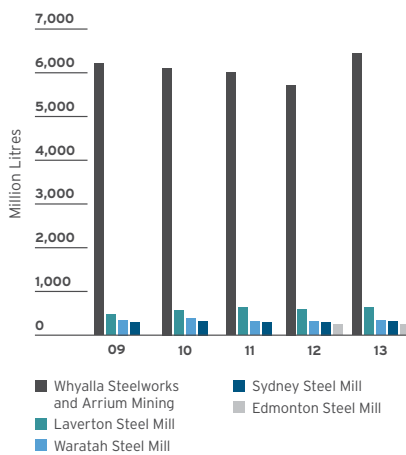
**Total Energy Use<sup>1,2</sup>**



**Greenhouse Gas Intensity<sup>1</sup>**



**Townswater Consumption**



1 Data for non-Australian sites included from 2012. Includes crude steel production and other activities (e.g. rolling and forging). Electricity use accounts for self-generated electricity at Whyalla Steelworks.

2 "Arrium Mining" energy use included in "All other energy use" category in prior years. Comparatives have not been restated.

**Biodiversity**

For Arrium Mining, the protection of biodiversity is a key consideration in the planning, development and operation of new mines. Each new mining development is required to have an approved Program for Environmental Protection & Rehabilitation (PEPR) in place which identifies all relevant environmental, social and economic impacts that may result from the proposed activities and how each of the identified impacts will be managed or avoided. The PEPR sets out an integrated approach to managing all the stages in the life-cycle of the mine, including its closure and completion. Typical activities undertaken by Arrium that relate to mining approval include:

- Flora and fauna surveys
- Environmental impact assessment
- Design iterations to minimise impacts on biodiversity
- Environmental impact statement
- Outcomes, mitigation strategies, controls and measurement criteria being developed and agreed
- Compliance to approved Program for Environmental Protection & Rehabilitation.

**Environmental regulation and performance**

The Arrium Group's operations are subject to various environmental regulations at a national, state and local level. Where this regulation is particular and significant, compliance is assured through Environmental Management Systems to the ISO14001 standard. Compliance with this regulation was generally achieved in FY13 with the exception of unrelated releases of contaminated water at separate locations that resulted in the receipt of an Infringement Notice (with associated fine of \$2,200) and a Penalty Notice (with associated fine of \$1,500).

**arrium**  
MINING

**SOUTHERN IRON FAUNA**

**PLAINS MOUSE**  
*(Pseudomys australis)*

**Conservation Status:** NATIONALLY VULNERABLE

**Description:** The plains mouse is an Australian native rodent weighing between 30 and 50g. The species is one of the largest rodents still inhabiting the arid zone and is grey-brown above and white or cream underneath. The tail is shorter than, or equal with, the head and body length.

**Diet:** The plains mouse is a herbivore feeding mostly on seeds with some green plant material and a few insects also taken.

**Habitat:** Typically found on gibber plains and cracking clay soil types associated with drainage lines. On the Peculiar Knob Site they are found NE of the mine site, between the 10km mark and the Breakaway Ranges as well as creek lines in the 20-30km region.

Southern Iron Environmental Fauna Fact Sheet Page 1

An example of a Fact Sheet produced to improve awareness of staff and contractors at Arrium Mining - Peculiar Knob

## EXECUTIVE MANAGEMENT



**ANDREW ROBERTS**

Managing Director and  
Chief Executive Officer

Age 46. Mr Roberts joined Arrium from BHP Steel, starting in 1989. Prior to his current appointment, Andrew was Chief Executive Mining Consumables. Andrew has held a number of roles in marketing, sales and general business management across the Manufacturing, Materials/Iron Ore, Steel-in-Concrete and Distribution businesses and recently in Mining Consumables. Mr Roberts did not hold any other listed company directorships during the period 1 July 2010 to 30 June 2013.



**ROBERT BAKEWELL**

Chief Financial Officer

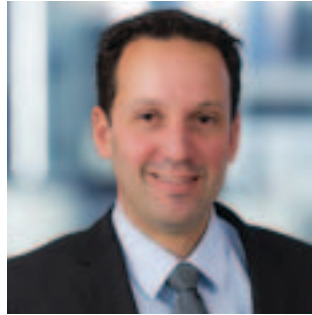
Age 48. Mr Bakewell joined Arrium in April 2010, responsible for accounting, internal audit, tax, risk management, treasury, business planning, IT and group procurement. Robert has more than 25 years professional experience in executive financial and commercial roles. Most recently, Mr Bakewell was Group Senior Vice-President, Chief Financial Officer, Power Products division of ABB Limited, the Swiss-based power and automation technologies group.



**JOHN BARBAGALLO**

Chief Executive  
Mining Consumables

Age 47. Mr Barbagallo joined Arrium in August 2005 and has been General Manager of the Rod and Bar and Moly-Cop Australasian businesses. Prior to joining Arrium, John has worked for Rio Tinto and Xstrata, where he held the roles of General Manager - Port Waratah Coal Services, Managing Director of Anglesey Aluminium and a number of line management roles in Aluminium and Coal Mining across Australia, New Zealand and the UK.



**GEOFF FEURTADO**

Chief Executive Recycling

Age 40. Mr Feurtado joined Arrium in 2002. Geoff has held various commercial and general management positions across the Manufacturing and Distribution businesses, prior to his appointment to the Chief Executive Recycling position in 2011. Before joining Arrium, Geoff established his commercial background, having worked in the airline industry and at Price Waterhouse.

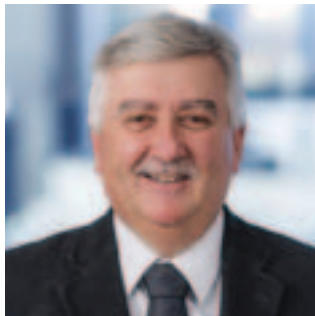


**BILL GATELY**

Chief Human Resources  
Officer

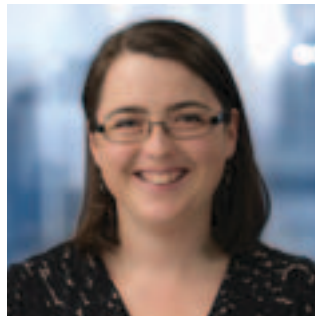
Age 52. Mr Gately has been in this role since Arrium was publicly listed in 2000. Bill joined Arrium from BHP, where he had worked since 1979 in a range of human resource and employee relations positions. During that period, he worked for BHP Minerals and in the Newcastle and Port Kembla Steel operations where he played a key role in significant change and business improvement initiatives. Bill has been involved in the various significant change projects that have transformed Arrium into a mining materials company, including the Smorgon merger, Project Magnet and the acquisition of Moly-Cop.

## Organisational chart



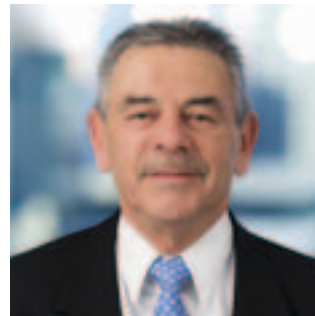
**STEVE HAMER**  
Chief Executive Steel

Age 56. Mr Hamer was appointed Chief Executive Steel in July 2013. Prior to his current appointment, Steve was Chief Executive OneSteel Distribution from 2009. Steve has spent his career within the Australian steel industry covering a range of technical, functional and senior business management positions.



**NAOMI JAMES**  
Chief Executive  
Merchandising & ATM  
and Chief Legal Officer

Age 35. Ms James joined Arrium in 2005 and in her role as Chief Executive Merchandising & ATM has responsibility for Arrium's non-integrated Steel businesses. Naomi is also responsible for legal and company secretarial matters and for Arrium's mergers, acquisitions and divestments. Prior to joining Arrium, Naomi worked in private practice at law firms in Australia and the UK.



**LEO SELLECK**  
Chief Executive  
Operational Excellence

Age 64. Mr Selleck has had 41 years experience in the Australian steel industry, joining Arrium from BHP where he had served in a variety of roles since 1972. Leo has significant experience in the steel manufacturing business. He has also held corporate roles in such fields as safety and environment. Prior to his current position, his previous roles included Chief Executive, Steel Manufacturing, Executive GM Technology, Safety and Services, Executive GM Electric Arc Furnaces & Technology, Executive GM Project Magnet and Executive GM Whyalla.

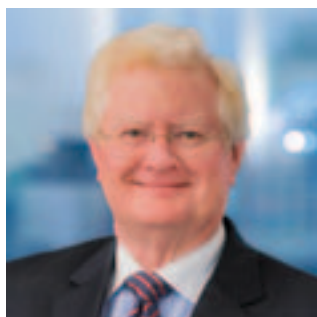


**GREG WATERS**  
Chief Executive Mining

Age 53. Mr Waters joined Arrium in October 2008 from BlueScope Steel where he held a number of senior roles including President, Western Port Works and President, Greater China. Previously, Greg held a number of General Management roles for BHP and Brambles in Land and Sea Transport and Logistics located in Australia, South East Asia and the United States.



## BOARD OF DIRECTORS



### **P J (PETER) SMEDLEY**

**Chairman, Independent Non-Executive Director** *BCom, MBA, FAICD*

Age 70. Appointed a Director and Chairman in October 2000. Mr Smedley is Chairman of the Operational Risk Committee and a member of the Governance & Nominations Committee and the Human Resources Committee. He is Chairman of Orygen Youth Health Research Centre and the Colonial Foundation. He is also a Director of The Australian Ballet and the Haven Foundation. His previous roles include Managing Director and Chief Executive Officer of Mayne Group Limited, Managing Director and Chief Executive Officer of the Colonial Group Limited, Chairman of CARE Australia, Spotless Group Limited and the State Bank of New South Wales, Executive Director, Downstream Oil and Chemicals, Executive Director Coal and Metals for Shell Australia Limited, Deputy Chairman of Newcrest Mining Limited and Director of Austen & Butta Limited. Other listed company directorships held during the period 1 July 2010 to 30 June 2013: Spotless Group Limited from 8 December 2006 to 16 August 2012.



### **A G (ANDREW) ROBERTS**

**Managing Director & Chief Executive Officer** *BCom*

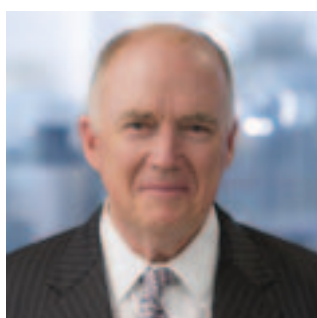
Age 46. Mr Roberts joined Arrrium from BHP Steel, starting in 1989. Prior to his current appointment, Mr Roberts was Chief Executive Mining Consumables. He has held a number of roles in marketing, sales and general business management across the Manufacturing, Materials/Iron Ore, Steel-in-Concrete and Distribution businesses and recently Mining Consumables. Mr Roberts did not hold any other listed company directorships during the period 1 July 2010 to 30 June 2013.



### **R B (BRYAN) DAVIS**

**Independent Non-Executive Director** *BSc (Tech), FAIMM, MAICD*

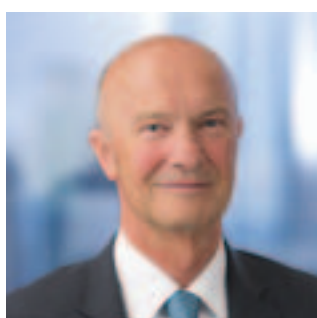
Age 70. Appointed a Director in December 2004. Mr Davis is Chairman of the Occupational Health, Safety & Environment Committee and a member of the Audit & Compliance Committee and the Operational Risk Committee. He is Chairman of the NSW Coal Competence Board. His previous roles include Non-Executive Director of Coal and Allied Industries Limited, Newcrest Mining Limited, Executive Director of Mining of Pasminco Limited, Director of North Flinders Mine Limited, Chairman of Indophil Resources NL, Bendigo Mining Limited and Terramin Australia Limited, Executive Director of Australian Consolidated Minerals Group, Chairman of the NSW Minerals Council, member of the NSW State Minerals Advisory Council and various senior management positions at CRA Limited. Other listed company directorships held during the period 1 July 2010 to 30 June 2013: Coal and Allied Industries Limited from September 2000 to December 2011 and Terramin Australia Limited from July 2009 to June 2012.



### **C R (COLIN) GALBRAITH AM**

**Independent Non-Executive Director** *LLB (Hons), LLM, FAICD*

Age 65. Appointed a Director in October 2000. Mr Galbraith is Chairman of the Governance & Nominations Committee and a member of the Audit & Compliance Committee. He is a Special Adviser at Gresham Partners Limited, a Director of CARE Australia and Colonial Foundation, Chairman of BHP Billiton Community Trust and a Trustee of Royal Melbourne Hospital Neuroscience Foundation. His previous roles include Director of Commonwealth Bank of Australia, Colonial Group, Azon Limited and GasNet Australia Limited (Group) and the Australian Institute of Company Directors. Other listed company directorships held during the period 1 July 2010 to 30 June 2013: Commonwealth Bank of Australia from June 2000 to October 2012.



### **P G (PETER) NANKERVIS**

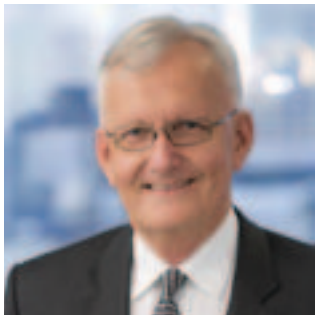
**Independent Non-Executive Director** *B Ec (Hons), FCPA, GAICD*

Age 63. Appointed a Director in December 2004. Mr Nankervis is Chairman of the Audit & Compliance Committee and a member of the Operational Risk Committee. He is also a Director of Dairy Australia Limited. His previous roles include Chief Financial Officer of Cadbury Schweppes Asia Pacific, Finance Director of Cadbury Schweppes Australia Limited and Director of Mitchell Communications Group Limited. Mr Nankervis did not hold any other listed company directorships during the period 1 July 2010 to 30 June 2013.



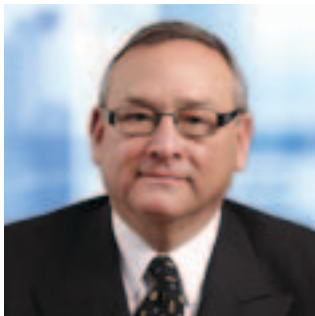
**G J (GEOFF) PLUMMER**  
Executive Director *BEc*

Age 57. Appointed a Director in December 2004. Appointed Managing Director & Chief Executive Officer on 2 May 2005. Mr Plummer joined the company in October 2000 from BHP after 22 years with the group. His previous roles with Arrium were Deputy Managing Director and prior to that Executive General Manager Market Mills. His roles at BHP included President Rod & Bar Products (BHP Steel), General Manager of the joint venture company Bekaert/BHP Steel Cord, President of Australian Logistics Services in BHP Transport and various management positions in BHP wire operations. He is a Director of the World Steel Association. Mr Plummer did not hold any other listed company directorships during the period 1 July 2010 to 30 June 2013.



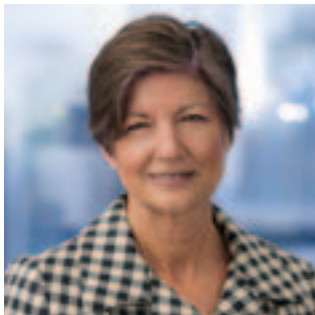
**D A (DEAN) PRITCHARD**  
Independent Non-Executive Director *BE, FIE Aust, CP Eng, FAICD*

Age 68. Appointed a Director in October 2000. Mr Pritchard is a member of the Occupational Health, Safety & Environment Committee, the Human Resources Committee and the Operational Risk Committee. He is a Director of OZ Minerals Limited and Steel & Tube Holdings Limited. His previous roles include Chief Executive Officer of Boulderstone Hornibrook, Chairman of ICS Global Limited, Director of Eraring Energy, RailCorp, Spotless Group Limited and Zinifex Limited. Other listed company directorships held during the period 1 July 2010 to 30 June 2013: Steel & Tube Holdings Limited since May 2005, Spotless Group Limited from May 2007 to 16 August 2012 and OZ Minerals Limited since June 2008.



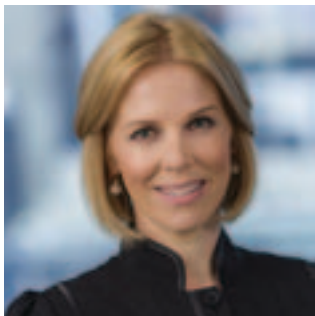
**G J (GRAHAM) SMORGON AM**  
Independent Non-Executive Director *B.Juris LL.B*

Age 63. Appointed a Director in September 2007. Mr Smorgon became Chairman of the Human Resources Committee in August 2009 and is a member of the Operational Risk Committee and the Occupational Health, Safety & Environment Committee. He is also Chairman of the GBM Group, Smorgon Consolidated Investment and Sental Pacific. He is a Director of Incitec Pivot Limited and a Trustee of The Victorian Arts Centre Trust. His previous roles include Chairman of the Print Mint Group, Director of Fed Square Pty Ltd, Chairman of the Arts Centre Foundation, Chairman of Smorgon Steel Group Ltd, President of the Carlton Football Club, Deputy Chairman of Melbourne Health, Director of The Walter and Eliza Hall Institute of Medical Research, Chairman of Creative Brands, Chairman of GBM Logic, Member of the Council of Bialik College, Director of Playbox Theatre Company and Playbox Malthouse Limited, Trustee of the Royal Melbourne Hospital Neuroscience Foundation, Chairman of the RMIT Marketing Industry Advisory Working Committee and Partner of law firm Barker Harty & Co. Other listed company directorships held during the period 1 July 2010 to 30 June 2013: Incitec Pivot Limited since December 2008.



**R (ROSEMARY) WARNOCK**  
Independent Non-Executive Director *BA (Media), MAICD*

Age 66. Appointed a Director in September 2010. Ms Warnock is a member of the Audit & Compliance Committee and the Occupational Health, Safety & Environment Committee. She is Chair of Arrium's Superannuation Policy Committee. She is a Director of Steel & Tube Holdings Limited. She is also Chairman of Thinc Group Holdings Pty Ltd and a Principal of The Adelante Group. Her previous roles include Executive Mentor with Merryck & Co, Expert Panel Member of the Independent Review of the Environment Protection & Biodiversity Conservation Act, Interim Chief Executive of the Clean Energy Council and numerous global senior executive positions within BP. Other listed company directorships held during the period 1 July 2010 to 30 June 2013: Steel & Tube Holdings Limited since September 2010.



**K (KARA) NICHOLLS**  
Company Secretary *BBus, MLS, FCIS, MAICD, JP*

Age 37. With over 15 years experience in equity capital markets, Ms Nicholls brings extensive knowledge of the Australian Securities Exchange listing rules, corporate governance and company administration to the Board. Ms Nicholls has extensive experience in commercial transactions and compliance matters. Prior to joining Arrium in 2009, Ms Nicholls gained six years experience with the Macquarie Group and over five years with the Australian Securities Exchange.

# CORPORATE GOVERNANCE STATEMENT

Arrium Limited has been listed on the Australian Securities Exchange (ASX) since 23 October 2000 (ASX:ARI).

This statement outlines the corporate governance practices adopted by the Board or put in place throughout the financial year.

## BOARD OF DIRECTORS

The Board has adopted a Board Charter and Corporate Governance Guidelines (Guidelines).

The Guidelines constitute a reference point for Directors, employees and shareholders in understanding the company's approach to the processes, performance measures, values and ethical standards which govern Directors and employees. The Guidelines are designed to facilitate an evaluation of the company's framework and procedures in the context of ensuring accountability and transparency.

The primary role of the Board is the protection and enhancement of shareholder value.

The Board has responsibility for corporate governance. It oversees the business and affairs of the company, establishes the strategies and financial objectives with management and monitors the performance of management directly and indirectly through Board committees.

The Directors have conferred on the Managing Director and Chief Executive Officer (MD&CEO) all the powers of management of the company subject to certain specified powers reserved for the Board which are referenced in the Guidelines.

The Board has established a framework for management of the company, including a system of internal control and business risk management and appropriate ethical standards.

The Board reviews the company's performance and considers other important matters such as strategic issues and plans, major investment and divestment decisions, diversity, human resources matters, and governance and compliance matters, and receives regular division and corporate function presentations. Senior management is regularly involved in Board discussions, and Directors have opportunities, such as visits to major operational sites, for contact with a wider group of employees.

The Board embraces the need for, and continued maintenance of, the highest standards of ethical conduct. The company's Code of Conduct formalises the obligation of Directors and employees to act within the law and to act honestly and ethically in all business activities.

For the purposes of the proper performance of their duties relating to the company, Directors are entitled to obtain independent professional advice at the company's expense following pre-approval by the Chairman. This advice is treated as advice to the Board.

## BOARD COMMITTEES

The Board has established five committees. Each committee has a clear mandate and operating procedures and operates principally in a review or advisory capacity, except in cases where particular powers are specifically conferred on the committee by the Board. Board committees may also be established from time to time to deal with matters arising.

In considering the composition of committees, the Board considers the number of Directors and the skills required to discharge and appropriately share the responsibilities conferred by the Board.

## BOARD COMPOSITION AND NON-EXECUTIVE DIRECTOR INDEPENDENCE

The Board regularly assesses the independence of each Director. For this purpose, an Independent Director is a Non-Executive Director whom the Board considers to be independent of management and free of any business or other relationship that could materially interfere with the exercise of unfettered and independent judgement.

In addition to being required to conduct themselves in accordance with principles for Directors' conduct and Directors' responsibilities outlined in the Guidelines, Directors must be meticulous in disclosure of any material contract or relationship in accordance with the *Corporations Act 2001* (Cth). Directors must strictly adhere to the constraints on their participation and voting in relation to matters in which they may have an interest in accordance with the Corporations Act and Arrium policies.

Each Director (or interests associated with each Director) may be a shareholder in the company. Each Director may be involved with other companies or professional firms which may, from time to time, have dealings with Arrium. Directors must be meticulous in ensuring that disclosure, as required by law, is made of any dealings and, where requisite, details are set out in the company's Financial Report.

The Board has assessed that each of the Non-Executive Directors of the company is an Independent Director. In reaching that determination, in addition to the matters referred to above, the Board has taken into account:

- Specific disclosures made by each Director
- Where applicable, the related party dealings of each Director, noting that those dealings are not material under accounting standards
- That no Director is a substantial shareholder or an officer of or otherwise associated with a substantial shareholder
- That no Non-Executive Director has ever been employed by Arrium or any of its subsidiaries, and

- That no Director has a contract with Arrium (other than as a Director), or is associated with a supplier, professional adviser, consultant to or customer of Arrium that is material under applicable accounting standards.

The Board does not consider that term of service should be considered as a factor affecting the question of independence. The Board considers that a fixed maximum tenure is not in the company's interests. Instead, it considers that a Director should not seek reelection if they or the Board considers it is not appropriate to do so. Matters considered by the Board may include renewal and succession, size, experience and skill mix, diversity and performance.

A key responsibility of the Board's Governance & Nominations Committee (G&NC) is to consider and make recommendations to the Board in relation to Board composition. The aim of the Directors is to create a Board which has the appropriate mix and depth of skills, experience and attributes to discharge its responsibilities to the highest standard and which, in discharging those responsibilities, vigorously and constructively challenges and motivates the company's executives to achieve outstanding performance in the interests of all stakeholders.

In considering the appointment or recommendation for appointment of Directors, attributes and matters which are taken into account include diversity in its widest sense, outstanding career performance, impeccable values, capacity to contribute constructively to a team, willingness and capacity to devote the time and effort required, capacity to contribute strongly to the assessment and oversight of risk and risk management, capacity to contribute to the development and implementation of strategy and the company's policies and a strong appreciation of the responsibilities of the company to its shareholders, employees, the communities in which it operates, its suppliers, customers and other stakeholders. Where the G&NC considers it appropriate, external professional consultants are engaged to assist in identifying suitable candidates for appointment to the Board.

Refer to pages 42 to 43 for the period of office held by each Director and for the experience and qualifications of each Director and the Company Secretary.

## PERFORMANCE EVALUATION

In each reporting period, the performance of the Board and each Board committee in meeting shareholder and stakeholder expectations is evaluated under the direction of the Chairman. In addition, the Chairman discusses individual Director contributions with each Director face-to-face annually.

Senior management is subject to an annual performance evaluation process which involves the assessment of performance against specific and measurable qualitative and quantitative performance criteria. An annual performance evaluation for senior management has been undertaken during the reporting period in accordance with this process.

### REMUNERATION AND DIVERSITY

The Human Resources Committee reviews and makes recommendations to the Board in respect of remuneration.

Details concerning diversity matters are set out on page 36.

The remuneration of Key Management Personnel is set out in the Remuneration Report on pages 50 to 62.

### RISK MANAGEMENT

Arrium is committed to managing risk to protect our people, the environment, company assets and our reputation, as well as to realise opportunities.

Arrium's risk-based system of internal control assists it to operate effectively and efficiently, achieve business objectives, ensure reliable reporting and comply with applicable laws and regulations.

Management implements this by designing and establishing a system for identifying, assessing, monitoring and managing material business risk throughout the company including the company's internal compliance and control systems. Management is expected to:

- Design and implement a system of ongoing risk reviews capable of responding promptly to new and evolving risks
- Monitor the effectiveness of the system of risk and internal control management
- Provide an annual assurance to the Board regarding the extent of its compliance, and
- Regularly report to the Board on the effectiveness of the management of Arrium's material business risks.

A description of the company's risk management system and the nature of the risks is outlined in the Risk Management section on pages 30 and 31.

The MD&CEO and the Chief Financial Officer (CFO) are required to provide and have provided assurance via a written statement to the Board in accordance with s295A of the Corporations Act.

The Board notes that, due to its nature, internal control assurance from the MD&CEO and the CFO can only be reasonable rather than absolute. This is due to factors such as the need for judgement, the use of testing on a sample basis, the inherent limitations in internal control and the fact that much of the evidence available is persuasive rather than conclusive and therefore cannot, and cannot be designed to, reveal all weaknesses in control procedures.

In response to this, sign-offs are provided by key stakeholders in each Division and corporate function to support the assurance provided.

### EXTERNAL AUDIT

KPMG was appointed as the company's external auditor in 2007.

The external auditor attends the Annual General Meeting and is available to answer questions about the conduct of the audit and the preparation and content of the audit report.

The Board conducts discussions and holds meetings with the external auditor without management present. Additional information on the appointment, review, provision of non-audit services, independence and other considerations is set out in the Audit & Compliance Committee Charter.

### SHAREHOLDINGS OF KEY MANAGEMENT PERSONNEL

The shareholdings of Key Management Personnel are set out in Note 30 of the Financial Report on pages 116 to 118.

### SECURITIES DEALING

The company's Securities Dealing Policy requires all Directors, officers and employees (including employees on fixed-term contracts), relevant consultants and contractors retained by the company from time to time (collectively Arrium People and individually an Arrium Person) to comply with the law relating to insider trading and with the rules outlined in the Securities Dealing Policy. The Securities Dealing Policy contains additional responsibilities which apply to Arrium People who are managers at level 3 (General Managers) and above, including Directors and senior executives.

### CONTINUOUS DISCLOSURE

Arrium's Continuous Disclosure Policy sets out the procedures in place to ensure that shareholders and the market are provided with full and timely information about the company's activities in compliance with its continuous disclosure obligations.

### SHAREHOLDER COMMUNICATIONS

The methods by which Arrium communicates with shareholders include:

- Releases to the ASX
- Annual General Meeting (AGM)
- Share Registry correspondence
- [www.arrium.com](http://www.arrium.com) which hosts:
  - Information about the company such as an overview, corporate governance documents (refer below), corporate history and strategy
  - Information about our businesses: Mining, Mining Consumables and Steel and Recycling

- Arrium's Investor Centre, which includes ASX releases, dividend information including the Dividend Reinvestment Plan Rules, shareholder information, reports and presentations, webcasts, a financial calendar, a financial snapshot and media contacts, and
- Sustainability information including an overview, safety and people, customers and markets, environment, community, economic and sustainability reports.

Shareholders are encouraged to subscribe to e-communications by contacting the Share Registry and to attend the AGM or, if they are unable to attend the AGM, to appoint a proxy or vote online.

### CORPORATE GOVERNANCE DOCUMENTS

Arrium has a range of charters, policies, guidelines and codes in connection with its governance practices. These documents are available on [www.arrium.com](http://www.arrium.com) and include:

- Constitution of the company
- Board Charter and Corporate Governance Guidelines
- Audit & Compliance Committee Charter
- Governance & Nominations Committee Charter
- Human Resources Committee Charter
- Occupational Health, Safety & Environment Committee Charter
- Operational Risk Committee Charter
- Code of Conduct
- Continuous Disclosure Policy
- Diversity Policy
- Risk Policy
- Securities Dealing Policy
- Shareholder Communications Policy, and
- Annual Report Corporate Governance Statement.



# FINANCIAL REPORT

FOR THE YEAR ENDED 30 JUNE 2013

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# DIRECTORS' REPORT

Your Directors submit their report on the consolidated entity consisting of Arrium Limited ("Arrium" or "the Company") and the entities it controlled at the end of, or during, the year ended 30 June 2013 (Arrium Group).

## DIRECTORS

The following persons were Directors of Arrium Limited during the whole of the financial year and up to the date of the report unless stated otherwise:

R B Davis

C R Galbraith, AM

P G Nankervis

G J Plummer (resigned 15 July 2013)

D A Pritchard

A G Roberts (appointed 18 February 2013)

P J Smedley

G J Smorgon, AM

R Warnock

Details of the qualifications, experience and responsibilities of the Directors are set out on pages 42 and 43.

## PRINCIPAL ACTIVITIES

The principal activities of the Company are mining and supply of iron ore and other steelmaking raw materials to steel mills internationally and in Australia; the manufacture and supply of mining consumables products with key market positions globally; the manufacture and distribution of steel long products and recycling of ferrous and non-ferrous scrap metal.

Arrium is an international mining and materials company with four key businesses: Mining, Mining Consumables, Steel and Recycling.

Arrium Mining is an exporter of hematite ore with operations in South Australia. Arrium Mining also supplies pelletised magnetite iron ore and some hematite lump iron ore to the Company's integrated steelworks at Whyalla at cost.

Arrium Mining Consumables supplies resource companies with a range of key mining consumables, including grinding media, wire ropes and rail wheels. The business is the largest supplier of grinding media in the world, with leading market positions in South America, North America and Australasia.

Arrium's integrated Steel and Recycling businesses comprises OneSteel Manufacturing, Australia's long products steel manufacturing business; OneSteel Distribution, Australia's largest steel distributor and reinforcing steel supplier; and OneSteel Recycling, a supplier and exporter of scrap metal with operations in Australia, Asia and North America.

## OPERATING AND FINANCIAL REVIEW

The Operating and Financial Review (OFR) of the Arrium Group during the financial year is set out on pages 10 to 32.

## DIVIDENDS

Dividends paid or declared by the Company since the end of the previous financial year were as follows:

	\$m
<b>2013 final dividend</b>	
3.0 cents per ordinary share payable on 17 October 2013, on fully paid ordinary shares	40.7
<b>2013 interim dividend</b>	
2.0 cents per ordinary share paid on 18 April 2013, on fully paid ordinary shares	27.0
<b>2012 final dividend</b>	
3.0 cents per ordinary share paid on 18 October 2012, on fully paid ordinary shares	40.4

## SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS

No significant changes in the state of affairs of the Arrium Group occurred during the financial year. Commentary on the overall state of affairs of the Arrium Group is set out in the Operating and Financial Review.

## ENVIRONMENTAL REGULATION AND PERFORMANCE

The Arrium Group's operations are subject to various environmental regulations at a Commonwealth, State and local level. Where this regulation is particular and significant, compliance is assured through Environmental Management Systems to the ISO14001 standard. Compliance with this regulation was generally achieved in FY13 with the exception of unrelated releases of contaminated water at separate locations that resulted in the receipt of an Infringement Notice (with associated fine of \$2,200) and a Penalty Notice (with associated fine of \$1,500).

## DIRECTORS' MEETINGS

The number of Directors' meetings held, and the number of meetings attended by each of the Directors (excluding invited attendees), during the financial year are listed below. Details of the Committees are set out on pages 44 to 45.

DIRECTOR	BOARD <sup>1</sup>	AUDIT & COMPLIANCE COMMITTEE	GOVERNANCE & NOMINATIONS COMMITTEE	HUMAN RESOURCES COMMITTEE	OCCUPATIONAL HEALTH, SAFETY & ENVIRONMENT COMMITTEE	OPERATIONAL RISK COMMITTEE
NUMBER OF MEETINGS HELD	14	4	3	4	4	1
R B Davis	14	4	-	-	4	1
C R Galbraith, AM	12	4	3	-	-	-
P G Nankervis	14	4	-	-	-	1
G J Plummer	14	-	-	-	-	-
D A Pritchard	14	-	-	3	4	1
A G Roberts	3	-	-	-	-	-
P J Smedley	14	-	3	4	-	1
G J Smorgon, AM	13	-	-	4	4	1
R Warnock	14	4	-	-	4	-

<sup>1</sup> Excludes sub-committee meetings and circulated resolutions and includes ten scheduled meetings and four out of session meetings.

## COMPANY SECRETARY

Information on the qualifications and experience of the Company Secretary is set out on page 43.

## NO OFFICERS ARE FORMER AUDITORS

No officer of Arrium has been a partner of an audit firm or a Director of an audit company that is or was an auditor of any entity in the Arrium Group during the year ended 30 June 2013.

## SHARES AND RIGHTS

During, or since the end of the financial year, the Company has issued 6,575,755 (2012: 4,456,594) rights over ordinary shares to the Executive Directors and Executives. No rights vested during or since the end of the financial year. Refer to the Remuneration Report for further details.

## DIRECTORS' REPORT CONTINUED

### DIRECTORS' INTERESTS

No Director, either directly or indirectly, was granted ordinary shares during the financial year other than G J Plummer, who was granted 2,575,757 (2012: 1,637,531) and A G Roberts, who was granted 681,818 rights to ordinary shares under the Arrium Performance Rights Plan. These rights will vest on 30 June 2015 subject to performance hurdles. No rights vested to Mr Plummer or Mr Roberts during the financial year.

The relevant interests of each Director in the shares, rights, options or other instruments of the Company and related bodies corporate are set out in Note 30 of the Financial Report.

### MATTERS SUBSEQUENT TO THE END OF THE FINANCIAL YEAR

On 16 August 2013, the High Court of Australia refused leave sought by BlueScope Steel (A.I.S.) Pty Limited to appeal a decision of the New South Wales Court of Appeal in favour of OneSteel Manufacturing Pty Limited (a wholly owned subsidiary of the Company) in respect of a contractual dispute. The litigation has now been finalised, subject to quantification of legal costs. No adjustment is required in respect of the 30 June 2013 financial statements.

On 19 August 2013, the Company reduced its share capital by \$831.8 million for the amount that is not represented by available assets, reflecting the impairment charges incurred by the Company and Consolidated Entity during the year ended 30 June 2013. This will have the effect of reducing the share capital account and eliminating accumulated losses at the Company and Consolidated Entity level. The transaction has been made in accordance with section 258F of the *Corporations Act 2001* (Cth) and will not result in any gains or losses being recognised in future reporting periods. The financial effect of this transaction will not affect the financial statements for the year ended 30 June 2013, but will be included in the financial statements for the year ending 30 June 2014.

On 20 August 2013, the Directors have declared the payment of a final dividend of 3.0 cents per fully paid ordinary share. The aggregate amount of the final dividend expected to be paid on 17 October 2013 but not recognised as a liability in the financial statements for the year ended 30 June 2013 is \$40.7 million.

Other than the above, there have been no circumstances arising since 30 June 2013 that have significantly affected or may affect:

- (a) the operations
- (b) the results of those operations, or
- (c) the state of affairs of the Arrium Group in future financial years.

### LIKELY DEVELOPMENTS AND EXPECTED RESULTS OF OPERATIONS

Certain likely developments in the operations of the Arrium Group known at the date of this report have been covered in the Operating and Financial Review.

### INTERESTS OF NON-EXECUTIVE DIRECTORS IN CONTRACTS OR PROPOSED CONTRACTS WITH THE COMPANY

Directors of Arrium Limited have declared their interests in contracts or proposed contracts that may result from their directorships of other corporations, as set out on pages 42 to 43.

Members of the Arrium Group had normal business transactions with Directors (or Director-related entities) of the Company and its controlled entities during the year.

### LOANS TO DIRECTORS AND KEY MANAGEMENT PERSONNEL

No loans were made to or are outstanding with Directors or Key Management Personnel.

### INDEMNIFICATION AND INSURANCE OF OFFICERS

The Group has agreements with each of the Non-Executive Directors of the Company in office at the date of this report, and certain former Directors.

The Directors have not included details of the nature of the liabilities covered or the amount of the premium paid in respect of the Directors' and officers' liability and legal expenses insurance contracts, as disclosure is prohibited.

### NON-AUDIT SERVICES

During the year, Arrium Group's auditor, KPMG, provided non-audit services to Arrium Group entities.

Details of the amounts paid or payable to the auditor, KPMG, for the provision of non-audit services during the financial year are set out in Note 31 to the Financial Report.

The Directors are satisfied that the provision of the non-audit services during the year is compatible with the general standard of independence for auditors imposed by the *Corporations Act 2001* (Cth). Following a review by the Audit & Compliance Committee, the Directors are satisfied that the nature and scope of each type of non-audit service provided means that auditor independence was not compromised.

### ROUNDING OF AMOUNTS

The Company is of the kind referred to in Australian Securities and Investments Commission (ASIC) Class Order 98/100. In accordance with that Class Order, amounts contained in this report and in the Financial Report have been rounded off to the nearest one hundred thousand dollars or, where the amount is \$50,000 or less, zero, unless specifically stated to be otherwise.



# LEAD AUDITOR'S INDEPENDENCE DECLARATION

UNDER SECTION 307C OF THE *CORPORATIONS ACT 2001* (CTH)

## TO THE DIRECTORS OF ARRIUM LIMITED

I declare that, to the best of my knowledge and belief, in relation to the audit for the financial year ended 30 June 2013 there have been:

- (a) No contraventions of the auditor independence requirements as set out in the *Corporations Act 2001* (Cth) in relation to the audit, and
- (b) No contraventions of any applicable code of professional conduct in relation to the audit.

KAMG

KPMG

A W Young

A W Young  
Partner

Sydney, 20 August 2013



# REMUNERATION REPORT

The Directors of Arrium Limited present the Remuneration Report, which forms part of the Directors' Report, for the Arrium Group (Group).

This Remuneration Report has been prepared in accordance with the *Corporations Act 2001* (Cth) and the *Corporations Regulations 2001* and sections B - F have been audited.

## CONTENTS OF THE REMUNERATION REPORT

The Remuneration Report outlines Arrium's remuneration strategy, the components of remuneration for Key Management Personnel (KMP), including Non-Executive Directors (NEDs) and Executives, the link between performance and reward, and provides details of remuneration paid to Non-Executive Directors and Executives during the year ended 30 June 2013. The report is divided into the following sections:

- A. Chairman's Letter to Shareholders providing an Overview of FY13
- B. Remuneration Governance at Arrium
- C. Non-Executive Director Remuneration
- D. Executive Remuneration
- E. Details of Non-Executive Director and Executive Remuneration for the year ended 30 June 2013
- F. Executive Service Agreements.

For the purposes of this report:

- Key Management Personnel are those executives with authority and responsibility for planning, directing and controlling the activities of the Arrium Group either directly or indirectly, and all the Directors of Arrium Limited (Executive and Non-Executive).
- Lead Team refers to members of the senior executive group and comprises the Managing Director & Chief Executive Officer (MD&CEO) and direct reports to the MD&CEO. There are no Key Management Personnel outside the Lead Team, other than the NEDs.

### A. CHAIRMAN'S LETTER TO SHAREHOLDERS PROVIDING AN OVERVIEW OF FY13 (UNAUDITED)

On behalf of the Arrium Board, I am pleased to provide you with the Remuneration Report for the 2013 financial year. Whilst the report that follows sets out a comprehensive account of remuneration at Arrium over the last 12 months, I would like to take the opportunity to provide you with an overview.

In considering this Remuneration Report, it is important to have regard for the business performance and results, as well as to the significant strategic and organisational transition that the Company is making. The repositioning to a mining and materials company has been occurring over a period of time and is now largely complete, with the Board firmly of the view that Arrium is well placed to generate value for its shareholders. In view of these circumstances, the Board has been implementing a set of very deliberate succession plans. During the year, the Board was delighted to have been able to appoint an internal successor to the CEO role from a very strong pool of candidates and give effect to a seamless CEO succession. The Company will

now be moving to Board succession activities over the next 18 months.

To facilitate the CEO succession, the Company entered into, and disclosed on 17 December 2012, an Agreement with the incumbent, Mr Geoff Plummer. A summary of this Agreement is included in this Report on page 61. It provided the Company with the certainty and flexibility required to consider a range of internal and external candidates and complete a successful transition. A key feature of this Agreement was to facilitate the ongoing measurement of Mr Plummer's unvested shares and rights. The Board wanted to ensure that they ran their "full course", with vesting only occurring if all performance hurdles are achieved. I note that Mr Plummer's overall remuneration arrangements are a function of the extended time period in the CEO role, as well as a reflection of his significant skills and experience base.

The Board has also put in place a contemporary employment agreement for its newly appointed CEO, Mr Andrew Roberts. The details of this Agreement are on page 61 and it includes a level of fixed remuneration commensurate with his experience in the role and focuses on targeted short and long term incentive plans (STI and LTI plans).

The Lead Team has also been restructured and rationalised during the period. The Board has placed emphasis on ensuring the retention and placement of executives into key roles. These include Mr Steve Hamer, formerly Chief Executive Distribution, being appointed Chief Executive of the newly formed Steel business; Mr Greg Waters being retained as Chief Executive of the expanded Mining business and Mr Robert Bakewell as CFO. Mr Leo Selleck, formerly Chief Executive Manufacturing, has also been specifically retained as Chief Executive Operational Excellence for a 12-month period.

The remuneration approach and outcomes reflect these organisational changes, the strategic repositioning and business results. The Board, supported by its independent advisers, has also had regard for contemporary remuneration practices, feedback from external stakeholders and ensuring that remuneration processes and outcomes are aligned to Company objectives and the interests of shareholders. In summary:

- NED fees have been retained at current levels. They were last adjusted in January 2011.
- Salaries for executives have been adjusted where there has been substantial change in roles; otherwise increases are in line with external market movements.
- STI payments for FY13 are significantly below target levels. No payments for financial targets have been made at a Group level. The Board determined that notwithstanding sound levels of cash generation, this approach was appropriate given the Group's statutory financial results in the period.
- The resultant outcome was that the MD&CEO forfeited 62% of a potential STI payment at his target participation level. A payment of 38% of target was applied primarily as a result of outstanding achievements in relation to the on-time

and on-budget execution of strategic projects, particularly in Mining and Mining Consumables. The payment also recognised improvements in relation to safety performance and significant risk reduction programs.

- The executive group, or KMP, forfeited on average 44% of their potential STI payment at the target level. There were no payments for Group financials, although some executives achieved components of their divisional financial targets as well as outcomes in relation to their safety and personal goals.
- Due to performance vesting requirements not being met, no LTI shares or rights vested to any executives during the year. No LTI shares have vested under this plan since 2008.

From 1 July 2013, the Board has also introduced the following changes to the remuneration arrangements for the Lead Team:

- All members of the Lead Team have moved to a Deferred STI arrangement. Target payment potential has increased within the existing payment range, where executives will receive two thirds of any payment in cash at the conclusion of the performance period, with the balance delivered in shares and subject to a further two-year service hurdle.
- The MD&CEO is required to give the Board 12 months' notice of termination of employment (formerly six months).
- The MD&CEO's restraints have been extended to two years in relation to non-solicitation clauses (formerly 12 months).
- The balance of the Arrium Lead Team are required to provide six months' notice of termination of employment (previously three months for the majority of the team).
- All executive contracts are aligned with the termination provisions introduced in 2010 in the Corporations Act.
- Clawback provisions are included in all executive STI and LTI Plan rules in the event of a material misstatement or other discrediting events.
- The EPS performance range hurdle with the LTI Plan has been adjusted from 5%-12% to 5%-15% for the 2013-2014 allocation.

In setting this remuneration framework and determining outcomes and changes, the Board has had close regard for the views and inputs of its independent advisers and will continue to actively monitor the approach and application of executive remuneration policy at Arrium to ensure continued alignment with the execution of its strategic plan and delivering shareholder return to our investors.

Thank you for your continued support, and I hope you will find the report set out below useful and informative.

Yours faithfully



Peter Smedley  
Chairman

## B. REMUNERATION GOVERNANCE AT ARRIUM

The Board is responsible for remuneration decisions at Arrium. To assist the Board, governance and oversight of remuneration is delegated to the Human Resources Committee. The Human Resources Committee responsibilities, which can be referenced in more detail on the Company's website, include:

- Reviewing remuneration policies and practices, including the setting of the fixed remuneration amount and the structure and quantum of awards under the STI and LTI Plans for executives
- The Group's superannuation arrangements for executives, and
- The fees for NEDs of the Board (within the total annual aggregate amount approved by shareholders).

The Human Resources Committee comprises three Non-Executive Directors, and has direct access to independent advice and comparative studies on the appropriateness of remuneration arrangements.

The Human Resources Committee makes recommendations to the Board. The Board makes final remuneration decisions in respect of Non-Executive Directors and the Lead Team.

The members of the Human Resources Committee, the number of meetings and attendance is presented on page 47 of the Director's Report.

For ease of reference, Arrium's Key Management Personnel are listed below:

### Arrium Key Management Personnel 2013

#### Directors

R B Davis	Non-Executive Director
C R Galbraith, AM	Non-Executive Director
P G Nankervis	Non-Executive Director
D A Pritchard	Non-Executive Director
P J Smedley	Board Chairman and Non-Executive Director
G J Smorgon, AM	Non-Executive Director
R Warnock	Non-Executive Director

#### Executive Directors

G J Plummer	Managing Director & Chief Executive Officer <sup>1</sup>
A G Roberts	Managing Director & Chief Executive Officer (appointed MD&CEO effective 1 July 2013) <sup>2</sup>

#### Other Executives

R C Bakewell	Chief Financial Officer
S H Hamer	Chief Executive Distribution <sup>3</sup>
L J Selleck	Chief Executive Manufacturing <sup>4</sup>
G A Waters	Chief Executive Mining
G D A Feurtado	Chief Executive Recycling

1 G J Plummer resigned as MD&CEO effective 30 June 2013 and resigned as Director on 15 July 2013.

2 A G Roberts was formerly Chief Executive Mining Consumables. He was appointed Deputy Managing Director on 18 February 2013 prior to commencing in the role of MD&CEO effective 1 July 2013.

3 Appointed Chief Executive Steel effective 1 July 2013.

4 Appointed Chief Executive Operational Excellence effective 1 July 2013.

#### Independent advice

The Board engages a number of expert consultants from time to time to provide independent and specialist advice in relation to executive remuneration policy and practice, market analysis and governance and the regulatory environment. This year, the Board has engaged the services of Egan Associates as the primary source of independent advice in relation to the executive group. Letters of engagement confirm that any advice provided must be free from undue influence by the member or members of the Key Management Personnel to whom any recommendations relate and sets out the processes to be followed in requesting information from, and providing reports to, the Company to ensure that these obligations are met. The Board is satisfied that the remuneration outcomes were free from undue influence by any Key Management Personnel on the

basis that the processes described above were followed and were designed to ensure such an outcome.

In 2013, the following advisers have been appointed by the Board in this capacity and have generated fees as set out in Table 1:

TABLE 1 - INDEPENDENT ADVICE

INDEPENDENT CONSULTANT	FEES PAID (EXCL GST)	NATURE OF ADVICE
Egan Associates	\$91,508	KMP-related advice including reward policy and practice, MD&CEO transition and appointment, Executive and Non-Executive Key Management Personnel market practice, retention considerations, conduct of market research, updating the Board on matters relevant to KMP and NED reward, advice on market practices across industrials, materials and resources companies, to maintain the Board's awareness of contemporary market trends.

## C. NON-EXECUTIVE DIRECTOR REMUNERATION

The Board, in conjunction with the Human Resources Committee, seeks to establish NED remuneration at a level that enables Arrium to attract and retain Directors of the highest calibre at a cost that is responsible and acceptable to shareholders.

The remuneration arrangements for NEDs are benchmarked against related industries with due regard to factors such as total revenue, market capitalisation, assets under management and profit. Such analysis indicates that the structures in place are appropriate and are consistent both with industry practice and principles of good corporate governance.

The key principles that underpin the Board's approach to NED remuneration are:

#### Board fees are approved by shareholders

The limit on the current total annual aggregate fee pool for NEDs of \$2 million was approved at the 2006 Annual General Meeting as required by Article 9.8 of the Constitution of the Company and under ASX Listing Rule 10.17. The Board will not seek any increase to this fee pool at the 2013 Annual General Meeting.

#### Remuneration is designed to preserve independence

The structure of Arrium's NED remuneration is separate and distinct from that applicable to the Lead Team. NEDs have not been granted shares or rights under the Group's LTI Share and Rights Plans, nor do they receive any bonus or other performance-based remuneration.

#### No retirement benefits

No additional benefits (other than their current statutory superannuation entitlements) are paid to NEDs upon their retirement from the Board.

A retirement benefit scheme was approved by shareholders during Arrium's public listing in 2000 and was discontinued from 17 November 2003. This retirement benefit was an additional and separate arrangement to the payment of Directors' fees. The amount of the retirement benefit accrued by each NED was fixed by reference to the length of service up to this date. For Directors who held office on this date, a cash benefit under the discontinued scheme is payable upon the retirement of the Director from the Board.

## REMUNERATION REPORT CONTINUED

### Suspension of Non-Executive Director Share Plan

The ability for NEDs to acquire shares under the Non-Executive Director Share Plan has been suspended since 2010 as a result of taxation changes affecting the operation of the Plan. Arrangements have now been put in place for NEDs to receive fees as cash and superannuation in lieu of the long-term share component that was previously in place. Market practice will continue to be monitored over the coming period regarding the use of equity-based plans for NEDs.

### Review of Non-Executive Director remuneration

As shown in Table 2, there has been no adjustment to NED fees this year. A comprehensive review was completed in 2009 and the outcome implemented in January 2011. A review this year confirmed that NEDs continue to be paid competitively and appropriately at this time.

**TABLE 2 - NON-EXECUTIVE DIRECTOR REMUNERATION QUANTUM AND STRUCTURE**

The quantum and structure of Director fees since 1 January 2011 are:

BOARD/COMMITTEE	ROLE	ANNUAL FEE SINCE 1 JANUARY 2011
Board	Chairman	\$495,000
	Member	\$165,000
Audit & Compliance Committee	Chairman	\$20,000
	Member	\$5,000
Governance & Nominations Committee	Chairman	\$15,000
	Member	\$5,000
Human Resources Committee	Chairman	\$15,000
	Member	\$5,000
Occupational, Health, Safety & Environment Committee	Chairman	\$15,000
	Member	\$5,000
Operational Risk Committee	Chairman	\$15,000
	Member	\$5,000

The Chairman of the Board does not receive any Board Committee fees.

## D. EXECUTIVE REMUNERATION

### Strategy and structure

The objective of Arrium's executive remuneration framework is to pay market competitive remuneration, recognising skills and experience, and to reward performance and the achievement of strategic objectives leading to the creation of shareholder value.

Arrium seeks to provide competitive remuneration that will attract, motivate and retain executives.

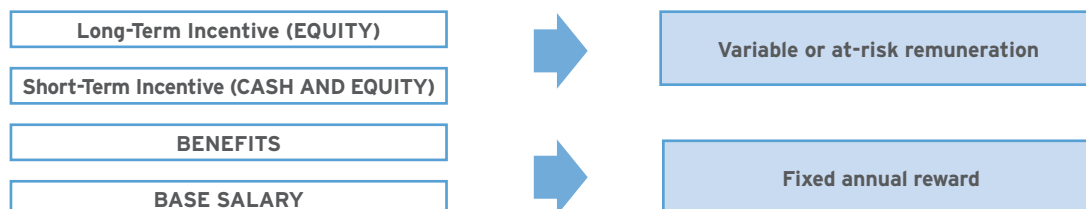
Arrium's remuneration strategy is to align fixed annual reward levels around the median of executives' local salary markets. Executives can be paid above or below the median consistent with their capability and demonstrated value to the business. It is also Arrium's policy to position variable or at-risk remuneration such that total remuneration can be positioned above, at or below the relevant market median dependent on the level of the Company's and the executive's performance.

For the Lead Team, remuneration consists of fixed annual reward (FAR) (incorporating a base salary and other benefits including superannuation, salary sacrifice items, other employment benefits and appropriate tax) and at-risk components.

The at-risk components are:

- Short-Term Incentives (STIs), giving executives the opportunity to earn a cash bonus contingent upon performance against a combination of Group financial and safety targets, and individual key performance indicators. From 2013-2014, the STI will provide for a benefit delivered through a combination of cash (two thirds) and shares (one third), where the shares are subject to a two-year service hurdle from the date of Award, and
- Long-Term Incentives (LTIs), giving executives the opportunity to acquire Arrium shares where they succeed in achieving outcomes linked to the creation of long-term sustainable growth for shareholders over a two to five-year period.

The structure of Arrium's executive remuneration arrangements is shown below:



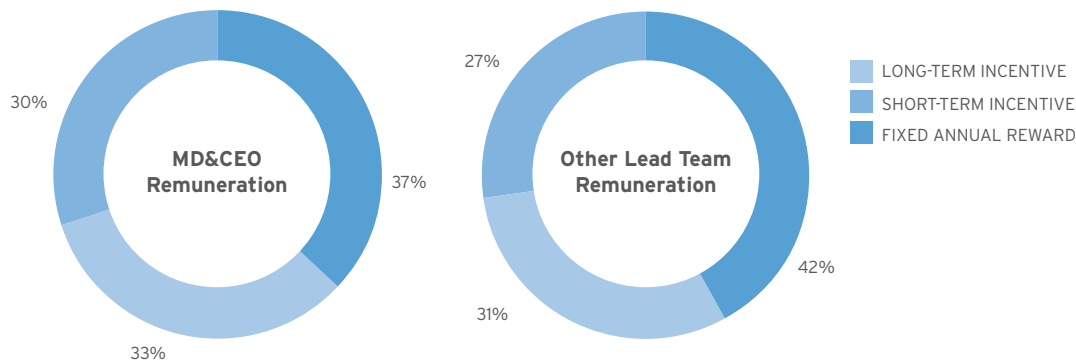
In determining the level and composition of executive remuneration, Arrium draws on independent external advisers to ensure that its practices are market competitive, flexible and in keeping with emerging trends and good corporate governance.

Remuneration is reviewed annually towards the end of the financial year, and changes are applied from 1 July for the Lead Team. The Human Resources Committee reviews the Lead Team remuneration arrangements, with the Board making final remuneration decisions in respect of any recommendations made. The remuneration structure is designed to ensure that executives have a significant portion of remuneration at risk. Table 3 sets out the target mix of fixed and at-risk pay (as a proportion out of a total 100%) for the MD&CEO and other members of the Lead Team.

TABLE 3 - REMUNERATION STRUCTURE

	MD&CEO	OTHER MEMBERS OF THE LEAD TEAM
Long-Term Incentive	33%	31%
Short-Term Incentive	30%	27%
Fixed annual reward	37%	42%

GRAPH 1



### The relationship between Group strategy and reward

A key underlying principle of Arrium's executive remuneration strategy is that remuneration should be strongly linked to Group performance. Each element of an executive's remuneration is linked or aligned with various drivers of shareholder value. This relationship is set out in Table 4.

TABLE 4 - PERFORMANCE LINK WITH REWARD

PERFORMANCE INDICATOR	LINK TO EXECUTIVE REWARD
Underlying net profit after tax (NPAT)	Together, NPAT and cash flow targets account for the majority of the STI weighting, though the weighting varies by individual to align to the relevant Group or Division strategy.
Generating strong cash flow	
Safety	10% STI weighting on significant safety improvement for all eligible Arrium employees.
Increasing shareholder wealth	LTI performance hurdles are equally weighted between earnings per share (EPS) and relative total shareholder return (TSR).
Execution of key strategic initiatives that drive future value for shareholders	Variable weighting in STI, depending on the role and expected contribution. Generally up to 20% of an individual's targets will be directed to strategically oriented personal goals.
Behaving in a manner consistent with our core values of safety and customer	Assessed through the Performance Planning and Management (PPM) process and considered in any FAR adjustment. Behaving in a manner consistent with the core values is a threshold for any potential STI payment.
Ensuring alignment between employee's and shareholders' interests	Board discretion to reduce or cancel potential STI or LTI awards in a range of circumstances, including in the event of a material financial misstatement. Overall reward is delivered through a balance of cash, equity (STI) and equity (LTI) to align the interests of the stakeholders.

The Lead Team's STI payments in any year are reviewed by assessment of performance against financial, Division, safety and personal/strategic targets. Targets are set by the Board in consultation with the MD&CEO at the start of each financial year.

A significant portion of payments under the STI Plan and vesting of all grants under the LTI Plan are contingent upon the financial performance of the Group. The Group's financial performance is illustrated in Table 5, which shows underlying NPAT, EPS and dividends per share performance over the last five years, together with the aggregate KMP STI payments.

TABLE 5 - ARRIUM GROUP FINANCIALS

YEAR ENDED 30 JUNE	UNDERLYING <sup>1</sup>							KMP STI AS THE AVERAGE PERCENTAGE OF TARGET
	BEGINNING SHARE PRICE	ENDING SHARE PRICE	STATUTORY NPAT (\$m)	NPAT (\$m)	EPS (CENTS) <sup>2</sup>	DIVIDENDS PER SHARE (CENTS)	KMP STI PAID (\$m)	
2013	0.87	0.78	(694.7)	168.3	12.7	5.0	2.0	54%
2012	1.84	0.87	57.7	195.0	14.6	6.0	2.6	73%
2011	2.97	1.85	230.3	235.4	17.7	10.0	1.4	39%
2010	2.53	2.98	258.4	240.6	18.2	11.0	3.8	168% <sup>3</sup>
2009	6.82	2.58	229.5	215.3	21.2	10.0	0.5	10% <sup>3</sup>

1 Details of the reconciliation between underlying and statutory financial measures can be found in the Operating and Financial Review.

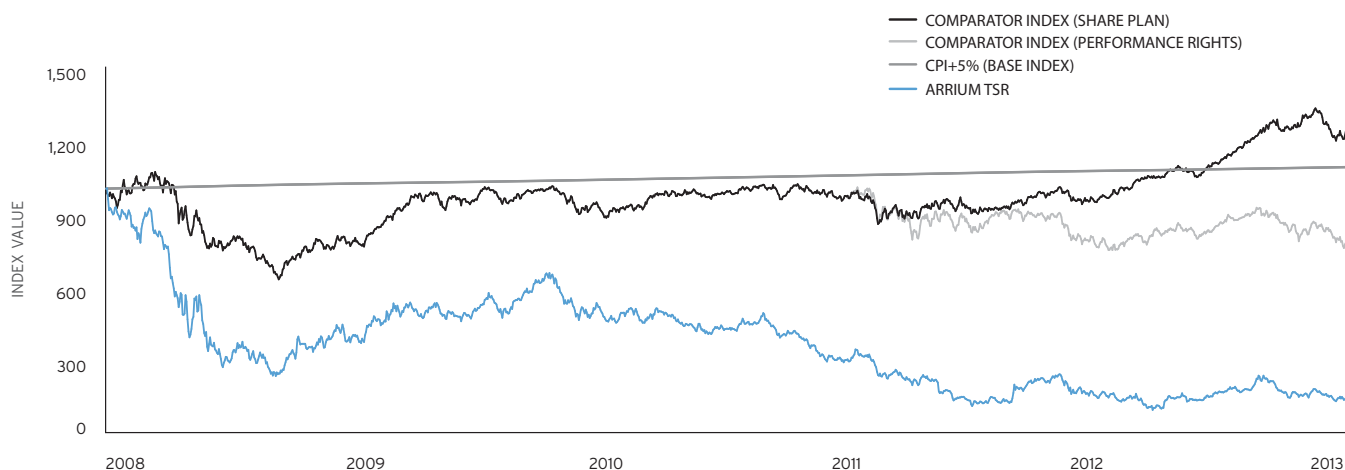
2 Based on weighted average number of shares outstanding at 30 June.

3 Excludes STI percentage for executives of Steel and Tube Holdings.

Graph 2 on the following page demonstrates performance against the Arrium LTI performance hurdles over the LTI vesting period. The graph compares the Arrium TSR against the applicable Comparator Index (the S&P/ASX 200 Index excluding banks, media and telecommunications for previous LTI Share Plan grants) and the Base Index (the Australian CPI plus 5% for previous LTI Plan grants).

## REMUNERATION REPORT CONTINUED

GRAPH 2



### Fixed Annual Reward

The level of salary is set so as to provide a level of remuneration that is both appropriate to the executive's skills, experience and performance and competitive in the market. The review process involves assessment of the Group, Division and individual performance, analysis of comparative market and internal remuneration information, and independent external advice on policies and practices. In all cases, independent advice received from Egan Associates and Hay Group is used to determine market movement and to provide input into recommended changes to executives' FAR.

Members of the Lead Team are provided flexibility to receive their FAR in a variety of forms, including cash, superannuation and employment benefits such as motor vehicles.

### Short-Term Incentive

The STI aims to reward participating employees for the achievement of agreed financial, safety, divisional and personal goals which deliver returns for shareholders. It is administered over the financial year. From FY14, Arrium has introduced a Deferred STI Program to further align executives' and shareholders' interests: to drive shareholder returns and to support executive retention. In broad terms, Arrium's STI Plan principles and structures for executives are as follows:

TABLE 6 - STI

ATTRIBUTE	STI PLAN FEATURES
STI opportunity	<p>Payments under the STI Plan are based on a set percentage of FAR for achievement of goals. For the MD&amp;CEO, the STI target was set at 80% of FAR, with a payment range of 0% to 120% of FAR potentially available. Other members of the Arrium Lead Team have an STI target of 50% of FAR with a payment range from 0% to 100% of FAR potentially available. The maximum payment is only paid on outstanding "stretch" outcomes.</p> <p>From FY14, the MD&amp;CEO will continue to have a target set at 80% of FAR with a payment range of 0% to 120% of FAR. The balance of the team will have their target percentage increased to 66% but maintain a payment range of 0% to 100%. In each case, two thirds of any award will be delivered in cash, with the balance delivered through shares. The shares will have a two-year service hurdle before they become available to the executive. Executives will receive any dividends during the service vesting period.</p>
Performance gateway	<p>Satisfactory performance is a prerequisite for participation in the STI Plan. Participation may be suspended or reduced where a participant has fallen short of performance expectations.</p> <p>Executives participate in an annual performance review process that assesses performance against key accountabilities, behaviours and job goals. Performance against these accountabilities and goals impacts directly on STI payments. In addition to an annual performance review, regular performance discussions with executives occur during the financial year. The process ensures that there is clarity in the communication and understanding of key business drivers and targets. These performance discussions also serve to provide feedback, to plan development initiatives and to aid succession planning.</p>
Performance criteria and weighting	<p>The performance conditions used for the STI Plan are established annually by the Board for the Lead Team and reflect strategic business plans and budgets.</p> <p>In FY13 the following performance measures applied:</p> <p>Financial targets (70%): In FY13, financial targets were to deliver NPAT and cash flow outcomes. For the MD&amp;CEO and the CFO, the financial targets reflect overall Arrium financial outcomes. Chief Executives have a 40% weighting directed towards divisional financial outcomes, with the balance of 30% relating to overall Arrium outcomes.</p> <p>Safety targets (10%): All executives have a 10% weighting on safety performance improvement. Performance improvement is assessed against improvement in Medically Treated Injury Frequency Rate (5%) (measuring the number of medically treated injuries across the combined employee and contractor workforce per 1,000,000 employee hours) as well as substantive improvement in the identification and management of significant safety risks (5%).</p> <p>Personal target (20%): All executives have a weighting of 20% relating to achievement of personal goals aligned with strategic or performance imperatives. In FY13, these included those relating to growth and capital development projects, cost reduction programs, restructuring, and divestment initiatives.</p> <p>In all cases, payments are intended to reward continuous improvement and not to reward maintenance of the status quo.</p>



ATTRIBUTE	STI PLAN FEATURES
Governance	Lead Team members' actual STI payments are subject to approval by the Board.  Arrium reserves the right to modify or cancel the STI Plan at any time. This may occur due to unsatisfactory business performance and/or other significant changes in business operating conditions or assumptions. The Board has discretion to reduce or cancel STI awards in the event of a material misstatement or other disintitling event.
Cessation of employment	If an executive resigns during the measurement period, they will generally not be entitled to receive an STI payment.

### Long-Term Incentive

During the year ended 30 June 2012, the Company replaced the existing LTI Share Plan with a new Performance Rights Plan (PRP) which continues to operate in the year ended 30 June 2013. The new PRP applied from 1 July 2012, with the previous LTI Share Plan remaining in operation until all unvested awards have either vested or the executive's entitlement lapses. No further awards have been granted under the previous LTI Share Plan since it was replaced by the PRP.

The objective of the LTI Plan is to reward participating executives for the sustained creation of shareholder wealth and to align the interests of executives with the Company's owners.

A summary of the key attributes of the previous LTI Share Plan and PRP are set out below in Table 7.

**TABLE 7 – LTI PLANS**

ATTRIBUTE	LTI PERFORMANCE RIGHTS PLAN (CURRENT SCHEME)	LTI SHARE PLAN (FORMER SCHEME)
Award	Rights to fully paid Arrium ordinary shares.	Arrium ordinary shares held in trust ("Restricted Shares").
Participation	Offered to the Lead Team and selected employees who are able to significantly influence Arrium's performance over the long term and therefore the creation of shareholder wealth.	Offered to the Lead Team and selected employees who are able to significantly influence Arrium's performance over the long term and therefore the creation of shareholder wealth.
Performance period	Three years.	Three years.
Access to retesting	No retesting.	Yes, up to five years (see detailed explanation below).
Performance hurdles	50% of rights assessed against relative total shareholder return, measured against the S&P/ASX 200 Index (excluding the consumer discretionary, consumer staples, financial services, health, information technology and telecommunications services sectors).  50% of rights assessed against compound annual growth in average earnings per share. Target established by the Board for each allocation.	50% of shares assessed against relative total shareholder return, measured against the S&P/ASX 200 Index (excluding banks, media and telecommunications).  50% of shares assessed against CPI plus 5%.
Vesting	Rights vest in proportion to the performance hurdles met (see Table 8 below).	Shares vest in proportion to the performance hurdles met (see Table 10 below).
Dividends	No entitlement to dividends.	Paid from initial allocation irrespective of whether shares are vested or unvested.
Governance	Lead Team members' LTI allocations and any vesting determinations are subject to approval by the Board.  The Board has discretion to reduce or cancel LTI awards in the event of a material misstatement or other disintitling event.	Lead Team members' LTI allocations and any vesting determinations are subject to approval by the Board.
Voting rights	No.	Yes.

### Performance Rights Plan (current scheme) performance hurdles

As noted in Table 7 above, there are two performance hurdles under the PRP, with 50% of rights vesting against each hurdle. One hurdle is Arrium's TSR relative to a comparator index. The second, which replaces the previous CPI-based hurdle, relates to Arrium's earnings per share (EPS).

These two complementary performance measures have been carefully and specifically determined by the Board so as to provide executives with an incentive to create shareholder wealth over a sustained period.

### Arrium's TSR performance relative to the comparator index

TSR measures the growth in the price of Arrium's ordinary shares plus dividends notionally reinvested over the relevant performance period. The relative TSR measure will assess Arrium's TSR performance against entities in the TSR ranking group over the performance period. The TSR ranking group will be all of the companies in the S&P/ASX 200 Index, excluding the consumer discretionary, consumer staples, financial services, health, information technology and telecommunications services sectors (approximately 115 companies in total).

The benchmark companies chosen for the PRP for comparing Arrium's TSR are not dissimilar from the index which was adopted by the Company under the former scheme. Having regard to the nature of Arrium's operations, its customer and supplier base and its international reach, it was considered inappropriate for the Company's relative TSR to be compared with local consumer-focused businesses, those in financial services, healthcare, information technology or telecommunications. In adopting the balance of the S&P/ASX 200 Index, the comparators contain all industrial companies, all materials and resources companies and significant others which, in the Board's judgement, represent a testing group of relevant comparators. For all rights to vest in respect of this performance hurdle, the Company's TSR over the three-year period will have to outperform 85 or more of the 115 relevant companies, which the Board believes represents an appropriate stretch performance target.

For the 2013 offer under the current scheme, the performance period for the relative TSR measure will be the three-year period commencing on 1 July 2013 and ending 30 June 2016 ("Performance Period"). For the purposes of this measurement, TSR will be calculated using the volume weighted average share price for the Company's shares over a 10 consecutive trading day period starting two months prior to the end date of the

## REMUNERATION REPORT CONTINUED

Performance Period and ending two months after the end date of the Performance Period. The relevant 10 consecutive trading day period will be determined by that which gives the highest level of vesting achieved during the Performance Period.

Fifty percent of the total rights awarded vest to participants at the end of the three-year Performance Period subject to the performance of Arrium's TSR relative to the comparator index over the Performance Period according to Table 8:

**TABLE 8 - TSR VESTING PROPORTIONS TO THE COMPARATOR INDEX**

TSR PERFORMANCE RELATIVE TO THE COMPARATOR INDEX	PROPORTION OF RIGHTS VESTING AS ARRIUM ORDINARY SHARES
Below the 50 <sup>th</sup> percentile	Nil
At the 50 <sup>th</sup> percentile	50%
Between the 50 <sup>th</sup> percentile and 75 <sup>th</sup> percentile	Pro-rata straight-line between 50% and 100%
At or above the 75 <sup>th</sup> percentile	100%

### Arrium's underlying earnings per share

Underlying EPS is the basic EPS disclosed in Arrium's full year Financial Report adjusted for non-recurring or non-trading items as determined by the Board. The underlying EPS hurdle will measure Arrium's underlying EPS growth (as an annual compound percentage) between the final year of the Performance Period for the underlying EPS hurdle (being the year ending 30 June 2016 for the 2013 offer) and the financial year ending immediately prior to the date of grant of the relevant rights (being the year ended 30 June 2013 for the 2013 offer). Underlying EPS growth is then compared against the underlying EPS targets for Arrium as determined by the Board for the prior corresponding period.

Rights granted and subject to the Arrium underlying EPS performance hurdle for the 2013 and 2012 offers vest according to Table 9:

**TABLE 9 - UNDERLYING EPS VESTING PROPORTIONS**

COMPOUND GROWTH IN ARRIUM UNDERLYING EPS OVER THE PERFORMANCE PERIOD	PROPORTION OF RIGHTS VESTING AS ARRIUM SHARES
Less than 5%	Nil
5%	25%
Greater than 5% up to 15% <sup>1</sup>	Pro-rata straight-line between 25% and 100%
Greater than 15% <sup>2</sup>	100%

1 This underlying EPS range in 2012 was 5% to 12%.

2 This underlying EPS range in 2012 was greater than 12%.

There are no retesting provisions under the PRP if rights fail to vest under either performance measure at the conclusion of the Performance Period. Prior to the approval of the vesting of rights and allotment of shares, independent external verification will be sought to confirm that the vesting conditions have been satisfied. If an executive ceases employment with Arrium before the performance condition is tested, then the executive's unvested rights will generally lapse. However, all or some of the rights may vest to an executive on ceasing employment when special circumstances apply at the discretion of the Board including redundancy, death and permanent disability.

### LTI Plan (former scheme) performance hurdles

The performance conditions of the LTI Share Plan were based on the performance of Arrium's total shareholder return (TSR). TSR measures the percentage growth in a company's share price together with the value of dividends received during the period, assuming that all of those dividends are reinvested into new shares. The performance conditions of the LTI Share Plan have been chosen to directly link executive reward to shareholder returns over a sustained period.

For the shares to vest to executives, the following TSR performance conditions must be achieved:

- For 50% of the shares, vesting will be dependent on Arrium's TSR performance compared with the TSR performance of companies within the S&P/ASX 200 Index (excluding banks, media and telecommunications) (the "Comparator Index"), and
- For the remaining 50% of the shares, vesting will be dependent on Arrium's TSR performance relative to Australian CPI plus 5% (the "Base Index").

### Arrium's TSR performance relative to the Comparator Index

Fifty percent of the total shares awarded vest to participants at the end of the three-year performance period subject to the performance of Arrium's TSR relative to the Comparator Index over the Performance Period according to Table 10:

**TABLE 10 - TSR VESTING PROPORTIONS TO THE COMPARATOR INDEX**

TSR PERFORMANCE RELATIVE TO THE COMPARATOR INDEX	PROPORTION OF SHARES VESTING
Below the 50 <sup>th</sup> percentile	Nil
At the 50 <sup>th</sup> percentile	50%
Between the 50 <sup>th</sup> percentile and 75 <sup>th</sup> percentile	Pro-rata straight-line between 50% and 100%
At or above the 75 <sup>th</sup> percentile	100%

### Arrium's TSR performance relative to the Base Index

Fifty percent of the total shares awarded vest to participants at the end of the three-year Performance Period subject to the performance of Arrium's TSR relative to the Base Index.

Shares granted and subject to the Base Index performance hurdle vest according to Table 11:

**TABLE 11 - TSR VESTING PROPORTIONS TO THE BASE INDEX**

TSR PERFORMANCE RELATIVE TO THE BASE INDEX	PROPORTION OF SHARES VESTING
Up to and including 60%	Nil
61% - 80%	60%
81% - 99%	80%
100% and over	100%

If the shares do not vest immediately under either performance measure at the end of the three-year performance period, provisions exist that enable retesting of performance hurdles annually for the current MD&CEO and every six months for other executives over a two-year period except for 2007 share grants, which were retested quarterly until 30 June 2012. These shares, alongside the 2008 allocation, have now been forfeited. Prior to the approval of the vesting of shares, the Board obtains independent external verification that the vesting conditions have been satisfied. If an executive ceases employment with Arrium before the performance condition is tested, then the executive's unvested shares will generally lapse. However, all or some of the shares may vest to an executive on ceasing employment when special circumstances apply at the discretion of the Board including redundancy, death and permanent disability.

Details of equity-based compensation provided to KMP are contained in Section E of this Report.

#### Participation in other equity plans

Together with all Australian resident permanent employees of Arrium, executives are eligible to participate in either the Tax Exempt or Tax Deferred Share Plans. Under these plans, employees are able to make salary sacrifice contributions to purchase Arrium ordinary shares on-market on a monthly basis. Details of the Tax Exempt and Tax Deferred Share Plans are set out in Note 29 to the Financial Statements.

#### Dealing in Company securities

Directors and relevant executives are precluded from dealing in Arrium securities at any time if they are aware of price sensitive information that has not been made public. Directors and executives must not use any derivatives or enter into margin lending arrangements in relation to Arrium securities.

Subject to that overriding rule, Company policy permits Directors and relevant executives to deal in Arrium securities during set trading windows throughout the year.

Current shareholdings of Directors are shown in Note 30 to the Financial Statements.

### E. DETAILS OF NON-EXECUTIVE DIRECTOR AND EXECUTIVE REMUNERATION FOR THE YEAR ENDED 30 JUNE 2013

#### Short-Term Incentives

The actual STI payable, the percentage of the total STI payable and the percentage of the STI forfeited by the Lead Team for the outcomes for the year ended 30 June 2013 is set out in Table 12.

TABLE 12 – STI PAYMENTS

2013	ACTUAL STI PAYABLE	% OF TARGET PAYABLE	% OF TARGET FORFEITED
G J Plummer	630,000 <sup>1</sup>	38%	62%
A G Roberts	277,000	68%	32%
R C Bakewell	260,000	55%	45%
G D A Feurtado	181,000	61%	39%
S H Hamer	240,000	59%	41%
L J Selleck	192,000	47%	53%
G A Waters	260,000	64%	36%

1. Excludes 2012 deferred STI component of \$320,000 contingent on achieving personal targets relating to iron ore and port development projects in South Australia in 2013. This amount was paid in February 2013.

In a year of considerable external challenge and volatility, overall profitability and returns to shareholders were less than planned; for this reason, below STI target payments were awarded. Accordingly, Mr Plummer has forgone 62% of his target STI payment in 2013. On average, the remaining members of the Lead Team have forgone 40% of their target STI payment.

*Financial targets (70%):* In FY13, financial targets were to deliver NPAT and cash flow outcomes. The Group's profit outcome was below plan and accordingly no payments were made for this significant component of the STI program. Cash results were sound, and targets achieved but no Group level payments were awarded having regard to the statutory profit result. Some Chief Executives received a payment in recognition of delivering planned cash and earnings outcomes in their respective Divisions.

*Safety targets (10%):* All executives have a 10% weighting on safety performance improvement. Performance improvement was assessed against improvement in Medically Treated Injury Frequency Rate (MTIFR) (measuring the number of medically treated injuries across the combined employee and contractor workforce per 1,000,000 employee hours) as well as substantive improvement in the identification and management of significant safety risks. In FY13, safety performance improved as indicated by the 15% reduction in Arrium's MTIFR. There was significant improvement across all of Arrium's businesses in the identification and management of critical risks which resulted in an above target payment for this part of the target. On average, a combined outcome above target was achieved.

*Personal targets (20%):* All executives have a weighting of 20% related to achievement of personal goals aligned with strategic or performance imperatives including those relating to growth and capital development projects, cost reduction programs, restructuring, and divestment initiatives. The Company made sound progress on its challenging strategic program. This included:

- On time and on budget delivery of the capital projects associated with the Southern Iron assets and Whyalla Port development, targeting a run rate of 12 million tonnes per annum of iron ore exports
- Giving effect to the expansion plans in Mining Consumables
- Significant improvements in the steel businesses, delivering a further material cost reduction and continued progress in re-shaping of the portfolio
- Balance sheet and working capital related targets.

These targets were achieved, and in some cases exceeded, and above target payments awarded on average.



## REMUNERATION REPORT CONTINUED

### Long-Term Incentives

No LTI awards vested during the 2013 financial year.

### Actual remuneration outcomes

Table 15 on page 59 provides details of the Lead Team's remuneration as required by the *Corporations Act 2001* (Cth) and Accounting Standards. As the information required to be presented represents the accounting value of, for example, equity awards, the Human Resources Committee is aware that it may be difficult for shareholders to interpret the value Lead Team executives actually derived during the FY13. Table 13 below therefore outlines the value of the total remuneration (fixed annual reward, STI earned, the value of any LTIs awarded in prior years that vested during 2013, and any other payments received in the period) received in the 2013 financial year.

TABLE 13 – REMUNERATION OUTCOMES

NAME	FIXED ANNUAL REWARD <sup>1,2</sup> \$	SHORT-TERM INCENTIVE EARNED (TO BE PAID IN AUGUST 2013) \$	LONG-TERM INCENTIVE (VALUE VESTED IN 2013) \$	OTHER \$	TOTAL REMUNERATION RECEIVED \$
G J Plummer	2,096,842	630,000 <sup>3</sup>	-	-	2,726,842
A G Roberts	908,685	277,000	-	-	1,185,685
R C Bakewell	938,776	260,000	-	-	1,198,776
G D A Feurtado	578,548	181,000	-	-	759,548
S H Hamer	808,959	240,000	-	-	1,048,959
L J Selleck	812,086	192,000	-	-	1,004,086
G A Waters	808,305	260,000	-	-	1,068,305

1 Includes salary and fees and superannuation.

2 In addition, the above KMPs accrued short and long-term leave entitlements during the year as follows: G J Plummer \$360,930 (2012: \$337,909); A G Roberts \$106,955 (2012: \$114,027); R C Bakewell \$99,561 (2012: \$92,784); G D A Feurtado \$74,867 (2012: \$119,679); S H Hamer \$120,408 (2012: \$129,177); L J Selleck \$103,312 (2012: \$218,609); G A Waters \$97,337 (2012: \$110,849).

3 Excludes 2012 deferred STI component of \$320,000 contingent on achieving personal targets relating to iron ore and port development projects in South Australia in 2013. This amount was paid in February 2013.

Details of remuneration paid to Directors and executives meeting the definition of KMP under AASB 124 Related Party Disclosures of the Arrium Group are set out in Tables 14 and 15.

TABLE 14 – REMUNERATION OF NON-EXECUTIVE DIRECTORS

	YEAR	SHORT-TERM BENEFITS			SUBTOTAL	POST-EMPLOYMENT BENEFITS	SHARE-BASED PAYMENTS	TOTAL	PROPORTION PERFORMANCE RELATED <sup>2</sup>
		SALARY & FEES	CASH BONUS	NON-MONETARY BENEFITS <sup>1</sup>		SUPER-ANNUATION	SHARES & RIGHTS GRANTED		%
		\$	\$	\$	\$	\$	\$	\$	%
<b>Non-Executive Directors</b>									
<b>R B Davis</b>	<b>2013</b>	<b>174,312</b>	-	<b>2,818</b>	<b>177,130</b>	<b>15,688</b>	-	<b>192,818</b>	-
Non-Executive Director	2012	174,312	-	1,315	175,627	15,688	-	191,315	-
<b>C R Galbraith, AM</b>	<b>2013</b>	<b>177,064</b>	-	-	<b>177,064</b>	<b>7,936</b>	-	<b>185,000</b>	-
Non-Executive Director	2012	169,725	-	1,286	171,011	15,275	-	186,286	-
<b>P G Nankervis</b>	<b>2013</b>	<b>174,312</b>	-	-	<b>174,312</b>	<b>15,688</b>	-	<b>190,000</b>	-
Non-Executive Director	2012	174,312	-	1,286	175,598	15,688	-	191,286	-
<b>D A Pritchard</b>	<b>2013</b>	<b>165,138</b>	-	-	<b>165,138</b>	<b>14,862</b>	-	<b>180,000</b>	-
Non-Executive Director	2012	165,138	-	3,193	168,331	14,862	-	183,193	-
<b>P J Smedley</b>	<b>2013</b>	<b>495,000</b>	-	<b>1,962</b>	<b>496,962</b>	-	-	<b>496,962</b>	-
Non-Executive Chairman	2012	495,000	-	10,325	505,325	-	-	505,325	-
<b>G J Smorgon, AM</b>	<b>2013</b>	<b>174,312</b>	-	-	<b>174,312</b>	<b>15,688</b>	-	<b>190,000</b>	-
Non-Executive Director	2012	174,312	-	1,286	175,598	15,688	-	191,286	-
<b>R Warnock</b>	<b>2013</b>	<b>160,550</b>	-	-	<b>160,550</b>	<b>14,450</b>	-	<b>175,000</b>	-
Non-Executive Director	2012	160,550	-	-	160,550	14,450	-	175,000	-
<b>Total</b>	<b>2013</b>	<b>1,520,688</b>	-	<b>4,780</b>	<b>1,525,468</b>	<b>84,312</b>	-	<b>1,609,780</b>	-
	2012	1,513,349	-	18,691	1,532,040	91,651	-	1,623,691	-

1 Non-monetary benefits include fringe benefits tax paid on benefits provided.

2 Excludes any statutory leave entitlement.

TABLE 15 – REMUNERATION OF EXECUTIVE DIRECTOR AND EXECUTIVES

	YEAR	SHORT-TERM BENEFITS				POST-EMPLOYMENT BENEFITS	SHARE-BASED PAYMENTS <sup>3,4</sup>		PROPORTION PERFORMANCE RELATED <sup>2</sup>
		SALARY & FEES <sup>9,10</sup>	CASH BONUS <sup>1</sup>	NON-MONETARY BENEFITS <sup>2,11</sup>	SUBTOTAL	SUPER-ANNUATION	RIGHTS	SHARES <sup>8</sup>	%
						\$	\$	\$	
<b>Executive Director</b>									
<b>G J Plummer</b>	<b>2013</b>	<b>2,073,765</b>	<b>630,000</b>	<b>16,043</b>	<b>2,719,808</b>	<b>23,077</b>	<b>947,746</b>	<b>659,300</b>	<b>51.4</b>
	<b>2013</b>	<b>-</b>	<b>320,000<sup>5</sup></b>	<b>-</b>	<b>320,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
MD&CEO	2012 <sup>5</sup>	1,947,308	776,000	46,620	2,769,928	50,000	531,712	986,004	52.9
<b>A G Roberts<sup>6</sup></b>	<b>2013</b>	<b>883,685</b>	<b>277,000</b>	<b>21,424</b>	<b>1,182,109</b>	<b>25,000</b>	<b>353,269</b>	<b>78,085</b>	<b>43.2</b>
MD&CEO (effective 1 July 2013)	2012	748,706	396,000	13,507	1,158,213	25,000	243,142	153,792	50.2
<b>R C Bakewell<sup>7</sup></b>	<b>2013</b>	<b>922,333</b>	<b>260,000</b>	<b>14,627</b>	<b>1,196,960</b>	<b>16,443</b>	<b>365,505</b>	<b>78,085</b>	<b>42.5</b>
Chief Financial Officer	2012	882,236 <sup>7</sup>	329,000	11,251	1,222,487	15,775	243,142	78,085	41.7
<b>G D A Feurtado</b>	<b>2013</b>	<b>535,798</b>	<b>181,000</b>	<b>10,847</b>	<b>727,645</b>	<b>42,750</b>	<b>225,444</b>	<b>14,315</b>	<b>41.7</b>
Chief Executive Recycling	2012	461,479	185,000	15,190	661,669	45,831	130,281	30,330	39.8
<b>S H Hamer</b>	<b>2013</b>	<b>785,882</b>	<b>240,000</b>	<b>13,455</b>	<b>1,039,337</b>	<b>23,077</b>	<b>353,269</b>	<b>78,085</b>	<b>44.9</b>
Chief Executive Distribution	2012	724,629	287,000	63,294	1,074,923	50,000	243,142	153,792	44.9
<b>L J Selleck</b>	<b>2013</b>	<b>715,477</b>	<b>192,000</b>	<b>326</b>	<b>907,803</b>	<b>96,609</b>	<b>317,025</b>	<b>65,071</b>	<b>41.4</b>
Chief Executive Steel Manufacturing	2012	666,375	287,000	594	953,969	87,740	199,701	117,483	44.5
<b>G A Waters</b>	<b>2013</b>	<b>788,257</b>	<b>260,000</b>	<b>-</b>	<b>1,048,257</b>	<b>20,048</b>	<b>339,976</b>	<b>78,085</b>	<b>45.6</b>
Chief Executive Mining	2012	682,917	287,000	604	970,521	67,604	229,850	151,697	47.1
<b>Total</b>	<b>2013</b>	<b>6,705,197</b>	<b>2,360,000</b>	<b>76,722</b>	<b>9,141,919</b>	<b>247,004</b>	<b>2,902,234</b>	<b>1,051,026</b>	<b>-</b>
	2012	6,113,650	2,547,000	151,060	8,811,710	341,950	1,820,970	1,671,183	-

1 Cash bonuses are in respect of short-term incentives.

2 Non-monetary benefits include items such as fringe benefits tax paid on benefits provided, rental assistance, living away from home allowance and cost of living allowance.

3 Dividends paid to executives on unvested shares under the previous LTI Share Plan are implicitly included in the fair value of the share-based payment expense recognised as remuneration. Dividends paid to the executives on unvested shares under the previous plan held at the end of the year were: G J Plummer \$80,221 (2012: \$133,692); A G Roberts \$11,018 (2012: \$19,439); R C Bakewell \$5,160 (2012: \$7,224); G D A Feurtado \$2,087 (2012: \$10,619); S H Hamer \$11,018 (2012: \$19,439); L J Selleck \$6,666 (2012: \$16,537); G A Waters \$11,412 (2012: \$15,977).

4 Share-based payments include performance and service rights allocations.

5 In 2012, G J Plummer was awarded a deferred STIP component to the value of \$320,000 contingent on achieving personal targets relating to iron ore and port development projects in South Australia in 2013. Inclusive of this amount, the total percentage of target payable for the 2012 financial year was equivalent to 68.5%, and a forfeiture of 31.5% of STI target. This amount was paid in February 2013.

6 A G Roberts was appointed Deputy Managing Director (MD) on 18 February 2013. During the period between Mr Roberts' appointment as Deputy MD and assuming the role of MD&CEO, he was paid an allowance of \$25,000 per month. He was formerly Chief Executive Mining Consumables.

7 R C Bakewell's remuneration is inclusive of the final instalment of the sign-on bonus to the value of \$125,000 in April 2012.

8 In the prior period, the above table incorrectly excluded a tranche of shares granted to G A Waters totalling \$18,289 and to G D A Feurtado totalling \$30,330. Management has restated this balance to correctly include all shares granted during 2012.

9 In addition to the total short-term benefits above, these KMPs accrued short-term leave entitlements during the year as follows: G J Plummer \$234,896 (2012: \$217,007); A G Roberts \$68,244 (2012: \$68,914); R C Bakewell \$72,318 (2012: \$66,535); G D A Feurtado \$48,514 (2012: \$66,485); S H Hamer \$72,870 (2012: \$70,777); L J Selleck \$57,811 (2012: \$66,877); G A Waters \$72,415 (2012: \$79,010).

10 In addition, the above KMPs accrued long-term leave entitlements during the year as follows: G J Plummer \$126,034 (2012: \$120,902); A G Roberts \$38,711 (2012: \$45,113); R C Bakewell \$27,242 (2012: \$26,249); G D A Feurtado \$26,353 (2012: \$53,194); S H Hamer \$47,539 (2012: \$58,401); L J Selleck \$45,501 (2012: \$151,733); G A Waters \$24,922 (2012: \$31,839).

11 The 2012 comparatives have been restated to exclude the gross-up amounts relating to reportable fringe benefits.

12 Excludes any statutory leave entitlements.

### Share-based compensation benefits

For each grant of shares and rights included in the remuneration of KMP, the percentage of the grant that was paid, or that vested, in the financial year, and the percentage that was forfeited because the KMP did not meet the service and/or performance criteria is set out on the following page.

The maximum value of the shares and rights yet to vest has been determined as the amount of the grant date fair value of the shares and rights that are yet to be expensed. No shares or rights will vest if the service and/or performance criteria are not satisfied, hence the minimum value of the share and right grants yet to vest is nil.

## REMUNERATION REPORT CONTINUED

TABLE 16 - SHARE-BASED COMPENSATION

SHARE-BASED COMPENSATION											
PLAN <sup>1</sup>	DATE OF GRANT <sup>2</sup>	NUMBER OF SHARES	FAIR VALUE OF SHARE AT DATE OF GRANT	AWARD VALUE AT DATE OF GRANT	EXPIRY DATE	FIRST VESTING DATE	LAST VESTING DATE	VESTED	FORFEITED	MAXIMUM TOTAL VALUE OF GRANT YET TO VEST	
			\$	\$				%	%	\$	
<b>Executive Director</b>											
<b>G J Plummer</b>	SP	7/05/2007	305,461	4.88	1,490,650	7/05/2013	7/05/2010	7/05/2013 <sup>3</sup>	-	100	-
	SP	7/09/2007	327,680	4.62	1,513,882	20/08/2013	20/08/2010	20/08/2013 <sup>3</sup>	-	100	-
	SP	26/08/2008	65,110	6.01	391,311	1/07/2013	1/07/2011	1/07/2013	-	-	-
	SP	26/08/2009	340,316	2.88	980,110	1/07/2014	1/07/2012	1/07/2014	-	-	-
	SP	25/08/2010	871,322	2.27	1,977,901	1/07/2015	1/07/2013	1/07/2015	-	-	-
	PRP	30/08/2011	1,637,531	0.98	1,596,593	1/07/2014	1/07/2014	1/07/2014	-	-	532,198
	PRP	5/11/2012	2,575,757	0.49	1,249,242	30/06/2015	30/06/2015	30/06/2015	-	-	832,828
<b>A G Roberts</b>	SP	7/09/2007	57,344	4.62	264,929	20/08/2012	20/08/2010	20/08/2012 <sup>3</sup>	-	100	-
	SP	26/08/2008	38,300	6.01	230,183	1/07/2013	1/07/2011	1/07/2013	-	-	-
	SP	26/08/2009	78,861	2.88	227,120	1/07/2014	1/07/2012	1/07/2014	-	-	-
	SP	25/08/2010	103,196	2.27	234,255	1/07/2015	1/07/2013	1/07/2015	-	-	-
	PRP	30/08/2011	327,506	0.98	319,318	1/07/2014	1/07/2014	1/07/2014	-	-	106,439
	SR	1/07/2011	160,000	1.71	273,600	1/07/2013	1/07/2013	1/07/2013	-	-	-
	PRP	5/11/2012	681,818	0.49	330,682	30/06/2015	30/06/2015	30/06/2015	-	-	220,454
<b>Executives</b>											
<b>R C Bakewell</b>	SP	25/08/2010	103,196	2.27	234,255	1/07/2015	1/07/2013	1/07/2015	-	-	-
	PRP	30/08/2011	327,506	0.98	319,318	1/07/2014	1/07/2014	1/07/2014	-	-	106,439
	SR	1/07/2011	160,000	1.71	273,600	1/07/2013	1/07/2013	1/07/2013	-	-	-
	PRP	5/11/2012	757,575	0.49	367,424	30/06/2015	30/06/2015	30/06/2015	-	-	244,949
<b>G D A Feurtado</b>	PRP	30/08/2011	98,251	0.98	95,795	1/07/2014	1/07/2014	1/07/2014	-	-	31,932
	SR	1/09/2011	50,000	1.43	71,500	31/08/2013	31/08/2013	31/08/2013	-	-	5,958
	SR	24/02/2012	50,000	0.93	46,500	4/10/2013	4/10/2013	4/10/2013	-	-	6,006
	PRP	24/02/2012	250,796	0.62	154,240	1/07/2014	1/07/2014	1/07/2014	-	-	51,413
	PRP	5/11/2012	515,151	0.49	249,848	30/06/2015	30/06/2015	30/06/2015	-	-	166,566
<b>S H Hamer</b>	SP	7/09/2007	57,344	4.62	264,929	20/08/2012	20/08/2010	20/08/2012 <sup>3</sup>	-	100	-
	SP	26/08/2008	38,300	6.01	230,183	1/07/2013	1/07/2011	1/07/2013	-	-	-
	SP	26/08/2009	78,861	2.88	227,120	1/07/2014	1/07/2012	1/07/2014	-	-	-
	SP	25/08/2010	103,196	2.27	234,255	1/07/2015	1/07/2013	1/07/2015	-	-	-
	PRP	30/08/2011	327,506	0.98	319,318	1/07/2014	1/07/2014	1/07/2014	-	-	106,439
	SR	1/07/2011	160,000	1.71	273,600	1/07/2013	1/07/2013	1/07/2013	-	-	-
	PRP	5/11/2012	681,818	0.49	330,682	30/06/2015	30/06/2015	30/06/2015	-	-	220,454
<b>L J Selleck</b>	SP	7/09/2007	57,344	4.62	264,929	20/08/2012	20/08/2010	20/08/2012 <sup>3</sup>	-	100	-
	SP	26/08/2008	38,300	6.01	230,183	1/07/2013	1/07/2011	1/07/2013	-	-	-
	SP	26/08/2009	54,596	2.88	157,236	1/07/2014	1/07/2012	1/07/2014	-	-	-
	SP	25/08/2010	85,977	2.27	195,213	1/07/2015	1/07/2013	1/07/2015	-	-	-
	PRP	30/08/2011	266,098	0.98	259,446	1/07/2014	1/07/2014	1/07/2014	-	-	86,482
	SR	1/07/2011	100,000	1.71	171,000	1/07/2013	1/07/2013	1/07/2013	-	-	-
	SR	24/02/2012	60,000	0.93	55,800	4/10/2013	4/10/2013	4/10/2013	-	-	7,208
	PRP	24/02/2012	34,832	0.62	21,422	1/07/2014	1/07/2014	1/07/2014	-	-	7,141
	PRP	5/11/2012	681,818	0.49	330,682	30/06/2015	30/06/2015	30/06/2015	-	-	220,454
	<b>G A Waters</b>	SP	16/10/2008	67,421	2.79	188,105	16/10/2013	16/10/2011	16/10/2013	-	-
SP		26/08/2009	57,629	2.88	165,972	1/07/2014	1/07/2012	1/07/2014	-	-	-
SP		25/08/2010	103,196	2.27	234,255	1/07/2015	1/07/2013	1/07/2015	-	-	-
PRP		30/08/2011	286,568	0.98	279,404	1/07/2014	1/07/2014	1/07/2014	-	-	93,135
SR		1/07/2011	160,000	1.71	273,600	1/07/2013	1/07/2013	1/07/2013	-	-	-
PRP		5/11/2012	681,818	0.49	330,682	30/06/2015	30/06/2015	30/06/2015	-	-	220,454

1 SP are shares issued under the former LTI Plan. PRP are rights issued under the Rights Plan. SR are Service Rights which were issued in 2011 to support executive retention during the MD&CEO succession period as reported in the 2012 Remuneration Report.

2 Share grants in respect of the 7 September 2007 allocation to executives other than G J Plummer are subject to quarterly retesting where the hurdles are not met. All other grants under the SP plans are subject to six-monthly retesting where the hurdles are not met. All G J Plummer's SP grants are subject to annual retesting. PRP rights are not subject to retesting.

3 The performance hurdles were not met and no shares vested.

## F. EXECUTIVE SERVICE AGREEMENTS

### MD&CEO

Mr G J Plummer was appointed MD&CEO on 2 May 2005 for a fixed term of five years. Effective 20 August 2007, an amendment was made to his Executive Service Agreement such that it will not terminate at the end of the initial five-year period but instead would continue on an ongoing basis until terminated. On 17 December 2012, Arrium and Mr Plummer agreed that Mr Plummer would continue to serve as Managing Director and Chief Executive Officer, if required, up until 31 December 2013. To give effect to this arrangement, to ensure a smooth and orderly transition and to acknowledge that Mr Plummer was agreeing to forgo his rights in relation to notice, the Board entered into a further contract variation. The material items contained within the agreement are summarised below. A comprehensive summary of the MD&CEO's initial employment contract was lodged with the Australian Securities Exchange on 20 December 2004, a summary of the amendments was lodged on 20 August 2007 and a summary of the terms of Mr Plummer's departure was lodged on 17 December 2012. ASX releases are available on Arrium's website. Key features of Mr Plummer's contract are outlined in the table below.

TABLE 17A – SUMMARY OF MD&CEO SERVICE AGREEMENT

FAR	Mr Plummer was paid a fixed annual reward of \$2,100,000 per annum inclusive of superannuation and novated car leases.
STI	The STI target provides for a payment range of 0% to 120% of FAR with target at 80%. The maximum possible payment is only paid on outstanding "stretch" outcomes. Targets and actual payments are determined by the Board. The Board has discretion to reduce or cancel STI awards in the event of a material misstatement or other disintitling event.
LTI	Mr Plummer was granted awards of Arrium Limited ordinary shares and rights to Arrium Limited ordinary shares up until and including July 2011. The shares and performance rights allocated to him shall continue in existence for so long as he continues to be employed as Managing Director and Chief Executive Officer or in another capacity mutually agreed, or as a Director of one or more subsidiary companies. The shares and rights are held in trust and vest according to the relevant performance hurdles detailed in Section D of this Report. Shares and rights granted to Mr Plummer under the LTI Plan are set out in Section E of this Report. The Board has discretion to reduce or cancel LTI awards in the event of a material misstatement or other disintitling event.
Notice of termination	Termination by the Company: 12 months notice. Termination by the MD&CEO: six months notice.
Termination provisions	In accordance with the ASX Corporate Governance Council Principles of Good Corporate Governance and Best Practice Recommendations, Mr Plummer's termination entitlements have been agreed in advance. After considering independent advice, the Company is satisfied that Mr Plummer's termination entitlements as set out below are reasonable, having regard to current employment practices.  <b>Death, illness, incapacity or by appropriate notice by either party:</b> <ul style="list-style-type: none"> <li>FAR and any accrued untaken statutory leave entitlements calculated to the agreed termination date.</li> <li>Any amount of STI that has accrued from the previous financial year. The Board, in its absolute discretion, will determine the amount of the STI payable for the financial year in which termination occurs, if any.</li> </ul> <p>The Board, in its absolute discretion, will determine whether the MD&amp;CEO may withdraw some or all of the shares or rights granted under the LTI Share Plan or Performance Rights Plan which have not vested.</p> <p><b>Termination for cause:</b> No further obligations other than the amount of FAR due to him through to his termination date plus any statutory leave entitlements calculated to the termination date.</p>
Non-compete	Upon termination of the MD&CEO's employment for any reason, the MD&CEO is prohibited from engaging in any activity that would compete with Arrium for a period of 12 months.

TABLE 17B – SUMMARY OF MD&CEO SERVICE AGREEMENT VARIATION DECEMBER 2012

FAR	Mr Plummer would receive no further adjustments to his FAR in his capacity as MD&CEO. His employment ceases from 31 December 2013, at which time, his salary would also cease.
STI	There were no changes to the STI provisions of Mr Plummer's existing contract.
LTI	Mr Plummer would receive no further LTI allocations during his tenure as MD&CEO. (Mr Plummer last received an allocation in July 2012). Existing allocations would remain on foot and would only vest if the applicable performance hurdles were met.
Termination	Mr Plummer agreed to remain in service and available to perform the role of MD&CEO up to 31 December 2013, thus forgoing the resignation and termination rights within the above mentioned Service Agreement. The MD&CEO further agreed to stand down from this role at the discretion of the Board. Mr Plummer would receive a payment of \$1.3 million within three months of standing down from the role of MD&CEO.  This deferred bonus of \$1.3 million is conditional on: <ul style="list-style-type: none"> <li>Satisfactory performance by Mr Plummer of his duties and responsibilities up to the time of termination of his appointment, and</li> <li>Satisfactory achievement of specific objectives agreed with him to secure a seamless succession of the role of Managing Director and Chief Executive Officer.</li> </ul>
Other benefits	Mr Plummer will enter a consultancy arrangement with Arrium upon termination from 1 January 2014 to 30 June 2015 and would be paid a monthly retainer of \$30,000 during this period.

### New Managing Director (appointed MD&CEO effective 1 July 2013)

Mr A G Roberts was appointed Deputy Managing Director on 18 February 2013 on an interim basis prior to commencing as MD&CEO from 1 July 2013. His service will continue on an ongoing basis until terminated by either Arrium or Mr Roberts in accordance with the termination rights in the Executive Service Agreement (as described on the following page). A comprehensive summary of the Deputy MD's employment agreement was lodged with the Australian Securities Exchange on 18 February 2013. ASX releases are available on Arrium's website. Key features of Mr Roberts' contract are outlined in the table on the following page.

## REMUNERATION REPORT CONTINUED

TABLE 18 - SUMMARY OF NEW MD&CEO SERVICE AGREEMENT (FROM 1 JULY 2013)

FAR	Mr Roberts was paid a fixed annual reward of \$1,400,000 per annum inclusive of superannuation.
STI	<p>The STI target provides for a payment range of 0% to 120% of FAR with target at 80%. The maximum possible payment is only paid on outstanding "stretch" outcomes. Targets and actual payments are determined by the Board. Two thirds of any award will be delivered in cash, with the balance delivered through shares. The shares will have a two-year service hurdle before they become available to the executive. Executives will receive any dividends during the service vesting period.</p> <p>The Board has discretion to reduce or cancel STI awards in the event of a material misstatement or other disentitling event.</p>
LTI	<p>During his term as Chief Executive Mining Consumables, Mr Roberts was granted awards of Arrium Limited ordinary shares and rights to Arrium Limited ordinary shares as the long-term component of his remuneration. Mr Roberts will retain these shares and rights in his new role. The shares and rights are held in trust and vest according to the relevant performance hurdles detailed in Section D of this Report. Shares and rights granted to Mr Roberts under the LTI Plan are set out in Section E of this Report.</p> <p>An LTI allocation of performance rights to the value of \$1.4 million will be granted to Mr Roberts, reflecting his new responsibilities as MD&amp;CEO, with a measurement period commencing 1 July 2013. The volume weighted average price of Arrium ordinary shares in the 10-day period following the Group's full year financial results announcement to ASX will be used to calculate the number of rights to be issued to Mr Roberts. The rights will vest according to the performance hurdles under the PRP. The Board has discretion to reduce or cancel LTI awards in the event of a material misstatement or other disentitling event.</p>
Notice of termination	<p>Termination by the Company: 12 months notice.</p> <p>Termination by the MD &amp; CEO: 12 months notice.</p>
Termination provisions	<p>In accordance with the ASX Corporate Governance Council Principles of Good Corporate Governance and Best Practice Recommendations, Mr Roberts' termination entitlements have been agreed in advance. The Company is satisfied that Mr Robert's termination entitlements as set out below are reasonable, having regard to current employment practices.</p> <p><b>Death, illness, incapacity or by appropriate notice by either party:</b></p> <ul style="list-style-type: none"> <li>• FAR and any accrued untaken statutory leave entitlements calculated to the agreed termination date.</li> <li>• Any amount of STI that has accrued from the previous financial year. The Board, in its absolute discretion, will determine the amount of the STI payable for the financial year in which termination occurs, if any.</li> </ul> <p>The Board, in its absolute discretion, will determine whether the MD&amp;CEO may withdraw some or all of the shares or rights granted under the LTI Share Plan or Performance Rights Plan which have not vested.</p> <p><b>Termination for cause:</b> No further obligations other than the amount of FAR due to him through to his termination date plus any statutory leave entitlements calculated to the termination date.</p>
Non-compete	<p>Upon termination of the MD&amp;CEO's employment for any reason, the MD&amp;CEO is prohibited from engaging in any activity that would compete with Arrium for a period of 12 months.</p> <p>Non-solicitation restraint for 24 months.</p>

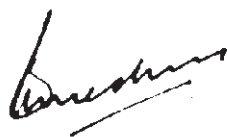
### Other executive KMP

Outlined below are the key termination entitlements with respect to other executive KMP. These KMP are engaged on permanent employment arrangements with termination entitlements as below.

TABLE 19 - TERMINATION ENTITLEMENTS

Notice of termination	<p>Termination by the employee: six months notice.</p> <p>Termination by employer: 12 months notice</p>
Termination provisions	<p><b>Termination for any reason other than for cause:</b> Arrium may pay up to 1.0 times fixed annual reward at the time of termination.</p> <p><b>Termination at the end of a fixed term or the end of an extension period, by death, illness, incapacity, by appropriate notice by Arrium or from the individual due to a fundamental change in the business:</b></p> <p>In addition to the above payments, the Board, in its absolute discretion, will determine whether the individual may be able to withdraw some or all of the shares or rights granted under the LTI Share Plan which have not vested.</p>
Non-compete	<p>Executives are also bound by non-compete clauses generally restraining them for a period of 12 months from taking up employment or engaging in activities which would be to the detriment of Arrium.</p>

Signed in accordance with a resolution of the Directors.



**Peter Smedley**  
Chairman



**Andrew Roberts**  
Managing Director and Chief Executive Officer

Sydney, 20 August 2013

# INCOME STATEMENT

FOR THE YEAR ENDED 30 JUNE

	NOTES	CONSOLIDATED	
		2013 \$m	2012 \$m
Sales revenue	4	6,084.9	6,314.8
Cost of sales		(5,015.2)	(5,194.5)
Gross profit		1,069.7	1,120.3
Other revenue	4	56.0	94.9
Other income	4	36.5	5.5
Operating expenses	4	(1,038.0)	(798.7)
Finance costs	4	(117.4)	(117.7)
Share of net (loss)/profit of investments accounted for using the equity method	11	(0.9)	1.0
<b>Profit from continuing operations before income tax</b>		<b>5.9</b>	<b>305.3</b>
Total income tax benefit/(expense)	5	64.6	(9.0)
<b>Profit from continuing operations after tax</b>		<b>70.5</b>	<b>296.3</b>
Loss from discontinued operations after tax	34	(763.1)	(232.7)
<b>Net (loss)/profit for the year</b>		<b>(692.6)</b>	<b>63.6</b>
Net (loss)/profit for the year is attributable to:			
Non-controlling interests		2.1	5.9
Equity holders of the parent		(694.7)	57.7
		<b>(692.6)</b>	<b>63.6</b>

The accompanying notes form an integral part of the financial statements.

# STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 30 JUNE

	NOTES	CONSOLIDATED	
		2013 \$m	2012 \$m
<b>(Loss)/Profit after tax</b>		<b>(692.6)</b>	<b>63.6</b>
<b>Other comprehensive income</b>			
Items that may be reclassified subsequently to profit or loss:			
Cash flow hedges:			
- net losses taken to equity		(1.5)	(13.4)
- transferred to profit and loss		6.7	7.6
- transferred to initial carrying amount of hedged items		(5.4)	3.6
Currency translation differences:			
- net investment hedges		(100.9)	(23.5)
- reclassified to profit and loss		(6.9)	-
- exchange fluctuations on overseas net assets		148.9	40.5
Other comprehensive income, net of tax		40.9	14.8
<b>Total comprehensive (loss)/income</b>		<b>(651.7)</b>	<b>78.4</b>
Total comprehensive (loss)/income attributable to:			
Equity holders of the parent		(654.8)	71.2
Non-controlling interests		3.1	7.2
		<b>(651.7)</b>	<b>78.4</b>
<b>Earnings per share for profit from continuing operations attributable to the ordinary equity holders of the parent:</b>			
Basic earnings per share (cents per share)	6	5.18	22.02
Diluted earnings per share (cents per share)	6	5.17	22.01
<b>(Loss)/Earnings per share attributable to the ordinary equity holders of the parent:</b>			
Basic (loss)/earnings per share (cents per share)	6	(51.52)	4.30
Diluted (loss)/earnings per share (cents per share)	6	(51.52)	4.30

The accompanying notes form an integral part of the financial statements.

# BALANCE SHEET

AS AT 30 JUNE

	NOTES	CONSOLIDATED	
		2013 \$m	2012 \$m
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash and cash equivalents	24	438.3	268.1
Receivables	7	720.9	953.0
Derivative financial instruments	8	11.3	16.9
Inventories	9	1,280.9	1,450.9
Current tax assets		-	23.0
Other financial assets	10	0.8	-
Other current assets	15	7.2	11.8
Disposal groups and assets held for sale	34	368.6	17.5
<b>Total Current Assets</b>		<b>2,828.0</b>	<b>2,741.2</b>
<b>Non-current Assets</b>			
Receivables	7	13.2	-
Investments accounted for using the equity method	11	12.8	14.0
Derivative financial instruments	8	23.2	29.9
Other financial assets	10	-	1.3
Other non-current assets	15	32.7	27.8
Property, plant and equipment	12	2,687.4	2,754.6
Mine development expenditure	13	492.6	317.9
Other intangibles and goodwill	14	2,035.1	2,822.0
Deferred tax assets	5	486.6	222.7
<b>Total Non-current Assets</b>		<b>5,783.6</b>	<b>6,190.2</b>
<b>TOTAL ASSETS</b>		<b>8,611.6</b>	<b>8,931.4</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>			
Payables	16	1,098.1	1,054.0
Derivative financial instruments	8	13.0	23.8
Interest-bearing liabilities	17	1.1	57.3
Current tax liabilities		23.8	-
Provisions	18	345.3	320.1
Disposal groups and liabilities held for sale	34	175.4	6.8
<b>Total Current Liabilities</b>		<b>1,656.7</b>	<b>1,462.0</b>
<b>Non-current Liabilities</b>			
Payables	16	0.2	0.3
Derivative financial instruments	8	45.2	57.4
Interest-bearing liabilities	17	2,552.1	2,354.1
Deferred tax liabilities	5	399.9	320.0
Provisions	18	224.0	237.0
<b>Total Non-current Liabilities</b>		<b>3,221.4</b>	<b>2,968.8</b>
<b>TOTAL LIABILITIES</b>		<b>4,878.1</b>	<b>4,430.8</b>
<b>NET ASSETS</b>		<b>3,733.5</b>	<b>4,500.6</b>
<b>EQUITY</b>			
Contributed equity	20	3,778.0	3,770.9
Retained earnings	21	(25.7)	734.6
Reserves	22	(21.7)	(66.7)
Parent interests		3,730.6	4,438.8
Non-controlling interests		2.9	61.8
<b>TOTAL EQUITY</b>		<b>3,733.5</b>	<b>4,500.6</b>

The accompanying notes form an integral part of the financial statements.



# CASH FLOW STATEMENT

FOR THE YEAR ENDED 30 JUNE

	NOTES	CONSOLIDATED	
		2013 \$m	2012 \$m
INFLOWS/(OUTFLOWS)			
<b>Cash flows from operating activities</b>			
Receipts from customers		7,044.0	7,646.4
Payments to suppliers and employees		(6,335.1)	(7,022.7)
Net GST paid		(2.5)	(9.8)
Interest received		2.9	2.5
Interest and other finance costs paid		(110.8)	(112.4)
Income taxes paid		(8.3)	(33.9)
<b>Net operating cash flows</b>	24(b)	<b>590.2</b>	<b>470.1</b>
<b>Cash flows from investing activities</b>			
Purchases of property, plant and equipment		(384.4)	(344.6)
Mine development expenditure		(74.2)	(56.1)
Purchase of finite life intangible assets		(0.6)	(0.6)
Purchase of businesses		-	(0.5)
Purchase of controlled entities, net of cash acquired	35	-	(273.4)
Purchase of loan receivable	35	-	(43.8)
Proceeds from sale of property, plant and equipment		52.7	33.3
Proceeds from sale of controlled entity, net of cash disposed	34(e)	68.8	-
Proceeds from sale of business	34(e)	-	82.5
Proceeds from sale of associate		0.8	-
<b>Net investing cash flows</b>		<b>(336.9)</b>	<b>(603.2)</b>
<b>Cash flows from financing activities</b>			
Proceeds from borrowings		1,355.1	3,203.6
Repayment of borrowings		(1,403.0)	(2,861.4)
Repayment of loan from related party		0.5	0.3
Repayment of principal of finance leases		(1.0)	(0.5)
Dividends paid		(62.5)	(89.5)
<b>Net financing cash flows</b>		<b>(110.9)</b>	<b>252.5</b>
<b>Net increase in cash and cash equivalents</b>		<b>142.4</b>	<b>119.4</b>
Cash and cash equivalents at the beginning of the year		271.7	153.7
Effect of exchange rate fluctuations on cash held		24.2	(1.4)
<b>Cash and cash equivalents at the end of the year</b>	24(a)	<b>438.3</b>	<b>271.7</b>

The accompanying notes form an integral part of the financial statements.

# STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 30 JUNE 2013

CONSOLIDATED	NOTES	ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT						NON-CONTROLLING INTERESTS	TOTAL EQUITY
		CONTRIBUTED EQUITY							
		ISSUED CAPITAL	EMPLOYEE COMPENSATION SHARES	TOTAL CONTRIBUTED EQUITY	RETAINED EARNINGS	TOTAL RESERVES	TOTAL PARENT INTERESTS		
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>At 1 July 2012</b>		3,796.5	(25.6)	3,770.9	734.6	(66.7)	4,438.8	61.8	4,500.6
Net (loss)/profit for the year		-	-	-	(694.7)	-	(694.7)	2.1	(692.6)
Other comprehensive income		-	-	-	-	39.9	39.9	1.0	40.9
Total comprehensive income/(loss) for the year, net of tax		-	-	-	(694.7)	39.9	(654.8)	3.1	(651.7)
Transactions with equity holders:									
Share-based payments expense	22(c)	-	-	-	-	6.9	6.9	-	6.9
Dividends paid	23	-	-	-	(67.4)	-	(67.4)	(2.2)	(69.6)
Shares issued under dividend reinvestment plan	20	7.1	-	7.1	-	-	7.1	-	7.1
Transfer to retained earnings		-	-	-	1.8	(1.8)	-	-	-
Disposal of controlled entities		-	-	-	-	-	-	(59.8)	(59.8)
Total transactions with equity holders		7.1	-	7.1	(65.6)	5.1	(53.4)	(62.0)	(115.4)
<b>At 30 June 2013</b>		<b>3,803.6</b>	<b>(25.6)</b>	<b>3,778.0</b>	<b>(25.7)</b>	<b>(21.7)</b>	<b>3,730.6</b>	<b>2.9</b>	<b>3,733.5</b>

CONSOLIDATED	NOTES	ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT						NON-CONTROLLING INTERESTS	TOTAL EQUITY
		CONTRIBUTED EQUITY							
		ISSUED CAPITAL	EMPLOYEE COMPENSATION SHARES	TOTAL CONTRIBUTED EQUITY	RETAINED EARNINGS	TOTAL RESERVES	TOTAL PARENT INTERESTS		
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>At 1 July 2011</b>		3,787.2	(25.6)	3,761.6	770.7	(86.5)	4,445.8	59.9	4,505.7
Net profit for the year		-	-	-	57.7	-	57.7	5.9	63.6
Other comprehensive income		-	-	-	-	13.5	13.5	1.3	14.8
Total comprehensive income for the year, net of tax		-	-	-	57.7	13.5	71.2	7.2	78.4
Transactions with equity holders:									
Share-based payments expense	22(c)	-	-	-	-	6.3	6.3	-	6.3
Dividends paid	23	-	-	-	(93.8)	-	(93.8)	(5.0)	(98.8)
Shares issued, net of transaction costs	20	-	-	-	-	-	-	(0.3)	(0.3)
Shares issued under dividend reinvestment plan	20	9.3	-	9.3	-	-	9.3	-	9.3
Total transactions with equity holders		9.3	-	9.3	(93.8)	6.3	(78.2)	(5.3)	(83.5)
<b>At 30 June 2012</b>		<b>3,796.5</b>	<b>(25.6)</b>	<b>3,770.9</b>	<b>734.6</b>	<b>(66.7)</b>	<b>4,438.8</b>	<b>61.8</b>	<b>4,500.6</b>

The accompanying notes form an integral part of the financial statements.

# NOTES TO THE FINANCIAL STATEMENTS

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of the financial report are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial report comprises the consolidated entity consisting of Arrium Limited and its controlled entities.

### (A) BASIS OF PREPARATION

This financial report is a general purpose financial report, which has been prepared in accordance with the requirements of the *Corporations Act 2001* (Cth), and applicable Australian Accounting Standards (including Australian Interpretations).

The financial report of Arrium Limited for the year ended 30 June 2013 was authorised for issue in accordance with a resolution of the Directors on 20 August 2013.

It is recommended that the financial report be considered together with any public announcements made by Arrium Limited and its controlled entities during the year ended 30 June 2013 in accordance with the continuous disclosure obligations of the *Corporations Act 2001* (Cth).

Certain comparative amounts have been reclassified to conform with the current year's presentation.

### Compliance with IFRS

The financial report complies with Australian Accounting Standards and International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

### Early adoption of standards

The Group has not elected to apply any pronouncements before their operative date in the annual reporting period beginning 1 July 2012.

### Historical cost convention

The financial statements have been prepared under the historical cost convention, except for derivative financial instruments that have been measured at fair value. The carrying values of recognised assets and liabilities that are hedged items in fair value hedges, and are otherwise carried at cost, are adjusted to record changes in the fair values attributable to the risks that are being hedged.

### Critical accounting estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 2.

### Rounding of amounts

The financial report is prepared in Australian dollars. Amounts in the financial statements have been rounded to the nearest hundred thousand dollars, unless specifically stated to be otherwise under the option available

to the Company under ASIC Class Order 98/0100. The Company is an entity to which the class order applies.

### (B) PRINCIPLES OF CONSOLIDATION

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Arrium Limited (the parent entity) at balance date and the results of all subsidiaries for the year then ended. Arrium Limited and its subsidiaries together are referred to in this financial report as the Arrium Group, Group or the consolidated entity.

Subsidiaries are all those entities (including special purpose entities) over which the Group has the power to govern the financial and operating policies so as to obtain benefits from their activities. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether a group controls another entity.

Subsidiaries are consolidated from the date on which control is obtained by the Group and cease to be consolidated from the date on which control ceases. All inter-company balances and transactions, including unrealised profits arising from intra-group transactions, have been eliminated in full.

The financial statements of subsidiaries are prepared for the same reporting period as the parent entity, using consistent accounting policies.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated Income Statement, Statement of Comprehensive Income, Statement of Changes in Equity and Balance Sheet respectively.

### Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of Arrium Limited.

When the Group ceases to have control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in the carrying amount recognised in the Income Statement. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, jointly controlled entity or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to the Income Statement where appropriate.

If the ownership interest in a jointly controlled entity or associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to the Income Statement where appropriate.

### (C) BUSINESS COMBINATIONS

The acquisition method of accounting is used to account for all business combinations, including business combinations involving entities or businesses under common control, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the fair values of the assets transferred, the liabilities incurred and the equity interest issued by the Group. The consideration transferred also includes the fair value of any contingent consideration arrangement and the fair value of any pre-existing equity interest in the subsidiary. Acquisition-related costs are expensed as incurred. Identifiable assets acquired, liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net identifiable assets.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree over the fair value of the Group's share of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the subsidiary acquired and the measurement of all amounts has been reviewed, the difference is recognised directly in the Income Statement as a bargain purchase.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognised in the Income Statement.

### (D) FOREIGN CURRENCY TRANSLATION

#### Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in Australian dollars, which is the functional and presentation currency of Arrium Limited.

### Transactions and balances

Transactions in foreign currencies are translated into the functional currency using exchange rates that approximate those prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at reporting period end exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in the Income Statement, except when deferred in Equity as qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Translation differences on financial assets and liabilities carried at fair value are reported as part of the fair value gain or loss in the Income Statement.

### Group entities

The results and financial position of all subsidiaries (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency of the Group are translated into the presentation currency as follows:

- Assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet
- Income and expenses for each income statement and statement of comprehensive income are translated at average exchange rates
- All resulting exchange differences are recognised as a separate component of equity.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other financial instruments designated as hedges of such investments, are taken to equity. When a foreign operation is sold and any borrowings forming part of the net investment are repaid, the cumulative amount in the translation reserve related to the foreign operation is recognised in the Income Statement, as part of the gain or loss on sale where applicable.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

### (E) REVENUE RECOGNITION

Revenue is recognised and measured at the fair value of the consideration received or receivable, to the extent it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured.

Amounts disclosed as revenue earned from the sale of products or services are net of returns, trade allowances, rebates and amounts collected on behalf of third parties.

Revenue is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer or the service has been delivered and the costs incurred or to

be incurred in respect of the transaction can be measured reliably.

Dividend income is recognised when the right to receive payment is established.

Interest income is recognised on a time proportion basis using the effective interest method.

### (F) INCOME TAXES

The income tax expense or benefit for the period is the tax payable on the current period's taxable income based on the national income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred tax assets and liabilities are recognised for temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements.

Deferred income tax is determined using tax rates which are enacted or substantively enacted for each jurisdiction at balance date and are expected to apply when the related deferred tax asset is realised or the deferred income tax liability is settled. An exception is made for certain temporary differences arising from the initial recognition of an asset or liability. No deferred tax asset or liability is recognised in relation to these temporary differences in a transaction, other than a business combination, that at the time of the transaction affects neither accounting profit nor taxable profit and loss.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in controlled entities where the parent entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Current and deferred tax balances attributable to amounts recognised directly in Equity, are also recognised directly in Equity.

### Tax consolidation legislation

Arrium Limited and its wholly-owned Australian controlled entities have implemented the tax consolidation legislation.

The head entity, Arrium Limited, and the controlled entities in the tax consolidated group account for their own current and deferred tax amounts. The Group has applied the stand-alone taxpayer approach in determining the appropriate amount of current taxes to allocate to members of the tax consolidated group.

Assets or liabilities arising under tax sharing agreements with the tax consolidated entities are recognised as amounts receivable from or payable to the head entity. Details of the tax sharing agreement are disclosed in Note 5.

Any difference between the amounts assumed and amounts receivable or payable under the tax sharing agreements are recognised as a contribution to (or distribution from) wholly-owned tax consolidated entities.

### Minerals Resource Rent Tax

Minerals Resource Rent Tax is accounted for as an income tax, as described above, as the calculation of the amount payable falls within the definition of "taxable profit" in accordance with AASB 112.

### (G) GOODS AND SERVICES TAX (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the taxation authority. In these circumstances, it is recognised as part of the cost of acquisition of the asset, or as part of the expense.

Receivables and payables in the Balance Sheet are shown inclusive of GST. The net amount of GST recoverable from, or payable to the taxation authority is included with other receivables or payables in the Balance Sheet.

The GST components of cash flows which are recoverable from, or payable to the taxation authority are classified as part of operating cash flows.

### (H) CASH AND CASH EQUIVALENTS

Cash and cash equivalents in the Balance Sheet comprise cash at bank and in hand and short-term deposits with an original maturity of three months or less, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purposes of the Cash Flow Statement, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts. Bank overdrafts are included within current interest-bearing liabilities on the Balance Sheet.

### (I) TRADE AND OTHER RECEIVABLES

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less an allowance for any uncollectible amounts.

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES CONTINUED

Collectibility of trade receivables is reviewed on an ongoing basis. Debts that are known to be uncollectible are written off when identified. An allowance for doubtful debts is raised when there is objective evidence that the Group will not be able to collect the debt. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that the trade receivable is impaired.

The amount of doubtful debt provided for is recognised in the Income Statement within operating expenses. When a trade receivable for which an allowance has been recognised becomes uncollectible in a subsequent period, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against operating expenses in the Income Statement.

### (J) INVENTORIES

Inventories, including raw materials, work in progress and finished goods, are valued at the lower of cost and net realisable value. Cost comprises direct materials, direct labour and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. They include the transfer from equity of any gains or losses on qualifying cash flow hedges relating to purchases of raw material. Costs are assigned to individual items of inventory on the basis of weighted average cost. Costs of purchased inventory are determined after deducting rebates and discounts. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

### (K) INVESTMENTS AND OTHER FINANCIAL ASSETS

The Group classifies its financial assets in the following categories: financial assets at fair value through profit and loss; loans and receivables; and available for sale financial assets. The classification depends on the purpose for which the investments were acquired. Management determines the classification of its investments at initial recognition and re-evaluates this designation at each reporting date. The Group does not have any held to maturity investments or available for sale investments.

#### Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are financial assets held for trading, and are classified as such if they are acquired for the purpose of selling in the near term. Derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on investments held for trading are recognised in the Income Statement. Assets in this category are classified as current assets.

#### Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are carried at amortised cost using the effective interest method. Gains and losses are recognised in the

Income Statement when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

### Impairment

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that loss event (or events) has an impact on the estimated future cash flows of the financial assets or group of financial assets that can be reliably estimated. In the case of equity investments classified as available for sale, a significant or prolonged decline in the fair value of the security below its cost is considered an indicator that the assets are impaired.

### (L) INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Investments in jointly controlled entities and associates are accounted for in the consolidated financial statements by applying the equity method of accounting, after initially being recognised at cost. Under the equity method, investments in jointly controlled entities and associates are carried in the consolidated balance sheet at cost plus post-acquisition changes in the Group's share of net assets of the jointly controlled entity or associate. After application of the equity method, the Group determines whether it is necessary to recognise any impairment loss with respect to the Group's net investment in jointly controlled entities or associates.

The Group's share of the jointly controlled entity's and associate's post-acquisition profits or losses is recognised in the Income Statement and its share of post-acquisition movements in reserves is recognised in reserves. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. Should the Group's share of losses in a jointly controlled entity or associate equal or exceed its interest in the entity, no further losses are recognised, unless it has incurred obligations or made payments on behalf of the entity.

The jointly controlled entity and associate's accounting policies conform to those used by the Group for like transactions and events in similar circumstances.

### (M) IMPAIRMENT OF ASSETS

Goodwill and intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely

independent of the cash inflows from other assets or groups of assets (cash generating units). Non-financial assets other than goodwill that have suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

### (N) LEASED ASSETS

Leases of property, plant and equipment where the Group, as lessee, has substantially all of the risks and benefits incidental to ownership of the leased item are classified as finance leases. These are initially recognised at the fair value of the leased asset, or if lower, the present value of the minimum lease payments as determined at the inception of the lease. The corresponding lease obligation, net of finance charges, is included in interest-bearing liabilities. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised as an expense in the Income Statement.

The property, plant and equipment acquired under finance leases are depreciated over the shorter of the estimated useful life of the assets and the lease term.

Leases in which a significant portion of the risks and rewards of ownership are not transferred to the Group as lessee are classified as operating leases. Operating lease payments are recognised as an expense in the Income Statement on a straight-line basis over the lease term. Lease incentives are recognised in the Income Statement as an integral part of the total lease expense.

### (O) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment assets are carried at cost less any accumulated depreciation and/or impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the items. Cost may also include transfers from equity of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the Income Statement during the reporting period in which they are incurred.



### Depreciation of property, plant and equipment

Land is not depreciated. Depreciation on other assets is calculated on a straight-line basis over the estimated useful life of the specific assets as follows:

Buildings:	20-40 years
Plant and equipment:	3-30 years
Capitalised leased assets:	Up to 30 years or life of lease, whichever is shorter.

The assets' residual values, useful lives and amortisation methods are reviewed, and adjusted if appropriate, at each reporting date.

### Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount. These are included in the Income Statement.

### (P) EXPLORATION AND EVALUATION EXPENDITURE

Expenditure on exploration and evaluation is accounted for in accordance with the "area of interest" method. Exploration and evaluation expenditure is capitalised provided the rights to tenure of the area of interest is current and either:

- The exploration and evaluation activities are expected to be recouped through successful development and exploitation of the area of interest, or alternatively, by its sale, or
- Exploration and evaluation activities in the area of interest have not at the reporting date, reached a stage that permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in, or relating to, the area of interest are continuing.

When the technical feasibility and commercial viability of extracting a mineral resource have been demonstrated, then any capitalised exploration and evaluation expenditure is reclassified as capitalised mine development. Prior to reclassification, capitalised exploration and evaluation expenditure is assessed for impairment.

### Impairment

The carrying value of capitalised exploration and evaluation expenditure is assessed for impairment at the cash generating unit level whenever facts and circumstances suggest that the carrying amount of the asset may exceed its recoverable amount.

An impairment exists when the carrying amount of an asset or cash generating unit exceeds its estimated recoverable amount. The asset or cash generating unit is then written down to its recoverable amount.

Any impairment losses are recognised in the Income Statement.

### (Q) MINE DEVELOPMENT EXPENDITURE - PRE-PRODUCTION

Pre-production mine development expenditure represents the costs incurred in preparing mines for production, and includes stripping and waste removal costs incurred before production commences. These costs are capitalised to the extent they are expected to be recouped through successful exploitation of the related mining leases. Once production commences, these costs are amortised on a straight-line basis over the estimated useful life of the mine.

### Impairment

The carrying value of pre-production mine development expenditure is assessed for impairment at the cash generating unit level whenever facts and circumstances suggest that the carrying amount of the asset may exceed its recoverable amount.

The recoverable amount of pre-production mine development expenditure is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and risks specific to the asset.

An impairment exists when the carrying amount of an asset or cash generating unit exceeds its estimated recoverable amount. The asset or cash generating unit is then written down to its recoverable amount. Any impairment losses are recognised in the Income Statement.

### (R) DEFERRED STRIPPING COSTS

In mining operations, it is necessary to remove overburden and other barren waste materials to access ore from which minerals can be economically extracted. The process of mining overburden and waste materials is referred to as stripping. Stripping costs incurred before production commences are included within capitalised mine development expenditure and subsequently amortised. The Group defers stripping costs incurred subsequently during the production stage of operation. Stripping ratios are a function of the quantity of ore mined compared with the quantity of overburden or waste required to be removed to mine the ore. Deferral of these post-production costs to the Balance Sheet is made, where appropriate, when actual stripping ratios vary from the average life of mine ratio.

Costs which have previously been deferred to the Balance Sheet are recognised in the Income Statement on a unit of production basis utilising the average stripping ratios. Changes in estimates of average stripping ratios are accounted for prospectively from the date of the change.

As it is not possible to separately identify cash inflows relating to deferred overburden removal costs, such assets are grouped with other assets of a cash generating unit for the purposes of undertaking assessments, where necessary, based on future cash flows for the cash generating unit as a whole.

### (S) GOODWILL AND OTHER INTANGIBLE ASSETS

#### Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net identifiable net assets of the acquired subsidiary as at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in intangible assets.

Following initial recognition, goodwill is measured at cost less any accumulated impairment losses.

For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash generating units or groups of cash generating units that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment losses recognised for goodwill are not subsequently reversed.

Gains and losses on the disposal of an operation include the carrying amount of goodwill relating to the operation sold.

#### System development costs

Costs incurred in developing products or systems and costs incurred in acquiring software and licences that will contribute to future period financial benefits through revenue generation and/or cost reduction are capitalised as system development costs. Costs capitalised include external direct costs of materials and service, direct payroll and payroll related costs of employees' time spent on the project.

System development costs include only those costs directly attributable to the development phase and are only recognised following completion of technical feasibility and where the Group has an intention and ability to use the asset.

#### Other intangible assets

Intangible assets acquired separately or in a business combination are initially measured at cost. The cost of an intangible asset acquired in a business combination is its fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and/or impairment losses. Internally generated intangible assets, excluding capitalised development costs, are not capitalised and expenditure is recognised in the Income Statement in the year in which the expenditure is incurred.

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the method for an intangible asset with a finite useful life is reviewed at least at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for prospectively by changing the amortisation period or

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES CONTINUED

method as appropriate, which is a change in accounting estimate. The amortisation expense on intangible assets with finite lives is recognised in the Income Statement in the expense category consistent with the function of the intangible asset.

Intangible assets with indefinite useful lives are tested for impairment annually, either individually or at the cash generating unit level consistent with the methodology outlined for goodwill. Such intangibles are not amortised. The useful life of an intangible asset with an indefinite life is reviewed at each reporting period to determine whether indefinite life assessment

continues to be supported. If not, the change in useful life assessment to finite is accounted for prospectively as a change in accounting estimate.

### Research and development costs

Research costs are expensed as incurred. Costs incurred on development projects are recognised as intangible assets when it is probable that the project will, after considering its commercial and technical feasibility, be completed and generate future economic benefits and its costs can be measured reliably. The expenditure capitalised comprises all directly attributable

costs, including costs of materials, services, direct labour and appropriate proportion of overheads. Other development expenditures that do not meet this criteria are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Capitalised development costs are recorded as intangible assets and amortised from the point at which the asset is ready for use on a straight-line basis over its useful life.

A summary of the policies applied to the Group's intangible assets is as follows:

	USEFUL LIFE	AMORTISATION METHOD	INTERNALLY GENERATED OR ACQUIRED
Patented technology	Finite	Straight line over estimated useful life (17 years)	Acquired
Brand names and know how	Indefinite	No amortisation	Acquired
	Finite	Straight line over estimated useful life (2-3 years)	
Customer and supplier contracts	Finite	Timing of projected cash flows of the contracts over 1 to 15 years	Acquired
System development and other capitalised development costs	Finite	Straight line over estimated useful life (5 years)	Internally generated
Mining tenement rights	Finite	Straight line over estimated useful life (7 years)	Acquired
Exploration rights	Indefinite	No amortisation	Acquired

### (T) TRADE AND OTHER PAYABLES

Trade and other payables are carried at amortised cost. They represent liabilities for goods and services provided to the Group prior to the end of the financial year which are unpaid. These amounts are unsecured except as may arise solely by operation of the *Personal Property Securities Act 2009 (Cth)*.

Other payables include liabilities in respect of trade financing within the normal operating cycle of the business.

### (U) PROVISIONS

Provisions are recognised when the Group has a present obligation (either legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the obligation. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the balance sheet date. If the effect of the time value of money is material, provisions are discounted using a current pre-tax discount rate that reflects the time value of money and the risks specific to the liability. The increase in the provision resulting from the passage of time is recognised as a finance cost.

### (V) EMPLOYEE BENEFITS

#### Wages and salaries, annual leave and long service leave

Provision is made for the liability for employee benefits arising from services rendered by employees to balance date. Employee benefits expected to be settled within one year, together with entitlements arising from wages and salaries and annual

leave which will be settled after one year, are measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Other employee benefits payable later than one year are measured at the present value of the estimated future cash outflows to be made for those benefits.

#### Long service leave

The liability for long service leave is recognised in the provision for employee benefits and is measured at the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currencies that match as closely as possible the estimated future cash outflows.

#### Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date, or when an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits when it is demonstrably committed to either terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to present value.

#### Retirement benefit obligations

A liability or asset in respect of the Group's defined benefit plan is recognised in the Balance Sheet, and is measured as

the present value of the defined benefit obligation (using the projected unit credit method) at the reporting date less unrecognised actuarial gains (plus any unrecognised actuarial losses) less the fair value of the plan's assets at that date and any unrecognised past service cost. The present value of the defined benefit obligation is based on expected future payments, which arise from membership of the fund to the reporting date, calculated annually by independent actuaries. Consideration is given to expected future salary levels, experience of employee departures and periods of service.

The "corridor approach" is applied in determining the periodic impact on the Income Statement. Under this approach, cumulative actuarial gains or losses greater than 10% of the present value of the defined benefit obligation or 10% of the fair value of plan assets are recognised through the Income Statement over the average remaining service period of the employees in the plan on a straight-line basis.

Contributions to the defined contribution fund are recognised as an expense as they become payable. Prepaid contributions are recognised as an asset to the extent that a cash refund or reduction in the future payments is available.

#### Equity-based compensation arrangements

The Arrium Group provides benefits to employees (including Directors) in the form of share-based payment transactions, whereby employees render services in exchange for Arrium Limited ordinary shares or rights to ordinary shares (equity-settled transactions). These instruments are held in trust and are subject to certain performance conditions.

The cost of these equity-settled transactions with employees is measured by reference to the fair value of the instruments at the date of the grant. The fair value is determined by an external valuation using a Monte Carlo Simulation, binomial tree methodology or a Black Scholes pricing model. In valuing equity-settled transactions, no account is taken of any performance conditions, other than those conditions that are linked to the price of the ordinary shares of Arrium Limited (market conditions).

The cost of the equity-settled transactions is recognised together with a corresponding increase in Equity, over the period in which the performance conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (the vesting date).

The cumulative expense recognised for equity-settled transactions at each reporting date until vesting date reflects:

- The extent to which the vesting period has expired, and
- The number of equity instruments that are estimated to ultimately vest, based on the best available information at the reporting date.

This valuation is formed based on the best available information at balance date. No adjustment is made for the likelihood of market conditions being met, as the effect of these conditions is included in the determination of fair value at grant date.

The dilutive effect, if any, of outstanding options or unvested shares, is reflected as additional share dilution in the computation of diluted earnings per share.

Arrium Limited ordinary shares acquired on-market and held in trust are classified and disclosed as Employee Compensation Shares and deducted from Equity.

#### **(W) RESTORATION AND REHABILITATION**

Restoration costs which are expected to be incurred are provided for as part of the cost of the exploration, evaluation, development, construction or production phases that give rise to the need for restoration. The costs include obligations relating to reclamation, waste site closure, plant closure and other costs associated with the restoration of the site. These estimates of the restoration obligations are based on anticipated technology and legal requirements and future costs. In determining the restoration obligations, there is an assumption that no significant changes will occur in the relevant Federal and State legislation in relation to restoration in the future.

The estimated restoration costs for which the entity has a present obligation are discounted to their net present value. To the extent that the activity that creates this obligation relates to the construction of an asset, a corresponding amount is added to the related asset. Otherwise, the amount is recognised in the Income Statement.

Changes in the measurement of the existing provision that result from changes in the estimated timing or amount of cash flows, or a change in the discount rate, are adjusted

on a prospective basis against the asset to which the restoration relates. Where the related asset has reached the end of its useful life, all subsequent changes in the provision are recognised in the Income Statement as they occur.

The charge to the Income Statement is a combination of the depreciation of the asset over the estimated mine life and finance cost representing the unwind of the discounting factor.

#### **(X) INTEREST-BEARING LIABILITIES**

Borrowings are initially recognised at fair value less any transaction costs. Subsequent to initial recognition, borrowings are measured at amortised cost. Any difference between the proceeds (net of the transaction costs) and the redemption amount is recognised in the Income Statement over the period of the borrowings using the effective interest rate method.

Borrowings are classified as current interest-bearing liabilities where there is an obligation to settle the liability within 12 months, and as non-current interest-bearing liabilities where the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance date.

#### **(Y) FINANCE COSTS**

Finance costs include interest, amortisation of discounts or premiums relating to borrowings, amortisation of ancillary costs incurred in connection with arrangement of borrowings and finance leases and net receipt or payment from interest rate swaps. Finance costs are expensed in the Income Statement, except where they relate to the financing of projects under construction, where they are capitalised up to the date of commissioning or sale.

#### **(Z) CONTRIBUTED EQUITY**

##### **Issued capital**

Issued and paid-up capital is recognised at the fair value of the consideration received by the Company. Any transaction costs arising on the issue of ordinary shares are recognised directly in Equity as a reduction of the share proceeds received, net of tax.

Ordinary share capital bears no special terms or conditions affecting income or capital entitlements of the Arrium shareholders.

Ordinary shares have the right to receive dividends as declared and, in the event of winding up of the Company, to participate in the proceeds from the sale of all surplus assets in proportion to the number of and amounts paid on shares held.

Ordinary shares entitle their holder to one vote, either in person or by proxy, at a meeting of the Company.

##### **Employee compensation shares**

Shares in the Arrium Group purchased for equity-based compensation arrangements are held in Trust and deducted from contributed equity in employee compensation shares. Upon vesting, the shares are transferred from employee

compensation shares into the share-based payment reserve.

Shares issued under the former Share Plan carry voting rights and the beneficial holder is entitled to any dividends paid during the vesting period. There are no voting entitlements attached to the rights held in trust, nor are any dividends paid until such time as the rights vest and the shares are allotted.

#### **(AA) DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING ACTIVITIES**

Derivatives are initially recognised at fair value on the date that a derivative contract is entered into and are subsequently remeasured at fair value. The method of recognising the resulting gain or loss depends on whether the derivative qualifies for hedge accounting, and if so, the nature of the item being hedged. The Arrium Group designates certain derivatives as either:

- Hedges of the fair value of recognised assets or liabilities or firm commitments (fair value hedges)
- Hedges of a particular risk associated with the cash flows of recognised assets and liabilities and highly probable forecast transactions (cash flow hedges)
- Hedges of a net investment in a foreign operation (net investment hedges).

At the inception of a hedge relationship, the Group formally designates and documents the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Group also documents its assessment, both at inception and on an ongoing basis, of whether the hedges have been, and will continue to be, highly effective in offsetting changes in the fair values or the cash flows of hedged items throughout the financial reporting periods for which they were designated.

##### **Fair value hedges**

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the Income Statement, together with any changes in the fair value of the hedged asset, liability or firm commitment that are attributable to the hedged risk. The Group discontinues fair value hedge accounting if the hedging instrument expires, or is sold, terminated or exercised, the hedge no longer meets the criteria for hedge accounting or the Group revokes the designation. Any adjustment to the carrying amount of a hedged financial instrument for which the effective interest method is used is amortised to the Income Statement.

##### **Cash flow hedges**

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in Equity as a hedging reserve. The change in fair value relating to the ineffective portion is recognised immediately in the Income Statement.



## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES CONTINUED

Amounts accumulated in Equity are transferred to the Income Statement in the periods when the hedged item affects profit or loss such as when hedged income or expenses are recognised or when a forecast sale or purchase occurs. When the hedged item is the cost of a non-financial asset or liability, the amounts taken to equity are transferred to the initial carrying amount of the non-financial asset or liability.

When a hedging instrument expires or is sold or terminated or exercised without replacement or rollover, any amounts recognised in Equity remain in Equity until the forecast transaction occurs. When a forecast transaction is no longer expected to occur, amounts recognised in Equity are immediately transferred to the Income Statement.

### Net investment hedges

Hedges of net investments in foreign operations are accounted for in a similar way to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised directly in equity while any gains or losses relating to the ineffective portion are recognised in profit or loss. On disposal of the foreign operation, the cumulative value of any such gains or losses recognised directly in equity is transferred to the Income Statement.

### Derivatives that do not qualify for hedge accounting

Certain derivatives instruments do not qualify for hedge accounting and are classified as held for trading financial instruments. Changes in the fair value of any such derivatives are recognised immediately in the Income Statement.

### Fair value estimation

The fair value of financial assets and liabilities must be estimated for recognition and measurement and for disclosure purposes.

The fair value of derivative financial instruments that are not traded in active markets is determined using valuation techniques. The Arrium Group uses a variety of methods and assumptions that are based on market conditions existing at balance date. Quoted market prices or dealer quotes for similar instruments are used for long-term debt instruments held. Other techniques, such as estimated discounted cash flows, are used to determine fair values of the remaining financial instruments. The fair value of interest rate swaps is calculated as the present value of the estimated cash flows. The fair value of forward exchange contracts is determined using forward exchange market rates at balance date.

### (AB) GOVERNMENT GRANTS

Grants from the government are recognised at their fair value when there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the Income Statement over the period necessary to match them with the costs they are intended to compensate.

### (AC) NON-CURRENT ASSETS (OR DISPOSAL GROUPS) HELD FOR SALE AND DISCONTINUED OPERATIONS

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. They are measured at the lower of their carrying amount and fair value less costs to sell, except for assets such as deferred tax assets, assets arising from employee benefits and financial assets, which are specifically exempt from this requirement.

An impairment loss is recognised for any initial or subsequent writedown of the asset (or disposal group) to fair value less costs to sell. A gain is recognised for any subsequent increases in fair value less costs to sell of an asset (or disposal group), but not in excess of any cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of the sale of the non-current asset (or disposal group) is recognised at the date of derecognition.

Non-current assets (including those that are part of a disposal group) are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held for sale continue to be recognised.

Non-current assets classified as held for sale and the assets of a disposal group classified as held for sale are presented separately from the other assets in the balance sheet. The liabilities of a disposal group classified as held for sale are presented separately from other liabilities in the balance sheet.

A discontinued operation is a component of the entity that has been disposed of or is classified as held for sale and that represents a separate major line of business or geographical area of operations, is part of a single co-ordinated plan to dispose of such a line of business or area of operations, or is a subsidiary acquired exclusively with a view to resale. The results of discontinued operations are presented separately in the Income Statement.

### (AD) CARBON EMISSIONS LIABILITY AND CARBON UNITS

Arrium receives free carbon units for facilities which qualify as Emissions Intensive Trade Exposed activities under the Jobs and Competitiveness Program. These are to partially offset both the direct carbon emissions liability under the Australian Government's Clean Energy Legislative Package 2011 and the indirect carbon cost from higher electricity charges. Free carbon units are recognised as an intangible asset at fair value and amortised to the Income Statement over the compliance period to match the additional expense on carbon emissions. Purchases of carbon units are recognised as an intangible asset at cost. Purchased carbon units are used to acquit the emissions liability by offsetting the liability against the intangible asset.

The carbon emissions liability is recognised as a provision on the Balance Sheet based on the best estimate of the expenditure required to settle the obligation. The excess

of carbon emissions liability over the carrying amount of available carbon units are measured at fair value. Carbon emissions expense, based on actual production and emissions data, is recognised either as cost of sales in the income statement or cost of inventories in the Balance Sheet.

### (AE) CHANGES IN ACCOUNTING POLICY AND DISCLOSURES

The accounting policies adopted are consistent with those of the previous financial year except for the following new and amended Australian Accounting Standards and AASB Interpretations adopted as at 1 July 2012:

#### AASB 2011-9 Amendments to Australian Accounting Standards

This standard requires entities to group items presented in other comprehensive income on the basis of whether they might be reclassified subsequently to profit or loss and those that will not.

These changes have been reflected in the Group's Statement of Comprehensive Income.

#### (AF) NEW ACCOUNTING STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE

A number of new standards, amendments to standards and interpretations are effective for annual reporting periods beginning after 30 June 2013, and have not been applied in preparing these consolidated financial statements. None of these are expected to have a significant effect on the consolidated financial statements of the Group with the exception of the below:

#### AASB 10 Consolidated Financial Statements (applicable to annual reporting periods beginning on or after 1 January 2013)

AASB 10 establishes a new control model that applies to all entities. It replaces part of AASB 127 Consolidated and Separate Financial Statements dealing with the accounting for consolidated financial statements and UIG-112 Consolidation - Special Purpose Entities.

The new control model broadens the situations when an entity is considered to be controlled by another entity and includes new guidance for applying the model to specific situations, including when acting as a manager may give control, the impact of potential voting rights and when holding less than a majority of voting rights may give control.

The adoption of this standard is not expected to have a material impact on the Group.

#### AASB 11 Joint Arrangements (applicable to annual reporting periods beginning on or after 1 January 2013)

AASB 11 replaces AASB 131 Interests in Joint Ventures and UIG-113 Jointly-controlled Entities - Non-monetary Contributions by Ventures.

AASB 11 uses the principle of control in AASB 10 to define joint control, and therefore the determination of whether joint control exists may change. In addition it removes the option to account for jointly controlled entities (JCEs) using proportionate consolidation. Instead, accounting for a joint

arrangement is dependent on the nature of the rights and obligations arising from the arrangement. Joint operations that give the venturers a right to the underlying assets and obligations themselves is accounted for by recognising the share of those assets and obligations. Joint ventures that give the venturers a right to the net assets is accounted for using the equity method.

The adoption of this standard is not expected to have a material impact on the Group.

**AASB 13 Fair Value Measurement (applicable to annual reporting periods beginning on or after 1 January 2013)**

AASB 13 establishes a single source of guidance for determining the fair value of assets and liabilities. AASB 13 does not change when an entity is required to use fair value, but rather, provides guidance on how to determine fair value when fair value is required or permitted. Application of this definition may result in different fair values being determined for the relevant assets.

AASB 13 also expands the disclosure requirements for all assets or liabilities carried at fair value. This includes information about the assumptions made and the qualitative impact of those assumptions on the fair value determined.

The impact on the Group's financial statements as a result of this standard is not expected to be material.

**AASB 119 Employee Benefits (applicable to annual reporting periods beginning on or after 1 January 2013)**

The main change introduced by this standard is to revise the accounting for defined benefit plans. The amendment requires that the liabilities arising from such plans is recognised in full with actuarial gains and losses being recognised in other comprehensive income. The corridor approach will no longer be permitted. The standard also revised the method of calculating the return on plan assets.

The revised standard also changes the definition of short-term employee benefits. The distinction between short-term and other long-term employee benefits is now based on whether the benefits are expected to be settled wholly within 12 months after the reporting date.

Had the Group adopted the new rules in the current reporting period, the loss for the current period would have been approximately \$6.6 million lower, other comprehensive income \$54.0 million higher and total comprehensive income for the period approximately \$21.9 million lower than reported. In the Balance Sheet as at 30 June 2013, retirement benefit obligations would have been \$11.4 million higher, deferred tax assets \$8.6 million higher, net defined benefit assets \$19.2 million lower and total equity \$21.9 million lower.

The Group will apply the new standard when it becomes operative, being from 1 July 2013.

**Interpretation 20 Stripping Costs in the Production Phase of a Surface Mine (applicable to annual reporting periods beginning on or after 1 January 2013)**

This interpretation applies to stripping costs incurred during the production phase of a surface mine. Production stripping costs are to be capitalised as part of an asset, if an entity can demonstrate that it is probable future economic benefits will be realised, the costs can be reliably measured and the entity can identify the component of an ore body for which access has been improved. This asset is to be called the "stripping activity asset".

The stripping activity asset shall be depreciated or amortised on a systematic basis, over the expected useful life of the identified component of the ore body that becomes more accessible as a result of the stripping activity. The units of production method shall be applied unless another method is more appropriate.

Had the Group adopted the new rules in the current period, the impact on the Income Statement and total comprehensive income would not be material. In the Balance Sheet as at 30 June 2013, deferred stripping asset would have been approximately \$87 million lower, inventory \$3 million lower, deferred tax liability \$26 million lower and retained earnings \$63 million lower.

The Group will apply the new standard when it becomes operative, being from 1 July 2013.

**AASB 9 Financial Instruments (applicable to annual reporting periods beginning on or after 1 January 2015)**

AASB 9 includes requirements for the classification and measurement of financial assets. It was further amended by AASB 2010-7 to reflect amendments to the accounting for financial liabilities. These requirements improve and simplify the approach for classification and measurement of financial assets compared with the requirements of AASB 139. The main changes are described below.

- (a) Financial assets that are debt instruments will be classified based on (1) the objective of the entity's business model for managing the financial assets; (2) the characteristics of the contractual cash flows.
- (b) Allows an irrevocable election on initial recognition to present gains and losses on investments in equity instruments that are not held for trading in other comprehensive income. Dividends in respect of these investments that are a return on investment can be recognised in profit or loss and there is no impairment or recycling on disposal of the instrument.
- (c) Financial assets can be designated and measured at fair value through profit or loss at initial recognition if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities, or recognising the gains and losses on them, on different bases.
- (d) Where the fair value option is used for financial liabilities, the change in fair value is to be accounted for as follows:
  - The change attributable to changes in credit risk is presented in other comprehensive income (OCI)
  - The remaining change is presented in the Income Statement.

If this approach creates or enlarges an accounting mismatch in the profit or loss, the effect of the changes in credit risk are also presented in profit or loss.

The impact of the new standard on the Group's financial statements has not yet been determined.

## 2. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses based on historical experience and on other various factors it believes to be reasonable under the circumstances. Actual results may differ from the judgements, estimates and assumptions. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

### SIGNIFICANT ACCOUNTING JUDGEMENTS

**Impairment of non-financial assets other than goodwill and intangibles with indefinite useful lives**

The Group assesses impairment of all assets at each reporting date by evaluating conditions specific to the Group and to the particular asset or cash generating unit (CGU) that may lead to impairment. These include business performance, technology, economic and political environments and future business expectations. If an impairment indicator exists, the recoverable amount of the asset is determined. Given the current uncertain economic

environment, management considered that the indicators of impairment were significant enough, and as such, these assets have been tested for impairment in this financial period. Refer to Note 14 for impairment recognised in the current financial year. Based on the recoverable amount estimates, the carrying value of the Group's non-financial assets and groups of assets continues to be supported.

### Taxation

The Group is subject to income taxes in Australia and jurisdictions where it has foreign operations. There are many transactions and calculations undertaken during the ordinary course of business for

## 2. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS CONTINUED

which the ultimate tax determination is uncertain. Judgement is also required in assessing whether deferred tax assets and certain deferred tax liabilities are recognised on the Balance Sheet and the application of income tax legislation. These judgements are subject to risk and uncertainty, hence there is a possibility that changes in circumstances will alter expectations, which may impact the amount of tax assets and liabilities recognised on the Balance Sheet and the amount of other tax losses and temporary differences not yet recognised. In such circumstances, some or all of the carrying amounts of recognised tax assets and liabilities may require adjustment, resulting in a corresponding credit or charge to the Income Statement.

Deferred tax assets, including those arising from unrecovered tax losses, capital losses and temporary differences (including those relating to MRRT), are recognised only where it is considered more likely than not that they will be recovered, which is dependent on the generation of sufficient future taxable profits.

### SIGNIFICANT ACCOUNTING ESTIMATES AND ASSUMPTIONS

#### Impairment of goodwill and intangibles with indefinite useful lives

The Group determines whether goodwill and intangibles with indefinite useful lives are impaired on at least an annual basis. This requires an estimation of the recoverable amount of the cash generating units to which the goodwill and intangibles with indefinite useful lives are allocated using a value in use discounted cash flow methodology. The assumptions used in this estimation of recoverable amount and the carrying amount of goodwill and intangibles with indefinite useful lives are detailed in Note 14.

#### Provision for restoration and rehabilitation

Restoration and rehabilitation costs are a normal consequence of the Group's operations. The provisions include future cost estimates associated with dismantling, closure and decontamination of various sites. The calculation of the provisions require assumptions such as application of environmental legislation, site closure dates, available technologies and consultant cost estimates.

The ultimate cost of restoration and rehabilitation is uncertain and costs can vary in response to many factors including changes to relevant legal requirements, the emergence of new restoration techniques or experience at other sites. These uncertainties may result in future actual expenditure differing from the amounts currently provided. The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the site. Changes to the estimated future costs for sites are recognised in the Balance Sheet by adjusting both the expense or asset (if applicable) and provision. The assumptions used in the estimation of restoration and rehabilitation provisions are detailed in Note 18.

#### Share-based payment transactions

The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date of grant. The fair value is determined by an external valuer using a Monte-Carlo Simulation, binomial tree methodology or a Black Scholes pricing model, using the assumptions detailed in Note 29. The accounting estimates and assumptions relating to equity-settled share-based payment would have no impact on the carrying amounts of assets and liabilities within the next annual reporting period but may impact expenses and equity.

#### Defined benefit plans

Various actuarial assumptions are required when determining the Group's pension schemes and other post-employment benefit obligations. AASB 119 Employee Benefits requires employee benefit provisions and defined benefit plan liabilities to be determined by discounting future cash flows using discount rates determined with reference to market yields at the end of the reporting period on high quality corporate bonds or, in countries where there is no deep market in such bonds, using market yields at the end of the period on government bonds. In re-estimating Australian employee benefit provisions and defined benefit plan liabilities for financial reporting purposes at 30 June 2013, Arrium Group has changed from using market yields on Australian Commonwealth government bonds to a blend of market yields on Australian Commonwealth government and state government bonds. This has resulted in a decrease in the Australian defined benefit plan liabilities of approximately \$4.2 million after tax effect. The impact of changes in discount rates on employee benefit provisions was not material.

#### Estimation of useful lives of assets

The estimation of the useful lives of assets has been based on historical experience as well as manufacturers' warranties. In addition, the condition of the assets is assessed at least annually and considered against the remaining useful life. Adjustments to useful lives are made when considered necessary.

#### Ore reserve and resource estimates

Ore resources are estimates of the mineralisation that has reasonable prospects for economical extraction in the future as defined by the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Estimates are based largely on geological information. There is no guarantee that all mineral resources will convert to ore reserves.

Ore reserves are derived from the Group's Ore Resources as defined under the JORC Code. They are estimates of the amount of ore that can be economically and legally extracted from the Group's mining properties. The Group estimates its ore reserves based on information compiled by competent persons as defined by the JORC Code. The estimation of recoverable reserves is based upon factors such as estimates of foreign exchange rates, commodity prices, future capital requirements, and production costs along with geological assumptions and judgements made in estimating the size and grade of the ore body.

Changes in the reserve or resource estimates may impact upon the carrying value of exploration and evaluation assets, mine properties, property plant and equipment, provision for rehabilitation and depreciation and amortisation charges.

#### Australian Government's carbon pricing mechanism

The Australian Government's carbon pricing mechanism commenced on 1 July 2012. It has impacted the cash flows of the Group in the financial year ended 30 June 2013 and is expected to have an impact on the future cash flows of the Group.

Arrium's carbon emission liability is estimated based on actual production and emission data. The carbon emissions liability at year end is reduced by any carbon units surrendered to the Clean Energy Regulator during the year to acquit the emissions liability.

The Group has incorporated the expected impact of the carbon pricing mechanism in its impairment testing as at 30 June 2013 based upon its assessment of the Clean Energy Legislative Package and associated regulations, including the benefit of assistance from the Steel Transformation Plan and free unit allocations for Emissions Intensive Trade Exposed facilities.

#### Minerals Resource Rent Tax

The Minerals Resource Rent Tax (MRRT) applies to iron ore and coal extraction activities from 1 July 2012. The MRRT applies to Arrium's iron ore mining operations both to the export sales and the ore used in the Steelworks. MRRT deferred tax assets arise in respect of these activities and are required to be measured over the relevant life of mine. Arrium produces a five-year plan and has had to extend that in order to measure the impact of the MRRT over the life of the mine. Estimates and assumptions for the life of the mine are subject to potentially significant change. As the deferred tax asset in respect of MRRT is subject to assessment for recoverability each reporting period, the deferred tax asset recognised is subject to change.

### 3. SEGMENT INFORMATION

2013	MINING <sup>1</sup>	MINING CONSUMABLES <sup>1</sup>	STEEL <sup>1</sup>	RECYCLING <sup>1</sup>	TOTAL SEGMENTS
	\$m	\$m	\$m	\$m	\$m
<b>Segment revenues</b>					
Sales to external customers	973.0	1,469.8	3,306.2	1,011.6	6,760.6
Intersegment revenue	0.1	78.2	110.8	333.2	522.3
Other revenue/income from external customers	3.8	18.7	68.8	4.7	96.0
<b>Total segment income</b>	<b>976.9</b>	<b>1,566.7</b>	<b>3,485.8</b>	<b>1,349.5</b>	<b>7,378.9</b>
Intersegment eliminations					(522.3)
Unallocated					98.3
<b>Consolidated income<sup>6</sup></b>					<b>6,954.9</b>
Segment share of (loss) of investments accounted for using the equity method	-	(0.6)	-	(0.5)	(1.1)
Unallocated					0.1
<b>Consolidated share of (loss) of equity accounted investments</b>					<b>(1.0)</b>
<b>Segment earnings before interest, tax, depreciation, amortisation and impairment</b>	<b>339.6</b>	<b>197.2</b>	<b>75.8</b>	<b>7.5</b>	<b>620.1</b>
Depreciation, amortisation and impairment	(91.1)	(44.6)	(118.8)	(15.8)	(270.3)
<b>Segment earnings/(loss) before interest and tax</b>	<b>248.5</b>	<b>152.6</b>	<b>(43.0)</b>	<b>(8.3)</b>	<b>349.8</b>
Restructuring costs <sup>4</sup>					(93.8)
Impairment <sup>3</sup>					(930.7)
Other costs					0.7
Finance costs					(118.1)
Intersegment eliminations					(75.9)
Unallocated					42.2
<b>Consolidated (loss) before tax<sup>5</sup></b>					<b>(825.8)</b>
Tax benefit					133.2
<b>Consolidated (loss) after tax</b>					<b>(692.6)</b>
<b>Segment assets</b>	<b>2,159.1</b>	<b>2,453.4</b>	<b>2,505.5</b>	<b>479.8</b>	<b>7,597.8</b>
Investments accounted for using the equity method	-	7.1	-	-	7.1
Tax assets					522.7
Intersegment eliminations					(45.7)
Unallocated assets					529.7
<b>Consolidated assets</b>					<b>8,611.6</b>
<b>Segment liabilities</b>	<b>500.6</b>	<b>388.9</b>	<b>727.3</b>	<b>114.6</b>	<b>1,731.4</b>
Tax liabilities					426.4
Intersegment eliminations					(44.1)
Unallocated liabilities					2,764.4
<b>Consolidated liabilities</b>					<b>4,878.1</b>
<b>Other segment information</b>					
Capital expenditure	302.7	53.8	53.1	11.2	420.8
Unallocated capital expenditure					1.8
<b>Consolidated capital expenditure</b>					<b>422.6</b>

## 3. SEGMENT INFORMATION CONTINUED

2012	MINING <sup>1</sup>	MINING CONSUMABLES <sup>1</sup>	STEEL <sup>1,2</sup>	RECYCLING <sup>1</sup>	TOTAL SEGMENTS
	\$m	\$m	\$m	\$m	\$m
<b>Segment revenues</b>					
Sales to external customers	814.7	1,442.2	3,819.0	1,202.8	7,278.7
Intersegment revenue	-	86.9	145.9	376.2	609.0
Other revenue/income from external customers	4.3	11.5	93.9	10.7	120.4
<b>Total segment income</b>	<b>819.0</b>	<b>1,540.6</b>	<b>4,058.8</b>	<b>1,589.7</b>	<b>8,008.1</b>
Intersegment eliminations					(609.0)
Unallocated <sup>2</sup>					317.2
<b>Consolidated income<sup>6</sup></b>					<b>7,716.3</b>
Segment share of profit/(loss) of investments accounted for using the equity method	-	0.8	-	(0.1)	0.7
Unallocated <sup>2</sup>					0.3
<b>Consolidated share of profit of equity accounted investments</b>					<b>1.0</b>
<b>Segment earnings before interest, tax, depreciation, amortisation and impairment</b>	<b>343.7</b>	<b>171.6</b>	<b>65.9</b>	<b>24.1</b>	<b>605.3</b>
Depreciation, amortisation and impairment	(40.8)	(36.4)	(122.3)	(17.5)	(217.0)
<b>Segment earnings/(loss) before interest and tax</b>	<b>302.9</b>	<b>135.2</b>	<b>(56.4)</b>	<b>6.6</b>	<b>388.3</b>
Restructuring costs <sup>4</sup>					(47.0)
Impairment <sup>3</sup>					(138.8)
Other costs					(38.9)
Finance costs					(121.1)
Intersegment eliminations					(35.8)
Unallocated <sup>2</sup>					7.1
<b>Consolidated profit before tax<sup>5</sup></b>					<b>13.8</b>
Tax benefit					49.8
<b>Consolidated profit after tax</b>					<b>63.6</b>
<b>Segment assets</b>	<b>1,685.9</b>	<b>2,303.1</b>	<b>3,534.5</b>	<b>674.1</b>	<b>8,197.6</b>
Investments accounted for using the equity method	-	7.2	-	1.2	8.4
Tax assets					245.7
Intersegment eliminations					(51.8)
Unallocated assets <sup>2</sup>					531.5
<b>Consolidated assets</b>					<b>8,931.4</b>
<b>Segment liabilities</b>	<b>306.2</b>	<b>362.8</b>	<b>712.7</b>	<b>107.9</b>	<b>1,489.6</b>
Tax liabilities					320.0
Intersegment eliminations					(50.2)
Unallocated liabilities <sup>2</sup>					2,671.4
<b>Consolidated liabilities</b>					<b>4,430.8</b>
<b>Other segment information</b>					
Capital expenditure	654.0	35.2	65.2	10.7	765.1
Unallocated capital expenditure					6.6
<b>Consolidated capital expenditure</b>					<b>771.7</b>

1 Segment results are equivalent to the underlying results of each segment and include both continuing and discontinued operations.

2 The 2012 comparatives have been restated to reflect the change in segment structure and formation of the Steel segment as announced on 30 May 2013. The 2012 comparatives have also been restated to include New Zealand Distribution following the disposal of Arrium's interest in Steel & Tube Holdings in October 2012 and classification of the former reporting segment as a discontinued operation.

3 Relating to the impairment of property, plant and equipment and indefinite life intangible assets in the Steel and Recycling segments of \$748.6 million and \$178.4 million respectively. The remaining balance relates to unallocated. In 2012, impairment related to the Steel segment.

4 Restructuring costs related to redundancies from organisational changes and other direct expenditure associated with business restructures such as onerous leases in the Steel and Recycling segments of \$69.9 million and \$14.5 million respectively. The remaining balance relates to unallocated. In 2012, restructuring costs related to the Recycling (\$2.2 million), Mining Consumables (\$0.6 million) and Steel segments (\$38.6 million) with the remaining balance relating to unallocated.

5 Consolidated profit/(loss) before tax included a loss of \$831.7 million (2012: loss of \$291.5 million) relating to discontinued operations.

6 Consolidated income includes \$777.5 million (2012: \$1,301.1 million) relating to discontinued operations.



## IDENTIFICATION OF REPORTABLE SEGMENTS

The Group has identified its operating segments based on internal reporting that is reviewed and used by the MD&CEO and the executive management team in assessing performance and in determining the allocation of resources.

The operating segments are identified by management based on the nature of the products provided, with each operating segment representing a strategic business unit that offers different products and serves different markets.

The reportable segments are based on operating segments including those that meet the aggregation criteria as determined by the similarity of the products produced and sold as these are the sources of the Group's major risks and have the most effect on the rates of return.

### Mining

The Mining segment's operations are located in South Australia; the Middleback Ranges, approximately 60 kilometres from the Whyalla township, and Southern Iron, which includes the Peculiar Knob tenement, located approximately 90 kilometres from the Cooper Pedy township. The Mining segment exports hematite iron ore to external customers and supplies both pelletised magnetite iron ore and some hematite lump iron ore to Arrium's integrated steelworks at Whyalla.

### Mining Consumables

The Mining Consumables segment comprises Moly-Cop grinding media businesses, Moly-Cop Ropes, Waratah Steel Mill and AltaSteel, with businesses located across North America, South America, Indonesia and Australia.

The Mining Consumables segment supplies resource companies with a range of key mining consumables, including grinding media, wire ropes and rail wheels.

### Steel

The Steel segment manufactures billet at its integrated steelworks in Whyalla and two electric arc furnaces. The manufacturing operations also include several rolling and wire mills, and pipe and tube mills. The Whyalla steelworks produces common and special grade billet as feedstock for the downstream Rod and Bar mills as well as producing rail and structural steel products for sale to external customers. Billets produced from Whyalla and the Sydney and Laverton electric arc furnaces are rolled into a wide range of long products for sale or further processing.

The Steel segment also distributes a diverse range of manufactured and externally sourced steel and metal products including structural steel sections, steel plate, angles, channels, reinforcing steel, carbon and stainless coils and flat products and a range of aluminium products to the construction, manufacturing and resource markets.

### Recycling

The Recycling segment supplies steelmaking raw materials to domestic and international steel mills, as well as non-ferrous metals for recycling. The Recycling segment operates in 11 countries through a combination of physical operations in the form of collection sites and trading offices that supply raw materials to foundries, smelters and steel mills in Australia and globally.

### Intra/Intersegment transfers

The Mining segment sells pelletised iron ore to the Steel segment. The Recycling segment sells raw materials to the Steel segment.

All sales between segments are conducted on an arm's length basis, with terms and conditions no more favourable than those which it is reasonable to expect when dealing with an external party, except for the sales of iron ore from the Mining segment to the Steel segment which occurs at cost.

## MAJOR CUSTOMERS

The Group has a number of customers to which it provides products. No single external customer generates 10% or more of the Group's revenue.

## GEOGRAPHIC INFORMATION

In presenting information on the basis of geographical area, revenue is based on the operation's country of domicile. Non-current assets other than financial instruments and deferred tax assets are based on the geographic location of assets.

The information below includes discontinued operations.

2013	AUSTRALIA	OTHER FOREIGN COUNTRIES
	\$m	\$m
<b>Revenues from external customers</b>		
Sales to external customers	5,147.4	1,613.2
Other revenue/income from external customers	71.3	24.7
<b>Total income</b>	<b>5,218.7</b>	<b>1,637.9</b>
<b>Non-current assets</b>	<b>4,085.4</b>	<b>1,931.4</b>

### 3. SEGMENT INFORMATION CONTINUED

2012	AUSTRALIA	OTHER FOREIGN COUNTRIES
	\$m	\$m
<b>Revenues from external customers</b>		
Sales to external customers	5,596.9	1,681.8
Other revenue/income from external customers	96.6	23.8
<b>Total income</b>	<b>5,693.5</b>	<b>1,705.6</b>
<b>Non-current assets</b>	<b>4,578.1</b>	<b>1,941.1</b>

### 4. INCOME STATEMENT ITEMS

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>(A) SALES REVENUE</b>		
Product sales	6,078.7	6,308.0
Rendering of services	6.2	6.8
Total sales revenue	6,084.9	6,314.8
<b>(B) OTHER REVENUE</b>		
Interest received from unrelated parties	2.8	2.4
Rental revenue	2.6	3.7
Other revenue <sup>1</sup>	50.6	88.8
Total other revenue	56.0	94.9
<b>TOTAL REVENUE</b>	<b>6,140.9</b>	<b>6,409.7</b>
<b>(C) OTHER INCOME</b>		
Net gains on disposal of property, plant and equipment	21.7	0.5
Net fair value gains <sup>2</sup>	14.8	5.0
<b>Total other income</b>	<b>36.5</b>	<b>5.5</b>
<b>TOTAL INCOME</b>	<b>6,177.4</b>	<b>6,415.2</b>
1 Includes amounts attributable to Steel Transformation Plan.		
2 Comprised of:		
Net fair value gain/(loss) on financial liabilities designated in fair value hedges	5.1	(17.3)
Net fair value (loss)/gain on derivatives designated in fair value hedges	(0.9)	18.4
Net fair value gain/(loss) on derivatives not qualifying as hedges	15.7	(4.3)
Net loss on ineffectiveness on hedge of net investments in foreign operations	-	(0.9)
Net (loss)/gain on financial liabilities measured at amortised cost	(5.1)	9.1
	14.8	5.0
<b>(D) OPERATING EXPENSES</b>		
Manufacturing expenses <sup>3</sup>	145.6	107.4
Distribution expenses	88.5	90.8
Marketing expenses	113.1	103.4
Administrative expenses	690.8	497.1
Total operating expenses	1,038.0	798.7
3 Includes mining expenses.		
<b>(E) FINANCE COSTS</b>		
Interest expense related to:		
Bank loans	119.9	124.4
Finance leases	0.9	0.6
Provision for restoration and rehabilitation discount adjustment	2.2	1.3
	123.0	126.3
Less: Borrowing costs capitalised <sup>4</sup>	(5.6)	(8.6)
Total finance costs	117.4	117.7

4 The weighted average interest rate applied was 2.86% (2012: 4.48%).

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>(F) PROFIT BEFORE INCOME TAX INCLUDES THE FOLLOWING SPECIFIC EXPENSES:</b>		
<b>Continuing operations:</b>		
Depreciation of property, plant and equipment:		
Buildings	15.6	14.0
Plant and equipment	182.6	153.2
Leased assets	1.4	0.7
Amortisation of mine development expenditure	28.8	9.4
Amortisation of finite-life intangible assets	28.9	17.0
Impairment of property, plant and equipment <sup>1</sup>	26.0	-
Impairment of goodwill and other intangible assets <sup>1</sup>	219.4	-
Impairment of mine development expenditure	-	3.4
Writedown of inventory to net realisable value	8.1	23.9
Minimum operating lease rentals	85.7	78.7
Restructuring costs <sup>2</sup>	46.6	27.5
Research and development costs <sup>3</sup>	124.5	124.5
<b>Discontinued operations:</b>		
Depreciation of property, plant and equipment:		
Buildings	2.6	2.9
Plant and equipment	14.1	23.3
Amortisation of finite-life intangible assets	0.1	0.3
Impairment of property, plant and equipment <sup>1</sup>	81.1	39.5
Impairment of goodwill and other intangible assets <sup>1</sup>	603.6	99.3
Writedown of inventory to net realisable value <sup>4</sup>	19.4	9.2
Minimum operating lease rentals	18.0	24.9
Restructuring costs <sup>2</sup>	28.0	7.6
Research and development costs <sup>3</sup>	-	0.8

1 Impairment relating to the Recycling and Steel businesses.

2 Restructuring costs related to redundancies from organisational changes and other direct expenditure associated with business restructures such as onerous leases.

3 Research and development costs largely consists of process and product improvement projects undertaken on the production line as part of the continuous drive for manufacturing efficiency and product advancement. Arrium undertakes many such projects.

4 Of the total writedown of inventory to net realisable value, \$19.1 million arises as a result of restructuring activities.

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>(G) EMPLOYEE BENEFITS EXPENSE</b>		
Included in employee benefits expense are the following items:		
<b>Continuing operations:</b>		
Defined contribution company contributions	50.2	51.5
Defined benefit plan expense (Note 19)	17.1	12.9
Employee provisions <sup>5</sup>	153.4	157.1
Share-based payments expense	6.9	6.3
<b>Discontinued operations:</b>		
Employee provisions <sup>5</sup>	23.7	14.1

5 Includes redundancies raised as part of restructuring activities.



## 5. INCOME TAX

	CONSOLIDATED	
	2013 \$m	2012 <sup>2</sup> \$m
<b>(A) INCOME STATEMENT</b>		
Current income tax charge	34.7	0.5
Over provided in prior years	(41.3)	(18.5)
Deferred tax benefit relating to the origination and reversal of temporary differences	(126.6)	(31.8)
Income tax benefit recognised in the Income Statement	(133.2)	(49.8)
<b>(B) RECONCILIATION OF INCOME TAX EXPENSE TO PRIMA FACIE TAX PAYABLE</b>		
Profit before tax from continuing operations	5.9	305.3
Loss before tax from discontinued operations	(831.7)	(291.5)
Total (loss)/profit before income tax	(825.8)	13.8
Prima facie income tax (benefit)/expense calculated at 30% (2012: 30%)	(247.8)	4.1
Research and development allowance	(12.5)	(9.4)
Income tax impact of MRRT taxation expense	24.7	15.2
Differences in overseas tax rates	(3.9)	(11.3)
Non-deductible impairment	244.1	28.3
Capital gains non-taxable <sup>2</sup>	(8.5)	(3.8)
Adjustments in respect of income tax of previous years <sup>1</sup>	(39.0)	(18.5)
Foreign currency translation differences <sup>2</sup>	(3.7)	(1.0)
Other items <sup>2</sup>	(4.3)	(2.8)
Income tax (benefit)/expense recognised in the income statement	(50.9)	0.8
MRRT-related deferred taxation benefit	(82.3)	(50.6)
Total taxation benefit	(133.2)	(49.8)
Aggregate income tax (benefit)/expense is attributable to:		
Continuing operations	(64.6)	9.0
Discontinued operations	(68.6)	(58.8)
	(133.2)	(49.8)

1 Primarily attributable to Research and Development claims not previously recognised together with finalisation of prior period amendments from 2008-2011.

2 The 2012 balances have been further disaggregated between other items, capital gains non-taxable and foreign currency translation differences. It also includes non-deductible expenses.

**(C) MOVEMENT IN DEFERRED TAX BALANCES DURING THE YEAR**

	BALANCE AT 1 JULY 2011	RECOGNISED IN PROFIT OR LOSS	RECOGNISED IN OTHER COMPREHENSIVE INCOME	RECOGNISED DIRECTLY IN EQUITY	BALANCE AT 30 JUNE 2012	RECOGNISED IN PROFIT OR LOSS	RECOGNISED IN OTHER COMPREHENSIVE INCOME	RECOGNISED DIRECTLY IN EQUITY	BALANCE AT 30 JUNE 2013
<b>Deferred tax assets</b>									
Employee benefit provisions (including retirement benefit obligations)	92.7	(5.6)	-	-	87.1	3.0	-	-	90.1
Other provisions	45.9	(19.5)	-	12.8 <sup>2</sup>	39.2	7.1	-	-	46.3
Inventory provisions	8.4	0.8	-	-	9.2	0.2	-	-	9.4
Derivative financial instruments and interest bearing liabilities	-	1.2	11.2	-	12.4	(3.5)	43.3	-	52.2
Net unrealised foreign exchange gains/losses	5.6	(1.9)	-	-	3.7	(3.0)	-	-	0.7
MRRT starting base	-	50.6	-	-	50.6	82.3	-	-	132.9
Research and development tax offset carry forward from 2012 tax return	-	-	-	-	-	62.4	-	-	62.4
Tax losses available to offset against future taxable income	-	-	-	-	-	86.0	-	-	86.0
Share-based payments	-	-	-	-	-	-	-	0.5	0.5
Other items	10.4	4.8	-	5.3 <sup>2</sup>	20.5	20.7	-	-	41.2
	163.0	30.4	11.2	18.1	222.7	255.2	43.3	0.5	521.7
<b>Deferred tax liabilities</b>									
Property, plant and equipment and intangibles	216.1	5.5	-	14.0 <sup>2</sup>	235.6	18.9	-	-	254.5
Stores and spares	25.4	(3.2)	-	-	22.2	0.6	-	-	22.8
Deferred charges	38.5	3.9	-	-	42.4	17.4	-	-	59.8
Share-based payments	2.6	(2.0)	-	(0.1)	0.5	-	-	(0.5)	-
Derivative financial instruments	5.7	(5.7)	-	-	-	-	-	-	-
Research and development feedstock adjustment	-	-	-	-	-	17.8	-	-	17.8
MRRT income tax impact	-	15.2	-	-	15.2	24.7	-	-	39.9
Other items	5.0	(0.9)	-	-	4.1	3.7	-	-	7.8
	293.3	12.8	-	13.9	320.0	83.1	-	(0.5)	402.6

2 Relates to tax balances acquired and accounted for in the business combination valuation reserve.

## 5. INCOME TAX CONTINUED

	CONSOLIDATED	
	2013 \$m	2012 \$m
Deferred tax balances are attributable to:		
<b>Deferred tax assets</b>		
Continuing operations	486.6	222.7
Disposal groups and assets held for sale	35.1	-
	521.7	222.7
<b>Deferred tax liabilities</b>		
Continuing operations	399.9	320.0
Disposal groups and assets held for sale	2.7	-
	402.6	320.0

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>(D) TAX MOVEMENTS RELATING TO ITEMS OF OTHER COMPREHENSIVE INCOME</b>		
<b>Deferred tax related to items charged or credited directly to other comprehensive income during the year</b>		
<i>Cash flow hedges:</i>		
- net gains taken to equity	0.6	5.7
- transferred to profit and loss	(2.9)	(3.2)
- transferred to initial carrying amount of hedged items	2.3	(1.4)
<i>Currency translation differences:</i>		
- net investment hedges	43.3	10.1
Income tax charged directly to other comprehensive income	43.3	11.2

### (E) TAX EFFECT ACCOUNTING BY MEMBERS OF THE TAX CONSOLIDATED GROUP

The head entity Arrium Limited and the controlled entities in the tax consolidated group continue to account for their own current and deferred tax amounts. The Arrium Group has applied the stand-alone taxpayer approach in determining the appropriate amount of current taxes to allocate to members of the tax consolidated group.

In addition to its own current and deferred tax amounts, the head entity also recognises current tax liabilities (or assets) assumed from controlled entities in the tax consolidated group.

The amounts receivable or payable under the tax sharing agreement are due upon receipt of the funding advice from the head entity which is issued as soon as practicable after the end of each financial year. The head entity may also require payment of interim funding amounts to assist with its obligations to pay tax instalments.

### (F) UNRECOGNISED DEFERRED TAX ASSETS

Deferred tax assets have not been recognised in respect of estimated capital losses amounting to \$43.0 million (2012: \$65.3 million). Deferred tax assets have not been recognised in respect of MRRT amounting to \$408.4 million (2012: \$540.7 million).

Capital tax losses are subject to continuity of ownership tests and MRRT unrecognised deferred tax assets are subject to future taxable mining profits. Deferred tax assets have not been recognised in respect of these items because it is not probable that future taxable profit or future mining profit will be available against which the consolidated entity can utilise the benefits.

### (G) MINERALS RESOURCE RENT TAX

On 29 March 2012, the Minerals Resource Rent Tax Bill 2011, Minerals Resource Rent Tax (Consequential Amendments and Transitional Provisions) Bill 2011, Minerals Resource Rent Tax (Imposition-General) Bill 2011, Minerals Resource Rent Tax (Imposition-Customs) Bill 2011 and Minerals Resource Rent Tax (Imposition-Excise) Bill 2011 which collectively implemented the Federal Government's Minerals Resource Rent Tax was enacted.

The Minerals Resource Rent Tax (MRRT) applies from 1 July 2012 and seeks to tax coal and iron ore extraction activities in Australia. As a result of the MRRT, Arrium has recognised deferred tax assets of \$132.9 million (2012: \$50.6 million), deferred tax liabilities of \$39.9 million (2012: \$15.2 million) and a corresponding net decrease in income tax expense of \$57.6 million (2012: \$35.4 million) for the year ended 30 June 2013.

## 6. EARNINGS PER SHARE

The Group presents basic and diluted earnings per share (EPS) for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for shares held by the Company's sponsored employee share plan trust. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for shares held by the Company's sponsored employee share plan trust, for the effects of all dilutive potential ordinary shares which comprise restricted shares granted to employees.

The following reflects the earnings and share data used in the calculation of basic and diluted earnings per share:

### (A) EARNINGS

	CONSOLIDATED	
	2013 \$m	2012 \$m
(Loss)/Profit attributable to equity holders of the parent	(694.7)	57.7
Add: Adjustment for employee compensation shares	2.1	(0.2)
<b>(Loss)/earnings used in calculating basic and diluted earnings per share attributable to equity holders of the parent</b>	<b>(692.6)</b>	<b>57.5</b>
Net profit for the period attributable to continuing operations	70.5	296.3
Less: Non-controlling interests	(0.7)	(1.0)
Profit from continuing operations attributable to equity holders of the parent	69.8	295.3
Less: Adjustment for employee compensation shares	(0.2)	(1.2)
<b>Earnings used in calculating basic and diluted earnings per share from continuing operations attributable to equity holders of the parent</b>	<b>69.6</b>	<b>294.1</b>

### (B) NUMBER OF ORDINARY SHARES

	2013 NUMBER OF SHARES	2012 NUMBER OF SHARES
Weighted average number of ordinary shares used in the calculation of basic earnings per share	1,344,284,948	1,335,544,142
Dilutive effect of executive share rights and restricted stock	-	1,208,098
Weighted average number of ordinary shares used in the calculation of diluted earnings per share	1,344,284,948	1,336,752,240

### ISSUES AFTER 30 JUNE 2013

There have been no other subscriptions for ordinary shares or issues of potential ordinary shares since the reporting date and before the completion of the financial report.

### (C) EARNINGS PER SHARE

	CONSOLIDATED	
	2013 CENTS/ SHARE	2012 CENTS/ SHARE
Basic (loss)/earnings per share	(51.52)	4.30
Diluted (loss)/earnings per share	(51.52)	4.30
<b>Earnings per share for profit from continuing operations attributable to the ordinary equity holders of the parent:</b>		
Basic earnings per share	5.18	22.02
Diluted earnings per share	5.17	22.01

## 7. RECEIVABLES

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current</b>		
Trade receivables <sup>1</sup>	625.9	900.7
Provision for doubtful debts	(3.1)	(6.5)
	622.8	894.2
Other receivables	98.1	58.8
	720.9	953.0
<b>Non-current</b>		
Other receivables	13.2	-
	13.2	-

<sup>1</sup> \$7.1 million (2012: \$8.4 million) of the trade receivables balance are known as Metalcard in the Steel segment whereby interest is charged on the outstanding balance at an average interest rate throughout the year of 11.93% (2012: 12.59%).

Trade receivables (excluding Metalcard receivables within the Steel segment) are non-interest bearing and are generally on 30 to 60 day terms.

### (A) PROVISION FOR DOUBTFUL DEBTS

A provision for doubtful debt is recognised when there is objective evidence that an individual trade receivable is impaired. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation or default or delinquency in payments are considered indicators that the trade receivable is impaired.

Movements in the provision for doubtful debts during the year were as follows:

	CONSOLIDATED	
	2013 \$m	2012 \$m
Carrying amount at the beginning of the year	(6.5)	(3.7)
Disposal groups and assets held for sale	2.4	-
Additional amounts provided	(2.5)	(6.9)
Utilised	2.5	2.3
Reversal of unutilised amounts	1.2	1.7
Net foreign currency differences on translation of foreign operations	(0.2)	0.1
Carrying amount at the end of the year	(3.1)	(6.5)

Amounts charged to the provision for doubtful debts are written off when there is no expectation of recovering additional cash. The other classes within trade and other receivables do not contain impaired assets and are not past due. Based on the credit history of these other classes, it is expected that these amounts will be received when due.

The total value of impaired receivables at 30 June 2013 is \$3.1 million (2012: \$6.5 million). These receivables are all greater than 30 days overdue and have been fully provided for.

### (B) PAST DUE BUT NOT IMPAIRED

At balance date, receivables of \$36.6 million (2012: \$74.3 million) were past due but not impaired. These relate to a number of independent customers for whom there is no recent history of default.

The aging analysis of these receivables are as follows:

	CONSOLIDATED	
	2013 \$m	2012 \$m
1 to 30 days	26.6	50.9
31 to 60 days	3.8	9.6
61 to 90 days	3.1	11.4
Over 90 days	3.1	2.4
	36.6	74.3

### (C) FAIR VALUE AND CREDIT RISK

Due to the short-term nature of these receivables, their carrying values are assumed to approximate their fair values.

The maximum exposure to credit risk at the reporting date is the fair value of each class of receivables mentioned above. The Group does not hold any collateral as security.

### (D) FOREIGN EXCHANGE AND INTEREST RATE RISK

The Group's exposure to foreign exchange and interest rate risk related to trade and other receivables is disclosed in Note 32.

## 8. DERIVATIVE FINANCIAL INSTRUMENTS

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current assets</b>		
Forward contracts - cash flow hedges	-	7.1
Forward contracts - held for trading	10.7	9.1
Option contracts - cash flow hedges	0.5	0.7
Option contracts - held for trading	0.1	-
	11.3	16.9
<b>Non-current assets</b>		
Interest rate swap contracts - fair value hedges	20.3	27.5
Cross-currency interest rate swap contracts - held for trading	2.9	2.4
	23.2	29.9
<b>Current liabilities</b>		
Forward contracts - cash flow hedges	0.5	1.1
Forward contracts - held for trading	9.2	4.0
Option contracts - cash flow hedges	2.5	0.4
Interest rate swap contracts - cash flow hedges	0.8	2.5
Cross-currency interest rate swap contracts - cash flow hedges	-	15.8
	13.0	23.8
<b>Non-current liabilities</b>		
Interest rate swap contracts - cash flow hedges	7.1	10.6
Cross-currency interest rate swap contracts - fair value hedges	27.7	34.0
Cross-currency interest rate swap contracts - cash flow hedges	10.4	12.8
	45.2	57.4

### INSTRUMENTS USED BY THE GROUP

The Group is party to derivative financial instruments in the normal course of business in order to manage exposure to fluctuations in interest and foreign exchange rates in accordance with the Group's financial risk management policies (refer to Note 32).

#### (a) Interest rate swap contracts - cash flow hedges

It is the Group's policy to hedge part of its variable interest rate loans from exposure to fluctuations in interest rates. Accordingly, the Group has entered into interest rate swap contracts under which it is obliged to receive interest at variable rates and to pay interest at fixed rates. Australian dollar-denominated bank loans of the Group currently bear an average variable interest rate of 5.14% (2012: 5.99%).

Swaps in place cover 43% (2012: 53%) of the variable AUD loan principal outstanding and are timed to expire between two and three years. This is managed on a portfolio basis and assumes that debt facilities are renewed. During the year, the fixed interest rates ranged between 3.10% and 7.51% (2012: 5.90% and 7.51%) and the variable rates settings between 2.95% and 3.53% (2012: 4.18% and 4.90%) compared with three-month BBSW which at balance date was 2.82% (2012: 3.49%).

The Group has USD denominated bank loans that currently bear an average variable interest rate of 2.58% (2012: 2.37%). Swaps in place cover 31% (2012: 32%) of the variable USD loan principal outstanding and are timed to expire between one and four years. This is managed on a portfolio basis and assumes that debt facilities are renewed. During the year, the fixed interest rates ranged between 0.93% and 1.74% (2012: 0.93% and 1.74%) and the variable rates settings between 0.28% and 0.46% (2012: 0.25% and 0.56%) compared with three-month LIBOR which at balance date was 0.27% (2012: 0.46%).

The Group also has Canadian dollar denominated bank loans that currently bear an average interest rate of 3.17% (2012: 3.31%). Swaps in place cover 31% (2012: 38%) of the variable Canadian loan principal outstanding and are timed to expire between two and three years. This is managed on a portfolio basis and assumes that debt facilities are renewed. During the year, the fixed interest rate was 2.59% (2012: 2.59%) and the variable rate ranged between 1.28% and 1.30% (2012: 1.28% and 1.30%) compared with three-month CDOR which at balance date was 1.28% (2012: 1.31%).

The contracts require settlement of net interest receivable or payable at 90-day intervals. The contracts are settled on a net basis where master netting agreements are in place. The majority of the settlement dates coincide with the dates on which interest is payable on the underlying debt.

The gain or loss from remeasuring the hedging instruments at fair value is deferred in equity in the cash flow hedge reserve to the extent that the hedge is effective. It is reclassified into the Income Statement when the hedged interest expense is recognised. Any ineffective portion is recognised in the Income Statement immediately. There was no material hedge ineffectiveness recognised in the Income Statement in the current or prior year.

## 8. DERIVATIVE FINANCIAL INSTRUMENTS CONTINUED

### (b) Interest rate swap contracts - fair value hedges

At 30 June 2013, the Group had a series of interest rate swaps in place with a notional amount of USD230 million (2012: USD230 million) whereby it receives an average fixed interest rate of 3.48% semi-annually (2012: 3.50%) in USD and pays a floating rate of interest equal to USD LIBOR amount quarterly.

Swaps currently in place cover 100% (2012: 100%) of USD30 million US Private Placement debt issued in August 2007 and USD200 million in June 2008. The swaps are being used to protect the value of USD denominated debt against changes in fair value due to changes in the benchmark interest rate. During the year, the fixed interest rates ranged between 3.00% and 3.89% (2012: 3.00% and 3.89%) and the variable rates between 0.28% and 0.46% (2012: 0.25% and 0.58%) compared with the three-month LIBOR which at balance date was 0.27% (2012: 0.46%). Interest payments on the debt are made semi-annually.

### (c) Cross-currency interest rate swap contracts - fair value hedges

At balance date, the Group had a series of cross-currency interest rate swaps in place with a notional amount of USD60 million (2012: USD60 million) whereby it receives a fixed interest rate of 5.5% semi-annually (2012: 5.5%) and pays a floating rate of interest equal to BBSW in AUD on the notional amount quarterly.

Swaps currently in place cover 100% (2012: 100%) of the loan principal outstanding. The swaps are being used to hedge the exposure to changes in the fair value of its US Private Placement, fixed interest USD denominated senior notes raised in April 2003 (a twelve year tranche of USD60 million expiring in April 2015). The fixed interest rate was 5.54% (2012: 5.54%) and the variable rate was between 4.42% and 4.89% (2011: 5.59% and 6.38%) compared with the three-month BBSW which at balance date was 2.82% (2012: 3.49%). Interest payments on the debt are made semi-annually.

The expiration of the cross-currency interest rate swaps is matched to the expiry of the underlying debt.

### (d) Cross-currency interest rate swaps - cash flow hedges

At balance date, the Group had a cross-currency interest rate swap in place with a notional amount of USD20 million (2012: USD45 million) whereby it receives an average fixed interest rate of 5.98% (2012: 5.9%) in USD on the notional amount semi-annually and pays an average fixed interest rate of 7.27% (2012: 7.3%) in AUD on the notional amount semi-annually.

The swap currently in place covers 100% of the designated loan principal outstanding (2012: 100%) and is timed to expire as each loan repayment falls due. The swap is being used to hedge the exposure to fluctuations in cash flow due to fluctuations to the AUD/USD spot exchange rate on USD denominated senior notes. During the year, the fixed interest rates paid ranged between 7.21% and 7.27% (2012: 7.21% and 7.33%) and the fixed rates received between 5.98% and 5.79% (2012: 5.64% and 5.98%). Interest payments on the debt are made semi-annually.

The contract requires settlement of interest receivable or payable at 180-day intervals. The contract is settled on a net basis where master netting agreements are in place. The settlement dates coincide with the dates on which interest is payable on the underlying debt.

The gain or loss from remeasuring the hedging instruments at fair value is deferred in equity in the cash flow hedge reserve, to the extent that the hedge is effective, and reclassified into the Income Statement when the hedged interest expense is recognised. The ineffective portion is recognised in the Income Statement immediately. There was no material hedge ineffectiveness recognised in the Income Statement in the current or prior year.

The expiration of the cross-currency interest rate swaps is matched to the expiry of the underlying debt.

### (e) Forward contracts - cash flow hedges

The Group is exposed to foreign exchange risk through primary financial assets and liabilities and anticipated future transactions modified through derivative financial instruments such as forward exchange contracts.

The Group has a series of forward exchange contracts to hedge highly probable forecast or committed purchases. The contracts are timed to mature when payments for the purchases are scheduled to be made.

The portion of the gain or loss on the forward contract that is determined to be an effective hedge is recognised directly in equity in the cash flow hedge reserve. Amounts accumulated in Equity are transferred to the Income Statement in the periods when the hedged item affects profit or loss such as when hedged income or expenses are recognised or when a forecast sale or purchase occurs. When the hedged item is the cost of a non-financial asset or liability, the amounts taken to equity are transferred to the initial carrying amount of the non-financial asset or liability. There was no material hedge ineffectiveness recognised in the Income Statement in the current or prior year.

At balance date, the details of outstanding contracts are:

	CONSOLIDATED					
	2013			2012		
	AVERAGE EXCHANGE RATE	BUY	SELL	AVERAGE EXCHANGE RATE	BUY	SELL
	\$m	\$m		\$m	\$m	
<b>Currency</b>						
United States Dollar						
Up to 3 months	0.95	-	13.3	0.97	10.0	102.9
3 months to 12 months	0.98	-	1.6	0.97	6.0	98.0
12 months to 2 years	-	-	-	0.98	-	6.4
		-	14.9		16.0	207.3
Euro						
Up to 3 months	-	-	-	0.76	0.8	-
3 months to 12 months	-	-	-	0.77	2.0	-
		-	-		2.8	-
Indonesian Rupiah						
Up to 3 months	-	-	-	9,530	3.6	-
3 months to 12 months	-	-	-	9,714	5.7	-
		-	-		9.3	-
New Zealand Dollar						
Up to 3 months	-	-	-	1.29	-	1.2
		-	-		-	1.2
Singapore Dollar						
Up to 3 months	-	-	-	1.24	0.3	-
		-	-		0.3	-

**(f) Option contracts - cash flow hedges**

At balance date the Group had a series of foreign currency collars being a combination of written put options and purchased call options with a notional amount of USD76 million (2012: USD60 million).

The options are being used to hedge the exposure to fluctuations in cash flow due to fluctuations to the AUD/USD spot exchange rate on highly probable forecasted sales of iron ore and scrap in USD in the ensuing financial year. The contracts are timed to mature when receipt of payment from customers are forecasted to occur. Changes in the intrinsic value of the options are deferred in equity in the cash flow hedge reserve. Changes in the fair value of the option other than intrinsic value are recognised in the Income Statement as they occur. There was no hedge ineffectiveness recognised in the Income Statement in the current year.

**(g) Forward contracts, option contracts and cross-currency interest rate swap contracts - held for trading**

The Group has entered into forward exchange and cross-currency interest rate swap contracts which are economic hedges but do not satisfy the requirements for hedge accounting. These contracts are accounted for as held for trading financial instruments and are subject to the same risk management policies as all other derivative contracts (refer to Note 32).



## 9. INVENTORIES

	CONSOLIDATED	
	2013 \$m	2012 \$m
Raw materials		
At cost	232.5	283.9
At net realisable value	14.4	32.3
	246.9	316.2
Work in progress		
At cost	428.4	337.9
At net realisable value	0.5	1.9
	428.9	339.8
Finished goods		
At cost	427.0	574.6
At net realisable value	50.2	48.4
	477.2	623.0
Stores, spares and other		
At cost	124.4	166.9
At net realisable value	3.5	5.0
	127.9	171.9
Total inventories		
At cost	1,212.3	1,363.3
At net realisable value	68.6	87.6
	1,280.9	1,450.9

## 10. OTHER FINANCIAL ASSETS

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current</b>		
Loan to jointly controlled entity	0.8	-
	0.8	-
<b>Non-current</b>		
Loan to jointly controlled entity	-	1.3
	-	1.3

## 11. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	CONSOLIDATED	
	2013 \$m	2012 \$m
Investment in jointly controlled entity <sup>1</sup>	12.8	12.8
Investment in associate <sup>2</sup>	-	1.2
	12.8	14.0

1 Arrium Limited has a 50% ownership interest and voting power in BOSFA Pty Ltd (2012: 50%) and Genalta Recycling Inc (2012: 50%). BOSFA Pty Ltd is a company incorporated in Australia involved in the distribution of steel wire products with a balance date of 31 December. Genalta Recycling Inc is a company incorporated in Canada involved in the recycling and sale of Scrap Metals and has a balance date of 31 December.

2 The Group disposed of its interest and voting power in Suntech Metals Company on 10 April 2013 (2012: 20% interest). Suntech Metals Company is a company incorporated in Thailand involved in the collection and sale of non-ferrous scrap metal.

There were no impairment losses relating to investments accounted for using the equity method. There were no commitments or contingencies.

The following information illustrates summarised financial information relating to the Group's investments accounted for using the equity method:

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Share of jointly controlled entity and associate's income, expenses and results<sup>3</sup></b>		
Income	28.3	28.2
Expenses	(30.2)	(26.7)
Net (loss)/profit before income tax	(1.9)	1.5
Income tax benefit/(expense)	1.0	(0.5)
Net (loss)/profit after income tax	(0.9)	1.0
<b>Share of jointly controlled entity and associate's assets and liabilities</b>		
Current assets	9.5	7.8
Non-current assets	10.1	11.9
Current liabilities	(4.6)	(3.2)
Non-current liabilities	(2.2)	(2.5)
Net assets	12.8	14.0

3 Includes share of income, expenses and results of Suntech Metals Company from 1 July 2012 to 10 April 2013.

## 12. PROPERTY, PLANT AND EQUIPMENT

	CONSOLIDATED				
	LAND	BUILDINGS	PLANT AND EQUIPMENT	LEASED ASSETS	TOTAL
	\$m	\$m	\$m	\$m	\$m
<b>Year ended 30 June 2013</b>					
Net carrying amount at the beginning of the year	188.5	362.7	2,190.0	13.4	2,754.6
Additions	1.9	11.9	333.5	-	347.3
Disposals	(18.1)	(29.6)	(26.0)	-	(73.7)
Disposal groups and assets held for sale	(16.5)	(45.7)	(36.8)	-	(99.0)
Transfers and other movements	0.8	21.4	3.5	-	25.7
Impairment loss	(6.4)	(13.7)	(86.9)	-	(107.0)
Depreciation	-	(18.2)	(196.7)	(1.4)	(216.3)
Net foreign currency differences on translation of foreign operations	(0.4)	10.0	46.2	-	55.8
Net carrying amount at the end of the year	149.8	298.8	2,226.8	12.0	2,687.4
<b>At 30 June 2013</b>					
Cost	149.8	453.2	3,586.8	14.1	4,203.9
Accumulated depreciation and impairment	-	(154.4)	(1,360.0)	(2.1)	(1,516.5)
Net carrying amount	149.8	298.8	2,226.8	12.0	2,687.4

## 12. PROPERTY, PLANT AND EQUIPMENT CONTINUED

	CONSOLIDATED				
	LAND	BUILDINGS	PLANT AND EQUIPMENT	LEASED ASSETS	TOTAL
	\$m	\$m	\$m	\$m	\$m
<b>Year ended 30 June 2012</b>					
Net carrying amount at the beginning of the year	208.9	368.5	2,008.6	-	2,586.0
Acquisitions through business combinations	-	-	14.3	-	14.3
Additions	1.6	14.3	378.6	14.1	408.6
Disposals	(14.4)	(4.8)	(11.9)	-	(31.1)
Disposal groups and assets held for sale	(3.2)	(5.2)	(0.7)	-	(9.1)
Transfers and other movements	(2.0)	12.3	(4.8)	-	5.5
Impairment loss	(4.2)	(6.5)	(28.8)	-	(39.5)
Depreciation	-	(16.9)	(176.5)	(0.7)	(194.1)
Net foreign currency differences on translation of foreign operations	1.8	1.0	11.2	-	14.0
Net carrying amount at the end of the year	188.5	362.7	2,190.0	13.4	2,754.6
<b>At 30 June 2012</b>					
Cost	192.3	550.0	3,654.5	14.1	4,410.9
Accumulated depreciation and impairment	(3.8)	(187.3)	(1,464.5)	(0.7)	(1,656.3)
Net carrying amount	188.5	362.7	2,190.0	13.4	2,754.6

## 13. MINE DEVELOPMENT EXPENDITURE

	CONSOLIDATED		
	DEFERRED STRIPPING	PRE-PRODUCTION EXPENDITURE	TOTAL
	\$m	\$m	\$m
<b>Year ended 30 June 2013</b>			
Net carrying amount at the beginning of the year	141.3	176.6	317.9
Additions	-	74.2	74.2
Deferrals	74.9	-	74.9
Amortisation	(14.9)	(28.8)	(43.7)
Net foreign currency differences on translation of foreign operations	-	11.1	11.1
Other movement	-	58.2	58.2
Net carrying amount at the end of the year	201.3	291.3	492.6
<b>At 30 June 2013</b>			
Cost	238.5	348.9	587.4
Accumulated depreciation and impairment	(37.2)	(57.6)	(94.8)
Net carrying amount	201.3	291.3	492.6
<b>Year ended 30 June 2012</b>			
Net carrying amount at the beginning of the year	128.2	79.1	207.3
Additions	-	56.1	56.1
Acquisitions through business combinations	-	18.2	18.2
Deferrals	35.4	-	35.4
Amortisation	(22.3)	(9.4)	(31.7)
Impairment loss	-	(3.4)	(3.4)
Net foreign currency differences on translation of foreign operations	-	(0.7)	(0.7)
Other movement	-	36.7	36.7
Net carrying amount at the end of the year	141.3	176.6	317.9
<b>At 30 June 2012</b>			
Cost	163.6	204.5	368.1
Accumulated depreciation and impairment	(22.3)	(27.9)	(50.2)
Net carrying amount	141.3	176.6	317.9

## 14. OTHER INTANGIBLES AND GOODWILL

	CONSOLIDATED									
	GOODWILL	SYSTEM DEVELOPMENT COSTS	CUSTOMER RELATIONSHIPS	SUPPLIER CONTRACTS	KNOW-HOW	BRAND NAMES	PATENTS	MINING TENEMENT RIGHTS	EXPLORATION RIGHTS	TOTAL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Year ended 30 June 2013</b>										
Opening net carrying amount	2,351.3	5.0	69.5	10.6	8.6	114.0	0.1	246.6	16.3	2,822.0
Acquisitions through business combinations	0.2	-	-	-	-	-	-	-	-	0.2
Additions	-	0.6	-	-	0.1	0.2	-	-	-	0.9
Disposals	(31.6)	-	-	-	-	-	-	-	-	(31.6)
Amortisation	-	(2.9)	(5.0)	(1.1)	(5.6)	-	(0.1)	(14.3)	-	(29.0)
Impairment	(747.1)	(1.2)	-	(7.0)	-	(67.7)	-	-	-	(823.0)
Net foreign currency differences on translation of foreign operations	66.5	0.1	5.6	(0.3)	0.2	3.4	-	18.7	1.4	95.6
Net carrying amount at the end of the year	1,639.3	1.6	70.1	2.2	3.3	49.9	-	251.0	17.7	2,035.1
<b>At 30 June 2013</b>										
Cost	2,038.9	76.8	95.8	14.5	18.7	104.4	-	266.9	17.7	2,633.7
Accumulated amortisation and impairment, net of discontinued operations	(399.6)	(75.2)	(25.7)	(12.3)	(15.4)	(54.5)	-	(15.9)	-	(598.6)
Net carrying amount	1,639.3	1.6	70.1	2.2	3.3	49.9	-	251.0	17.7	2,035.1
<b>Year ended 30 June 2012</b>										
Net carrying amount at the beginning of the year	2,422.2	10.2	69.8	11.7	13.6	115.9	0.7	-	-	2,644.1
Acquisitions through business combinations	0.3	-	-	-	-	-	-	256.4	17.0	273.7
Additions	-	0.3	-	-	-	0.5	-	-	-	0.8
Disposals	(18.3)	-	-	-	-	-	-	-	-	(18.3)
Amortisation	-	(5.6)	(4.5)	(1.4)	(5.7)	-	(0.1)	-	-	(17.3)
Impairment	(94.2)	-	-	-	-	(4.6)	(0.5)	-	-	(99.3)
Net foreign currency differences on translation of foreign operations	41.3	0.1	4.2	0.3	0.7	2.2	-	(9.8)	(0.7)	38.3
Net carrying amount at the end of the year	2,351.3	5.0	69.5	10.6	8.6	114.0	0.1	246.6	16.3	2,822.0
<b>At 1 July 2012</b>										
Cost	2,445.5	78.7	109.5	14.2	17.2	125.0	9.7	246.6	16.3	3,062.7
Accumulated amortisation and impairment, net of discontinued operations	(94.2)	(73.7)	(40.0)	(3.6)	(8.6)	(11.0)	(9.6)	-	-	(240.7)
Net carrying amount	2,351.3	5.0	69.5	10.6	8.6	114.0	0.1	246.6	16.3	2,822.0

## 14. OTHER INTANGIBLES AND GOODWILL CONTINUED

### DESCRIPTION OF THE GROUP'S INTANGIBLE ASSETS

#### Goodwill

After initial recognition, goodwill acquired in a business combination is measured at cost less any accumulated impairment losses. Goodwill is not amortised but is subject to impairment testing on an annual basis and whenever there is an indication of impairment.

The carrying amount of goodwill in the Steel segment has been impaired to its recoverable amount during the year by \$579.1 million (2012: nil) and the carrying amount of goodwill in the Recycling segment has been impaired to its recoverable amount during the year by \$168.0 million (2012: nil) This loss has been included in "Operating Expenses" in the Income Statement.

#### System development costs

System development costs are carried at cost less accumulated amortisation and impairment losses. These have been assessed as having a finite life and amortised on a straight-line basis. If an impairment indication arises, the recoverable amount is estimated and an impairment loss is recognised to the extent that the recoverable amount is lower than the carrying amount.

#### Customer relationships, supplier contracts, know-how, patents and finite life brand names

These intangibles have been acquired through business combinations and are carried at cost less accumulated amortisation and impairment losses. These intangible assets have been determined to have finite lives. If an impairment indication arises, the recoverable amount is estimated and an impairment loss is recognised to the extent that the recoverable amount is lower than the carrying amount.

#### Indefinite life brand names

Included in Brand Names are indefinite life brand names with a carrying amount of \$49.9 million as at 30 June 2013 (2012: \$114.0 million). These brand names are core to the continuing operations of the Group and accordingly have been assessed as having an indefinite useful life as there is no foreseeable limit to the period over which the assets are expected to generate net cash inflows for the Group. Indefinite life brand names are carried at cost less accumulated impairment losses. These assets are subject to impairment testing on an annual basis and whenever there is an indication of impairment.

The carrying amount of the indefinite life brand names within the Steel segment have been fully impaired by \$67.7 million (2012: nil) to their estimated recoverable amount of nil. This loss has been included in "Operating Expenses" in the Income Statement.

#### Mining tenement rights

Mining tenement rights have been acquired through business combinations and are carried at cost less accumulated amortisation and impairment losses. These intangible assets have been determined to have finite useful lives. If an impairment indication arises, the recoverable amount is estimated and an impairment loss is recognised to the extent that the recoverable amount is lower than the carrying amount.

#### Exploration rights

Exploration rights acquired through business combinations are carried at cost less any accumulated impairment losses. These intangible assets are not amortised but are subject to impairment testing on an annual basis or whenever there is an indicator of impairment.

### IMPAIRMENT TESTING OF GOODWILL AND INTANGIBLES WITH INDEFINITE USEFUL LIVES

#### (a) Carrying amount of goodwill and intangibles with indefinite useful lives allocated to each of the cash generating units (CGUs)

For the purpose of impairment testing, goodwill and/or indefinite life intangibles have been allocated to the Group's CGUs/groups of CGUs which represent the lowest level within the Group at which they are monitored for internal management purposes.

The aggregate carrying value of goodwill and indefinite life brand names according to the CGUs are as follows:

2013	CONSOLIDATED		
	GOODWILL	INDEFINITE LIFE BRAND NAMES	TOTAL
	\$m	\$m	\$m
Recycling	176.7	-	176.7
Steel			
Manufacturing	-	-	-
Distribution	190.9	-	190.9
Mining Consumables	1,271.7	49.2	1,320.9
Unallocated	-	0.7	0.7
	1,639.3	49.9	1,689.2

2012	CONSOLIDATED		
	GOODWILL	INDEFINITE LIFE BRAND NAMES	TOTAL
	\$m	\$m	\$m
Recycling	333.5	-	333.5
Steel <sup>2</sup>			
Manufacturing	533.0	21.8	554.8
Distribution	255.8	45.9	301.7
Mining Consumables	1,216.6	46.3	1,262.9
Unallocated <sup>1</sup>	12.4	-	12.4
	2,351.3	114.0	2,465.3

1 The New Zealand Distribution segment ceased to be an operating segment on the disposal of Steel & Tube Holdings on 9 October 2012. Accordingly, the June 2012 balance has been reclassified as unallocated.

2 On 30 May 2013 Arrium announced the merger of the Manufacturing and Distribution operating segments into Steel effective 1 July 2013. Accordingly, the June 2012 balances for the Manufacturing and Distribution operating segments have been combined into Steel.

#### (b) Key assumptions used in value in use calculations

The recoverable amount of the CGUs/groups of CGUs to which goodwill and/or indefinite life brand names have been allocated has been determined based on a value in use calculation using the cash flow projections based on the five-year forecast approved by the Board. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below.

CGU/GROUP OF CGUS	DISCOUNT RATE		TERMINAL GROWTH RATE	
	2013 %	2012 %	2013 %	2012 %
Recycling	11.6	9.2	2.5	2.0
Manufacturing	11.0	9.6	2.5	2.0
Australian Distribution	12.2	10.5	2.5	2.0
Mining Consumables				
North Americas	12.4	8.5	3.0	2.0
South Americas	13.5	7.8	3.0	2.0
AltaSteel	9.8	8.5	3.0	2.0
Australia	12.2	10.1	3.0	2.0

The calculation of value in use is most sensitive to the following assumptions:

- Discount rates
- Gross margins
- Raw materials price inflation
- Market conditions
- Growth rate used to extrapolate cash flows beyond the forecast period.

**Discount rates** - discount rates reflect management's estimate of the time value of money and the risks specific to each CGU/group of CGUs that are not already reflected in the cash flows. In determining appropriate discount rates for each unit, regard has been given to a weighted average cost of capital of the entity as a whole and adjusted for country and business risk specific to the unit. The Group has applied post-tax discount rates to discount the forecast future attributable post-tax cash flows. The equivalent pre-tax discount rates are disclosed above.

**Gross margins** - the basis used to determine the value assigned to the margins in the CGUs are the actual margins achieved, adjusted for efficiency improvement as well as movements in input costs and international steel prices in line with external sources of information.

**Raw materials price inflation** - values assigned to this key assumption are consistent with external sources of information except for Arrium owned mines, where the value assigned is in line with mining contracts and other cost escalators such as oil.

**Market conditions** - assumptions on key domestic market segment activity including construction, mining, agriculture and manufacturing are consistent with external sources of information. Assumptions including GDP, CPI and wages escalation are consistent with external sources of information. Long-term forecast AUD/USD and NZD exchange rates are used which are consistent with external sources of information.

**Growth rate estimates** - are based on published industry research and do not exceed the growth rate of the markets or country to which the CGUs/group of CGUs are dedicated.

## 14. OTHER INTANGIBLES AND GOODWILL CONTINUED

### (c) Sensitivity to changes in assumptions

#### Manufacturing

For the Manufacturing CGU, actual recoverable amount based on the value in use calculation is consistent with its carrying amount. Management recognises that the cash flow projections, discount and growth rates used to calculate the value in use may vary to what they have estimated. Management notes the value in use estimate is particularly sensitive in the following areas:

- An increase by 1% in the discount rate used will result in an impairment loss of \$127.0 million.
- A fall in the growth rate to 1% will result in an impairment loss of \$141.0 million.

#### Recycling

For the Recycling CGU, actual recoverable amount based on the value in use calculation is consistent with its carrying amount. Management recognises that the cash flow projection, discount and growth rates used to calculate value in use may vary to what they have estimated. Management notes the value in use estimate is particularly sensitive in the following areas:

- An increase by 1% in the discount rate used will result in an impairment loss of \$30.0 million.
- A fall in the growth rate to 1% will result in an impairment loss of \$35.0 million.

## 15. OTHER ASSETS

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current</b>		
Other assets	7.2	11.8
	7.2	11.8
<b>Non-current</b>		
Defined benefit asset (Note 19)	32.7	27.8
	32.7	27.8

## 16. PAYABLES

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current</b>		
Trade and other payables	1,098.1	1,054.0
	1,098.1	1,054.0
<b>Non-current</b>		
Other payables	0.2	0.3
	0.2	0.3

Trade payables are non-interest bearing and are generally settled on 30 to 60 day terms. Other payables are non-interest bearing and include liabilities in respect of trade financing within the normal operating cycle of the business.

### FAIR VALUES

Due to the short-term nature of these payables, their carrying amounts are assumed to approximate their fair values.

### FOREIGN EXCHANGE RISK

The Group's exposure to foreign exchange risk related to trade and other payables is disclosed in Note 32.

## 17. INTEREST-BEARING LIABILITIES

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current</b>		
Finance lease (Note 25)	1.1	1.0
Unsecured		
Bank loans	-	31.4
US Private Placement - at amortised cost <sup>2</sup>	-	24.9
	1.1	57.3
<b>Non-current</b>		
Finance lease (Note 25)	11.6	12.7
Unsecured		
Bank loans <sup>1</sup>	1,966.8	1,801.7
US Private Placement - at fair value <sup>2,4,5</sup>	89.7	93.2
US Private Placement - at amortised cost <sup>3,4,5,6</sup>	484.0	446.5
	2,552.1	2,354.1

- 1 Included in bank loans are USD1.1 billion and CAD230 million of debt designated as a hedge of the Group's net investments in its US and Canadian operations. Gains and losses on the translation of the debt are recorded in equity offsetting losses and gains on the translation of the net investments in subsidiaries to the Group functional currency AUD. During the year, net losses of \$73.2 million (2012: \$33.6 million) on the translation of the designated debt were recorded in equity. There was no ineffectiveness recognised in the Income Statement during the year (2012: \$0.9 million loss).
- 2 Included in this balance is USD60 million issued under US Private Placement in April 2003 at 5.55% payable in April 2015. This has been hedged using a series of cross-currency interest rate swaps and accounted for as a fair value hedge - refer to Notes 8 and 32.
- 3 Included in this balance is US Private Placement debt recognised on acquisition of SSX Pty Ltd in August 2007. This comprises USD30 million at 6.08% payable in July 2014 and USD20 million at 6.08% payable in June 2015. USD25 million was repaid in June 2013. Of the balance at 30 June, USD20 million (2012: USD45 million) has been hedged using a cross-currency interest rate swap accounted for as a cash flow hedge - refer to Notes 8 and 32. A further USD30 million is designated as a hedge of the Group's net investments in its US operations. Gains and losses on the translation of the debt are recorded in equity offsetting losses and gains on the translation of the net investments in subsidiaries to the Group functional currency AUD. During the year, net unrealised losses of \$1.7 million (2012: \$1.2 million) on the translation of the designated debt were recorded in equity. There was no ineffectiveness recognised in the Income Statement during the year (2012: nil).
- 4 Interest rate risk on the USD30 million referred to above has been hedged using an interest rate swap to receive a fixed interest rate of 3.0% semi-annually (2012: 3.0%) in USD and pay a floating rate of interest equal to LIBOR in USD on the notional amount quarterly. The underlying debt continues to be carried at amortised cost. The future interest payment cash flows, being the hedged item, are carried at fair value.
- 5 Included in this balance is USD200 million US Private Placement debt issued in July 2008. This comprises USD50 million at 7.0% payable in July 2015, USD97 million at 7.3% payable in July 2018 and USD53 million at 7.4% payable in July 2020. Interest rate risk on the debt has been hedged using a series of interest rate swaps to receive an average fixed interest rate of 3.5% (2012: 3.5%) in USD and pay a floating rate of interest equal to LIBOR in USD on the notional amount quarterly. The underlying debt continues to be carried at amortised cost. The future interest payment cash flows, being the hedged item, are carried at fair value.
- 6 Included in this balance is USD200 million US Private Placement debt issued in June 2011. This comprises USD50 million at 4.95% payable in June 2018, USD125 million at 5.61% payable in June 2021 and USD25 million at 5.71% payable in June 2023. This debt is designated as a hedge of the Group's net investments in its US operations. Gains and losses on the translation of the debt are recorded in equity offsetting losses and gains on the translation of the net investments in subsidiaries to the Group functional currency AUD. During the year, net losses of \$11.6 million (2012: \$5.7 million) on the translation of the designated debt were recorded in equity. There was no ineffectiveness recognised in the Income Statement in the current or prior year.

At 30 June 2013, the fair value of US Private Placement debt carried at amortised cost on Balance Sheet is \$484.0 million (2012: \$471.4 million).

### FAIR VALUES

Unless disclosed above, the carrying amount of the Group's current and non-current borrowings approximate their fair value. The fair values have been calculated by discounting the expected future cash flows at prevailing interest rates.

### RISK EXPOSURES

Details of the Group's exposure to risks arising from current and non-current borrowings are set out in Note 32.



## 18. PROVISIONS

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Current</b>		
Employee benefits (Note 29)	259.9	277.2
Restoration and rehabilitation	14.2	16.4
Legal and customer claims	8.6	11.6
Restructuring	32.1	14.9
Carbon unit liability	30.5	-
	345.3	320.1
<b>Non-current</b>		
Employee benefits (Note 29)	39.5	49.4
Defined benefit liability (Note 19)	30.4	45.0
Restoration and rehabilitation	151.2	141.0
Legal and customer claims	1.2	1.6
Restructuring	1.7	-
	224.0	237.0

	CONSOLIDATED				
	LEGAL AND CUSTOMER CLAIMS	RESTORATION AND REHABILITATION	RESTRUCTURING	CARBON UNIT LIABILITY	TOTAL
2013	\$m	\$m	\$m	\$m	\$m
<b>Movements in carrying amounts</b>					
Carrying amount at the beginning of the year	13.2	157.4	14.9	-	185.5
Disposal of controlled entities	(0.7)	-	(0.2)	-	(0.9)
Additional amounts provided	5.2	31.4	70.4	62.9	169.9
Reversal of unutilised amounts	(2.0)	(10.2)	(6.3)	-	(18.5)
Utilised	(5.4)	(9.1)	(19.3)	(32.4)	(66.2)
Net foreign currency differences on translation of foreign operations	0.2	2.6	(0.1)	-	2.7
Unwinding of discount to present value	-	1.9	-	-	1.9
Discontinued operations	(0.7)	(8.6)	(25.6)	-	(34.9)
Carrying amount at the end of the year	9.8	165.4	33.8	30.5	239.5

### PROVISION FOR RESTORATION AND REHABILITATION

Provision for restoration and rehabilitation comprise obligations relating to reclamation, site closure and other costs.

### PROVISION FOR LEGAL AND CUSTOMER CLAIMS

Provision for legal and customer claims relates to estimates of settlement of legal claims with regulators, customers and others for alleged liability and/or legal costs associated with such claims.

### PROVISION FOR RESTRUCTURING

Provision for restructuring comprised of obligations relating to redundancies from organisational changes and other direct expenditure associated with business restructures.

### PROVISION FOR CARBON UNIT LIABILITY

Provision for carbon unit liability relates to obligations to pay for carbon emissions based on actual emissions and consumption data.

## 19. RETIREMENT BENEFIT OBLIGATIONS

The Arrium Group participates in a number of defined benefit and accumulation plans in Australia and Canada. The funds provide benefits either on a defined benefit or cash accumulation basis, for employees on retirement, resignation, disablement, or to their dependants on death.

### ACCUMULATION PLANS

The benefits provided by accumulation funds are based on contributions and income thereon held by the fund on behalf of the member. Contributions are made by the member and the Company based on a percentage of the member's salary, as specified by the fund rules. These contributions are expensed in the period in which they are incurred. Contributions by the Group of 9% of employees' wages and salaries are legally enforceable in Australia.

### DEFINED BENEFIT PENSION PLANS

#### Australia

The Group has two superannuation plans in Australia, one of which has defined benefit sections and defined contribution sections. The benefits provided by the defined benefit sections of the plan are based on the length of service of the member and the salary of the member at or near retirement. Member contributions, based on a percentage of salary, are specified by the fund rules. The defined benefit sections have been closed to new members since February 2011.

Employer contributions are made each month to the fund in accordance with the advice of the actuary to the fund, at levels deemed to be adequate to fund benefit payments in accordance with the fund's Trust Deed. These contributions are expensed in the period in which they are incurred.

#### Canada

The pension plans are defined benefit plans funded by employer contributions made in accordance with the most recent actuarial valuations for funding purposes.

The Group also operates a number of plans in Canada, which provide employees with post-employment benefits in respect of medical costs. Contributions are made on a pay-as-you-go basis as benefits are paid.

The following tables summarise the components of the net defined benefit expense recognised in the Income Statement and the funded status and amounts recognised in the Balance Sheet for the respective plans.

2013	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS
	AUSTRALIA \$m	CANADA \$m	CANADA \$m
<b>Net defined benefit expense</b>			
Current service cost	14.4	2.4	0.9
Interest cost on benefit obligation	7.8	6.6	1.8
Expected return on plan assets	(19.6)	(8.1)	-
Salary sacrifice contributions	2.4	-	-
Net actuarial losses recognised in the year	8.0	0.5	-
Effect of curtailments and settlements	-	-	-
Net defined benefit expense	13.0	1.4	2.7
Actual return on plan assets	47.8	11.8	-
<b>Defined benefit asset/(liability) included in the Balance Sheet</b>			
Fair value of plan assets	333.2	144.7	-
Present value of defined benefit obligation	(328.7)	(151.9)	(35.4)
Surplus/(Deficit) at the end of the year	4.5	(7.2)	(35.4)
Net actuarial losses not yet recognised	28.2	13.6	(1.4)
Net defined benefit asset - non-current (refer to Note 15)	32.7	-	-
Net defined benefit liability - non-current (refer to Note 18)	-	6.4	(36.8)

## 19. RETIREMENT BENEFIT OBLIGATIONS CONTINUED

2012	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS
	AUSTRALIA \$m	CANADA \$m	CANADA \$m
<b>Net defined benefit expense</b>			
Current service cost	12.8	2.1	0.7
Interest cost on benefit obligation	13.6	6.8	1.8
Expected return on plan assets	(22.2)	(7.4)	-
Salary sacrifice contributions	3.8	-	-
Effect of curtailments and settlements	0.9	-	-
Net defined benefit expense	8.9	1.5	2.5
Actual return on plan assets	3.3	3.6	-
<b>Defined benefit asset/(liability) included in the Balance Sheet</b>			
Fair value of plan assets	299.3	112.1	-
Present value of defined benefit obligation	(356.1)	(140.1)	(37.2)
Deficit at the end of the year	(56.8)	(28.0)	(37.2)
Net actuarial losses not yet recognised	84.6	16.2	4.0
Net defined benefit asset - non-current (refer to Note 15)	27.8	-	-
Net defined benefit liability - non-current (refer to Note 18)	-	(11.8)	(33.2)

The Group has no legal obligation to settle any defined benefit liability with an immediate contribution or additional one-off contributions.

2013	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS
	AUSTRALIA \$m	CANADA \$m	CANADA \$m
<b>Changes in the present value of the defined benefit obligation</b>			
Opening defined benefit obligation	356.1	140.1	37.2
Interest cost	7.8	6.6	1.8
Current service cost	14.4	2.4	0.9
Contributions by plan participants	3.0	-	-
Benefits paid	(32.3)	(7.1)	(1.2)
Settlements	-	-	-
Actuarial (gains)/losses on obligation	(20.3)	0.3	(6.0)
Net foreign exchange differences	-	9.6	2.7
Closing defined benefit obligation	328.7	151.9	35.4
<b>Changes in the fair value of plan assets</b>			
Opening fair value of plan assets	299.3	112.1	-
Expected return	19.6	8.1	-
Contributions by employer	17.9	18.6	1.2
Contributions by plan participants	0.6	-	-
Benefits paid	(32.3)	(7.1)	(1.2)
Settlements	-	-	-
Actuarial gains	28.1	3.7	-
Net foreign exchange differences	-	9.3	-
Closing fair value of plan assets	333.2	144.7	-

2012	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS
	AUSTRALIA \$m	CANADA \$m	CANADA \$m
<b>Changes in the present value of the defined benefit obligation</b>			
Opening defined benefit obligation	333.5	126.5	31.9
Interest cost	13.6	6.8	1.8
Current service cost	12.8	2.1	0.7
Contributions by plan participants	4.4	-	-
Benefits paid	(44.3)	(6.3)	(1.1)
Business combinations	(7.2)	-	-
Actuarial losses on obligation	43.3	11.4	4.0
Net foreign exchange differences	-	(0.4)	(0.1)
Closing defined benefit obligation	356.1	140.1	37.2
<b>Changes in the fair value of plan assets</b>			
Opening fair value of plan assets	324.3	114.1	-
Expected return	22.2	7.4	-
Contributions by employer	22.6	1.0	1.1
Contributions by plan participants	0.6	-	-
Benefits paid	(44.3)	(6.3)	(1.1)
Business combinations	(7.2)	-	-
Actuarial losses	(18.9)	(3.8)	-
Net foreign exchange differences	-	(0.3)	-
Closing fair value of plan assets	299.3	112.1	-

The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

2013	DEFINED BENEFIT PENSION PLANS	
	AUSTRALIA %	CANADA %
Equity instruments	57.5	64.3
Property	4.5	-
Debt instruments	23.0	34.0
Alternatives	15.0	1.7

2012	DEFINED BENEFIT PENSION PLANS	
	AUSTRALIA %	CANADA %
Equity instruments	57.5	63.1
Property	4.5	-
Debt instruments	23.0	35.1
Alternatives	15.0	1.8

The expected rate of return on plan assets has been based on historical and future expectations of returns for each of the major categories of asset classes as well as the expected and actual allocation of plan assets to these major categories.

The principal actuarial assumptions used in determining defined benefit obligations for the Group's defined benefit plans are shown below:

2013 PRINCIPAL ACTUARIAL ASSUMPTION	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS
	AUSTRALIA %	CANADA %	CANADA %
Discount rate <sup>1</sup>	4.1	4.7	4.9
Expected rate of return on assets	N/A	6.6	N/A
Future salary increases	3.5	3.3	3.1
CPI inflation	2.5	N/A	N/A
Immediate healthcare trend rate	N/A	N/A	6.9
Ultimate healthcare trend rate	N/A	N/A	4.5

<sup>1</sup> For the financial year ended 30 June 2013, the discount rate for Australian defined benefit funds was determined based on a blend of Commonwealth and state government bonds. The discount rate for financial year ended 30 June 2012 was based on current market yields for Australian Commonwealth government bonds.

## 19. RETIREMENT BENEFIT OBLIGATIONS CONTINUED

2012 PRINCIPAL ACTUARIAL ASSUMPTION	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS
	AUSTRALIA %	CANADA %	CANADA %
Discount rate	2.8	5.4	5.7
Expected rate of return on assets	6.3	6.6	N/A
Future salary increases	3.7	3.3	3.1
CPI inflation	2.2	N/A	N/A
Immediate healthcare trend rate	N/A	N/A	7.3
Ultimate healthcare trend rate	N/A	N/A	4.5

Assumed healthcare cost trend rates have a significant effect on the amounts recognised in the Income Statement. A one percentage point change in assumed healthcare cost trend rates would have the following effects:

SENSITIVITY TO TREND ASSUMPTIONS	POST-EMPLOYMENT MEDICAL BENEFITS			
	VALUATION TREND + 1%		VALUATION TREND - 1%	
	2013 \$m	2012 \$m	2013 \$m	2012 \$m
Effect on total service cost and interest cost components	0.6	0.5	(0.5)	(0.4)
Effect on post-employment benefit obligation for medical costs	3.4	6.6	(3.1)	(5.2)

	DEFINED BENEFIT PENSION PLANS				
	AUSTRALIA				
	2013 \$m	2012 \$m	2011 \$m	2010 \$m	2009 \$m
<b>Historic summary</b>					
Defined benefit plan obligation	(328.7)	(356.1)	(333.5)	(322.4)	(376.4)
Plan assets	333.2	299.3	324.3	298.6	303.8
Surplus/(Deficit)	4.5	(56.8)	(9.2)	(23.8)	(72.6)
Experience adjustments arising on plan liabilities	(0.1)	(14.1)	(17.3)	17.8	(2.5)
Experience adjustments arising on plan assets	(28.1)	18.9	18.2	23.6	(54.7)

	DEFINED BENEFIT PENSION PLANS		POST-EMPLOYMENT MEDICAL BENEFITS	
	CANADA		CANADA	
	2013 \$m	2012 \$m	2013 \$m	2012 \$m
<b>Historic summary</b>				
Defined benefit plan obligation	(151.9)	(140.1)	(35.4)	(37.2)
Plan assets	144.7	112.1	-	-
Deficit	(7.2)	(28.0)	(35.4)	(37.2)
Experience adjustments arising on plan liabilities	0.4	(1.1)	0.1	-
Experience adjustments arising on plan assets	-	-	-	-

**Employer contributions - Australia**

Excluding salary sacrifice contributions, the Group intends to continue to contribute to the defined benefit sections of the plan at a rate of at least 13.5% (2012: 13.5%) of superannuation salaries, in line with the actuary's latest recommendations.

The Group also intends to contribute the additional "top-up" contributions to the Arrium Superannuation Fund to fund the current funding deficit as instructed by the Fund actuary from time to time.

Total employer contributions excluding any additional "top-up" contributions expected to be paid by the Group in respect of defined benefit sections for the year ending 30 June 2014 are \$7.8 million (2013: \$8.5 million).

**Employer contributions - Canada**

Total employer contributions to pension and post-employment medical plans in Canada expected to be paid for the year ending 30 June 2014 are \$6.8 million (2013: \$10.9 million).

## 20. CONTRIBUTED EQUITY

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Contributed equity</b>		
Issued capital (a)	3,803.6	3,796.5
Employee compensation shares (b)	(25.6)	(25.6)
Total contributed equity	3,778.0	3,770.9
<b>(a) Issued capital</b>		
Number of ordinary shares: 1,355,433,903 (2012: 1,345,665,626)		
Issued and paid-up	3,803.6	3,796.5
<b>(b) Employee compensation shares</b>		
Number of ordinary shares: 6,283,917 (2012: 6,283,917)		
Shares held in trust under equity-based compensation arrangements	(25.6)	(25.6)

	NUMBER OF ORDINARY SHARES		VALUE OF ORDINARY SHARES	
	2013	2012	2013 \$m	2012 \$m
<b>Movement in issued capital for the period</b>				
On issue at the beginning of the year	1,345,665,626	1,338,106,652	3,796.5	3,787.2
Shares issued under a dividend reinvestment plan <sup>1</sup>	9,768,277	7,558,974	7.1	9.3
On issue at the end of the year	1,355,433,903	1,345,665,626	3,803.6	3,796.5
<b>Movements in employee compensation shares for the period</b>				
Held in trust at the beginning and end of the year	(6,283,917)	(6,283,917)	(25.6)	(25.6)

1 The dividend reinvestment plan provides shareholders with an opportunity to acquire additional ordinary shares of Arrium Limited in lieu of cash dividends. Shares were issued at \$0.58 (October 2012) and \$0.95 (April 2013).

### Terms and conditions of contributed equity

Ordinary shares have the right to receive dividends as declared and, in the event of winding up of the Company, to participate in the proceeds from the sale of all surplus assets in proportion to the number of and amounts paid on shares held.

Ordinary shares entitle their holder to one vote, either in person or by proxy, at a meeting of the Company.

## 21. RETAINED EARNINGS

	CONSOLIDATED	
	2013 \$m	2012 \$m
At the beginning of the year	734.6	770.7
Net (loss)/profit	(694.7)	57.7
Transfer from asset revaluation reserve	1.8	-
Dividends paid (Note 23)	(67.4)	(93.8)
At the end of the year	(25.7)	734.6

## 22. RESERVES

	CONSOLIDATED	
	2013 \$m	2012 \$m
Foreign currency translation reserve	(48.2)	(88.2)
Cash flow hedge reserve	0.3	0.4
Share-based payments reserve	26.2	19.3
Asset revaluation reserve	-	1.8
	(21.7)	(66.7)
<b>(A) FOREIGN CURRENCY TRANSLATION RESERVE</b>		
At the beginning of the year	(88.2)	(104.2)
Net investment hedges	(100.9)	(23.5)
Reclassified to profit and loss	(6.9)	-
Exchange fluctuations on overseas net assets	147.8	39.5
At the end of the year	(48.2)	(88.2)
<b>(B) CASH FLOW HEDGE RESERVE</b>		
At the beginning of the year	0.4	2.9
Losses taken to equity	(1.4)	(13.4)
Transferred to profit and loss	6.7	7.6
Transferred to initial carrying amount of hedged items on Balance Sheet	(5.4)	3.3
At the end of the year	0.3	0.4
<b>(C) SHARE-BASED PAYMENTS RESERVE</b>		
At the beginning of the year	19.3	13.0
Expense recognised	6.9	6.3
At the end of the year	26.2	19.3
<b>(D) ASSET REVALUATION RESERVE</b>		
At the beginning of the year	1.8	1.8
Transferred to retained earnings	(1.8)	-
At the end of the year	-	1.8

### NATURE AND PURPOSE OF RESERVES

#### Foreign currency translation reserve

The foreign currency translation reserve is used to record exchange differences arising from the translation of the financial statements of foreign subsidiaries and the effective portion of the gain or loss on net investment hedges.

#### Cash flow hedge reserve

The cash flow hedge reserve is used to record the effective portion of the gain or loss on hedge instruments and the underlying hedged item in designated cash flow hedges relationships.

#### Share-based payments reserve

The share-based payments reserve is used to record the value of equity-based compensation provided to employees and senior executives as part of their remuneration. Refer to Note 29 for further details of these plans.

#### Asset revaluation reserve

The asset revaluation reserve relates to the revaluation of the pre-acquisition carrying amounts of intangible assets acquired through business combinations, to their fair values.

## 23. DIVIDENDS

The following dividends have been paid, declared or recommended since the end of the preceding financial year:

	ON ORDINARY SHARES	DIVIDEND PER ORDINARY SHARE
	\$m	CENTS
<b>2013</b>		
Interim dividend for 2013, paid 18 April 2013	27.0	2.0
Final dividend for 2012, paid on 18 October 2012	40.4	3.0
	67.4	5.0
<b>2012</b>		
Interim dividend for 2012, paid 19 April 2012	40.3	3.0
Final dividend for 2011, paid on 13 October 2011	53.5	4.0
	93.8	7.0

### DIVIDENDS NOT RECOGNISED AT YEAR END

In addition to the above dividends, since year end the Directors have recommended the payment of a final dividend of 3.0 cents per fully paid ordinary share (2012: 3.0 cents). The aggregate amount of the proposed dividend expected to be paid on 17 October 2013 but not recognised as a liability at year end is \$40.7 million (2012: \$40.4 million).

### DIVIDEND FRANKING

There were no franking credits available for the subsequent financial year.

The balance of the franking account at year end has been adjusted for franking credits arising from the payment of provision for income tax and dividends recognised as receivables, franking debits arising from the payment of proposed franked dividends and franking credits that may be prevented from distribution in subsequent financial years.



## 24. NOTES TO THE CASH FLOW STATEMENT

### (A) RECONCILIATION TO CASH FLOW STATEMENT

Cash at balance date as shown in the Cash Flow Statement is reconciled to the related items in the Balance Sheet as follows:

	CONSOLIDATED	
	2013 \$m	2012 \$m
Cash and cash equivalents	438.3	268.1
Cash and cash equivalents attributable to discontinued operations (Note 34)	-	3.6
	438.3	271.7
At call bank loan	-	(2.0)
	438.3	269.7

### (B) RECONCILIATION OF PROFIT AFTER TAX TO NET CASH FLOWS FROM OPERATING ACTIVITIES:

(Loss)/Profit after tax	(692.6)	63.6
<b>Adjusted for non-cash items</b>		
Depreciation and amortisation	274.1	220.8
Impairment of plant and equipment and intangible assets	930.1	142.2
Net gains on disposal of property, plant and equipment	(32.6)	(8.9)
Net gain on disposal of business	-	(3.1)
Net gain on disposal of controlled entity	(2.4)	-
Share of net loss/(profit) of investments accounted for using the equity method	0.9	(1.0)
Net fair value change on derivative financial instruments	(2.7)	(4.4)
Unrealised foreign exchange (gains)/losses	(10.8)	19.8
Share-based payment expense	6.9	6.5
Finance costs	8.1	8.8
<b>Changes in assets and liabilities net of effects of purchase and sale of controlled entities and business</b>		
Decrease/(Increase) in receivables	141.9	(68.2)
(Increase)/Decrease in inventories	(46.8)	113.4
(Increase)/Decrease in deferred tax balances	(171.8)	(26.1)
(Increase)/Decrease in other assets	(78.6)	(9.1)
(Decrease)/Increase in tax provisions	30.3	(57.7)
(Decrease)/Increase in payables	194.6	47.1
(Decrease)/Increase in provisions	41.6	26.4
<b>Net cash flow from operating activities</b>	<b>590.2</b>	<b>470.1</b>

### (C) NON-CASH INVESTING AND FINANCING ACTIVITIES

During the year, dividends of \$7.1 million (2012: \$9.3 million) were satisfied via the issue of shares under a dividend reinvestment plan (refer Note 20).

### (D) FAIR VALUES

The carrying amount of the Group's cash and cash equivalents approximate their fair value.

## 25. COMMITMENTS

### (A) CAPITAL COMMITMENTS

During the year ended 30 June 2013, the Group entered into contracts to purchase property, plant and equipment for \$58.7 million (2012: \$161.4 million).

### (B) OPERATING LEASE COMMITMENTS

The Arrium Group has entered into various non-cancellable operating leases on property, plant and equipment. The leases have varying terms, escalation clauses and renewal rights. On renewal, the terms of the leases are renegotiated.

The Group also leases various plant and machinery under cancellable operating leases.

Future minimum rentals payable under non-cancellable operating leases as at 30 June are follows:

	CONSOLIDATED	
	2013 \$m	2012 \$m
Within one year	90.8	82.4
After one year but not more than five years	171.6	173.7
Longer than five years	29.7	41.3
Total operating lease commitments	292.1	297.4

### (C) FINANCE LEASE COMMITMENTS

The Group has finance leases for plant and machinery.

Commitments in relation to finance leases are payable as follows:

	CONSOLIDATED			
	2013 \$m		2012 \$m	
	MINIMUM PAYMENTS	PRESENT VALUE OF PAYMENTS	MINIMUM PAYMENTS	PRESENT VALUE OF PAYMENTS
Within one year	1.9	1.9	1.9	1.9
After one year but not more than five years	7.8	6.4	7.8	6.3
Longer than five years	7.2	4.4	9.1	5.5
Total operating lease commitments	16.9	12.7	18.8	13.7
Less: Amounts representing finance charges	(4.2)	-	(5.1)	-
Present value of minimum lease repayments	12.7	12.7	13.7	13.7

## 26. CONTINGENCIES

### CONTINGENT LIABILITIES

Contingent liabilities at the balance date not otherwise provided for in the financial statements are categorised as follows:

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Guarantees and indemnities</b>		
Bank guarantees covering:		
Workers' compensation self-insurance licences <sup>1</sup>	52.5	48.9
Performance of contracts	45.5	46.7

<sup>1</sup> In Australia, Arrium Limited has given guarantees to various state workers' compensation authorities as a prerequisite for self-insurance. Of this amount, a total of \$32.9 million (2012: \$36.2 million) has been provided for in the consolidated financial statements as recommended by independent actuarial advice.

### Third party claims

The Group has been involved from time to time in various claims and lawsuits incidental to the ordinary course of business, including claims for damages and commercial disputes relating to its business, products or services. Based on legal advice obtained, other than amounts already provided for in the accounts, the Directors do not expect any material liability to eventuate.

### Taxation

From time to time, the Company is subject to information requests, reviews, audits and investigations by tax authorities in the various jurisdictions in which the Group operates, including the Australian Taxation Office (ATO). These include a current audit by the ATO in relation to a sale and leaseback transaction entered into in 2004. Amended assessments have been received in respect of the sale and leaseback transaction for \$26.0 million, comprising \$16.5 million of primary tax, \$5.4 million of interest and \$4.1 million of penalty. The ATO has advised that the amended assessments are based on its determination to deny a part of the income tax deductions in respect of lease rental payments made under the sale and leaseback transaction.

The Company strongly disputes this view and believes its treatment of the lease payments is supported by both case law and the ATO's own published ruling on sale and leaseback transactions. The Company intends to vigorously defend its position and to pursue all avenues of objection as appropriate. Accordingly, no liability has been recognised in the Company's financial statements in relation to this transaction. As part of the objection process, the Company has paid \$7.4 million of the assessed primary tax and interest whilst the matter is disputed. This amount has been offset against other agreed tax refunds with the ATO.

## 27. CONTROLLED ENTITIES

The consolidated financial statements at 30 June 2013 include the following controlled entities:

ENTITY	NOTES	COUNTRY OF INCORPORATION	% OF SHARES HELD	
			2013	2012
Arrium Limited	(a)	Australia		
A.C.N. 006 769 035 Pty Ltd		Australia	100.0	100.0
Akkord Pty Limited		Australia	100.0	100.0
Alta Steel Chile S.A.	(c)	Chile	100.0	100.0
AltaSteel Ltd.		Canada	100.0	100.0
ANI Construction (W.A.) Pty Ltd		Australia	100.0	100.0
ANI Finance (UK) Ltd		United Kingdom	100.0	100.0
ANI Mineral Processing, LLC		USA	100.0	100.0
Arrium Finance Pty Limited	(b)	Australia	100.0	100.0
Arrium Iron Ore Holdings Pty Limited	(b)	Australia	100.0	100.0
Atlas Group Employees Superannuation Fund Pty Ltd		Australia	100.0	100.0
Atlas Group Staff Superannuation Fund Pty Ltd		Australia	100.0	100.0
Atlas Group Superannuation Plan Pty Ltd		Australia	100.0	100.0
Australian National Industries Pty Ltd		Australia	100.0	100.0
Australian Tube Mills Pty Limited	(h)	Australia	100.0	100.0
Australian Wire Industries Pty Ltd		Australia	100.0	100.0
AWI Holdings Pty Limited		Australia	100.0	100.0
B.G.J. Holdings Proprietary Limited		Australia	100.0	100.0
Bradken Consolidated Pty Limited		Australia	100.0	100.0
Central Iron Pty Ltd		Australia	100.0	100.0
Cockatoo Dockyard Pty Limited		Australia	100.0	100.0
Commonwealth Steel Company Pty Limited		Australia	100.0	100.0
Comsteel Pty Limited		Australia	100.0	100.0
Coober Pedy Resources Pty Ltd		Australia	100.0	100.0
Eagle & Globe Pty Limited		Australia	100.0	100.0
Email Accumulation Superannuation Pty Ltd		Australia	100.0	100.0
Email Executive Superannuation Pty Ltd		Australia	100.0	100.0
Email Holdings Pty Limited		Australia	100.0	100.0
Email Management Superannuation Pty Ltd		Australia	100.0	100.0
Email Metals Pty Ltd		Australia	100.0	100.0
Email Pty Ltd		Australia	100.0	100.0
Email Superannuation Pty Limited		Australia	100.0	100.0
Emwest Holdings Pty Ltd		Australia	100.0	100.0
Emwest Properties Pty Limited		Australia	100.0	100.0
Fagersta Australia Pty Ltd	(b)	Australia	100.0	100.0
Fagersta Steels Pty Ltd	(b)	Australia	100.0	100.0
GCG (JB) Sdn Bhd	(e)	Malaysia	100.0	100.0
GSF Management Pty Limited		Australia	100.0	100.0
GST Philippines Inc.	(c)	Philippines	100.0	100.0
HP Metal Recycling (HK) Limited		Hong Kong	100.0	100.0
HP Metal Recycling Inc.		Philippines	100.0	100.0
HPR Industrial (JB) Sdn Bhd	(e)	Malaysia	100.0	100.0
Inversiones Moly-Cop S.A.	(c)	Chile	100.0	100.0
J Murray-More (Holdings) Pty Ltd		Australia	100.0	100.0
John McGrath Pty Ltd		Australia	100.0	100.0
Kelvinator Australia Pty Ltd		Australia	100.0	100.0
Linstar Holdings Sdn Bhd	(e)	Malaysia	100.0	100.0
Litesteel Products Pty Ltd		Australia	100.0	100.0
Litesteel Technologies America, LLC		USA	100.0	100.0
Litesteel Technologies Pty Ltd	(b)	Australia	100.0	100.0
Maple Leaf Metals (A Partnership)	(c)	Canada	100.0	100.0
M-Asia Enterprise (KL) Sdn Bhd	(e)	Malaysia	100.0	100.0
Metals Properties Pty Ltd		Australia	100.0	100.0

ENTITY	NOTES	COUNTRY OF INCORPORATION	% OF SHARES HELD	
			2013	2012
Metalstores Pty Limited		Australia	100.0	100.0
Metpol Pty Ltd		Australia	100.0	100.0
Moly-Cop Adesur S.A.	(c)	Peru	94.1	94.1
Moly-Cop Canada (A Partnership)	(c)	Canada	100.0	100.0
Moly-Cop Chile S.A.	(c)	Chile	100.0	100.0
Moly-Cop Group SARL	(c)	Luxembourg	100.0	100.0
Moly-Cop Mexico S.A de C.V.	(c)	Mexico	100.0	100.0
Moly-Cop Peru S.A.C.	(c)	Peru	100.0	100.0
MolyCop Steel Inc.		Canada	100.0	100.0
Moly-Cop USA LLC	(c)	United States	100.0	100.0
N.K.S. (Holdings) Proprietary Limited		Australia	100.0	100.0
O Dee Gee Co. Pty Ltd		Australia	100.0	100.0
OneSteel Americas Holdings Pty Limited	(b)	Australia	100.0	100.0
OneSteel Asia Limited		Hong Kong	100.0	100.0
OneSteel Australian Tube Mills Pty Limited	(h)	Australia	100.0	100.0
OneSteel Building Supplies Pty Limited		Australia	100.0	100.0
OneSteel Coil Coaters Pty Ltd	(b)	Australia	100.0	100.0
OneSteel Group (US Holdings) Inc.		USA	100.0	100.0
OneSteel Insurance Pte Ltd		Singapore	100.0	100.0
OneSteel Manufacturing Pty Limited	(b)	Australia	100.0	100.0
OneSteel MBS Pty Limited	(b)	Australia	100.0	100.0
OneSteel NSW Pty Limited	(b)	Australia	100.0	100.0
OneSteel NZ Holdings Limited		New Zealand	100.0	100.0
OneSteel NZ Limited		New Zealand	100.0	100.0
OneSteel Queensland Pty Limited		Australia	100.0	100.0
OneSteel Recycling (Fiji) Limited		Fiji	100.0	100.0
OneSteel Recycling (PNG) Limited	(d)	PNG	-	100.0
OneSteel Recycling Asia Limited		Hong Kong	100.0	100.0
OneSteel Recycling Holdings Pty Ltd	(b)	Australia	100.0	100.0
OneSteel Recycling Hong Kong Limited		Hong Kong	100.0	100.0
OneSteel Recycling NZ Limited		New Zealand	100.0	100.0
OneSteel Recycling Overseas Pty Limited	(b)	Australia	100.0	100.0
OneSteel Recycling Pty Limited	(b)	Australia	100.0	100.0
OneSteel Recycling, Inc.		USA	100.0	100.0
OneSteel Reinforcing Pty Limited	(b)	Australia	100.0	100.0
OneSteel Technologies Pty Limited		Australia	100.0	100.0
OneSteel Trading Pty Limited	(b)	Australia	100.0	100.0
OneSteel UK Holdings Limited	(c)	United Kingdom	100.0	100.0
OneSteel US Investments		USA	100.0	100.0
OneSteel US Investments 1 Pty Ltd	(b)	Australia	100.0	100.0
OneSteel US Investments 2 Pty Ltd		Australia	100.0	100.0
OneSteel Wire Pty Limited	(b)	Australia	100.0	100.0
Overseas Corporation (Australia) Pty Ltd		Australia	100.0	100.0
P & T Tube Mills Pty Ltd	(h)	Australia	100.0	100.0
Palmer Tube Mills (NZ) Limited		New Zealand	100.0	100.0
Palmer Tube Mills Pty Limited	(h)	Australia	100.0	100.0
Pipeline Supplies of Australia Pty Limited		Australia	100.0	100.0
PT Commonwealth Steel Indonesia		Indonesia	100.0	100.0
QMR, Inc.		Philippines	100.0	100.0
Reosteel Pty Ltd		Australia	100.0	100.0
Roentgen Ray Pty Ltd		Australia	100.0	100.0
Servicios Moly-Cop S.A de C.V.	(c)	Mexico	100.0	100.0
Southern Iron Pty Ltd	(b)	Australia	100.0	100.0
SSG Investments Pty Ltd		Australia	100.0	100.0
SSG No.2 Pty Ltd		Australia	100.0	100.0
SSG No.3 Pty Ltd		Australia	100.0	100.0

## 27. CONTROLLED ENTITIES CONTINUED

ENTITY	NOTES	COUNTRY OF INCORPORATION	% OF SHARES HELD	
			2013	2012
SSGL Share Plan Nominees Pty Ltd		Australia	100.0	100.0
SSX Acquisitions Pty Limited	(b)	Australia	100.0	100.0
SSX Employees Superannuation Fund Pty Ltd		Australia	100.0	100.0
SSX Holdings Pty Limited		Australia	100.0	100.0
SSX International Pty Limited	(b)	Australia	100.0	100.0
SSX Pty Limited	(b)	Australia	100.0	100.0
SSX Retirement Fund Pty Ltd		Australia	100.0	100.0
SSX Services Pty Limited	(b)	Australia	100.0	100.0
SSX Staff Superannuation Fund Pty Ltd		Australia	100.0	100.0
Steel & Tube Holdings Limited	(f)	New Zealand	-	50.3
Steel & Tube New Zealand Limited	(f)	New Zealand	-	50.3
Stube Industries Limited	(f)	New Zealand	-	50.3
Tasco Superannuation Management Pty Ltd		Australia	100.0	100.0
Thai Metal Recycling Limited		Thailand	100.0	100.0
The ANI Corporation Pty Limited		Australia	100.0	100.0
The Australian Steel Company (Operations) Pty Ltd	(b)	Australia	100.0	100.0
TMR Loha Holdings Limited		Thailand	100.0	100.0
Tube Estates Pty Ltd		Australia	100.0	100.0
Tube Street Pty Ltd		Australia	100.0	100.0
Tube Technology Pty Ltd		Australia	100.0	100.0
Tubemakers of Australia Pty Limited		Australia	100.0	100.0
Tubemakers Somerton Pty Limited		Australia	100.0	100.0
Wembley Insurance Pte Ltd	(g)	Singapore	100.0	100.0
Western Consolidated Industries Pty Ltd		Australia	100.0	100.0
Whyalla Ports Pty Ltd	(b)	Australia	100.0	100.0
X.C.E. Pty Ltd		Australia	100.0	100.0
XEM (Aust) Pty Limited		Australia	100.0	100.0
XLA Pty Ltd		Australia	100.0	100.0
XLL Pty Ltd		Australia	100.0	100.0
XMS Holdings Pty Limited	(b)	Australia	100.0	100.0
Zinctek Pty Ltd		Australia	100.0	100.0

a) Arrium Limited is a public company limited by shares, incorporated and domiciled in Australia. The registered office is c/- Company Secretary, Arrium Limited, Level 40, 259 George Street, Sydney NSW 2000, Australia.

b) These entities are party to a Deed of Cross Guarantee or Assumption Deed (Deeds) with Arrium Limited pursuant to ASIC Class Order 98/1418 and are, as at the date of execution of the Deeds, eligible for the benefit of the individual class order.

c) Balance date 31 December.

d) These companies are deregistered.

e) These companies are in liquidation.

f) These companies were disposed on 9 October 2012. See Note 34 for additional details.

g) Balance date 31 March.

h) These entities were party to a Deed of Cross Guarantee with Arrium Limited pursuant to ASIC Class Order 98/1418. On 5 February 2013, these entities were disposed of to SSG No. 2 Pty Ltd, a wholly-owned subsidiary of Arrium Limited, and accordingly ASIC Class Order 98/1418 ceased to apply to these entities.

The financial years of all controlled entities above, with the exception of (c) and (g), are the same as that of the parent entity, Arrium Limited.

**DEED OF CROSS GUARANTEE**

Financial information for the Arrium Limited class order closed group:

	CLOSED GROUP	
	2013 \$m	2012 \$m
<b>Income Statement</b>		
Sales revenue	4,481.2	4,681.7
Cost of sales	(3,550.2)	(3,653.9)
Gross profit	931.0	1,027.8
Other revenue	141.5	125.7
Other income	3.0	18.1
Operating expenses	(972.0)	(777.0)
Finance costs	(101.1)	(104.9)
Share of net loss of investments accounted for using the equity method	(0.5)	(0.1)
(Loss)/Profit before income tax	1.9	289.6
Income tax expense/(benefit)	119.0	(5.2)
Profit after tax from continuing operations	120.9	284.4
Net loss from discontinued operations, after tax	(56.6)	(256.5)
<b>Profit after tax</b>	<b>64.3</b>	<b>27.9</b>
<b>Statement of Comprehensive Income</b>		
Profit after tax	64.3	27.9
Other comprehensive income		
<b>Items that may be reclassified subsequently to profit or loss:</b>		
Cash flow hedges:		
- net losses taken to equity	(1.5)	(13.4)
- transferred to profit	6.7	7.6
- transferred to initial carrying amount of hedged items	(5.4)	3.3
Currency translation differences:		
- net investment hedges	(100.9)	(23.5)
- exchange fluctuations on overseas net assets	86.5	26.0
<b>Other comprehensive loss for the year, net of tax</b>	<b>(14.6)</b>	<b>-</b>
<b>Total comprehensive income for the year</b>	<b>49.7</b>	<b>27.9</b>
<b>Summary of movements in consolidated retained earnings</b>		
Retained earnings at the beginning of the financial year	241.1	307.0
Net profit	64.3	27.9
Dividends provided for or paid	(67.4)	(93.8)
<b>Retained earnings at the end of the year</b>	<b>238.0</b>	<b>241.1</b>

## 27. CONTROLLED ENTITIES CONTINUED

	CLOSED GROUP	
	2013 \$m	2012 <sup>1</sup> \$m
<b>Balance Sheet</b>		
<b>Current assets</b>		
Cash and cash equivalents	230.2	143.6
Receivables	1,148.4	777.1
Derivative financial instruments	6.4	11.4
Inventories	982.5	1,099.9
Tax assets	-	18.8
Other assets	6.7	7.9
Disposal groups and assets held for sale	195.7	16.1
<b>Total current assets</b>	<b>2,569.9</b>	<b>2,074.8</b>
<b>Non-current assets</b>		
Derivative financial instruments	20.3	27.4
Other financial assets	1,435.5	1,365.9
Property, plant and equipment	2,151.5	2,171.5
Mine development expenditure	492.2	317.6
Other intangibles and goodwill	1,601.8	1,963.2
Deferred tax assets	86.7	-
Other assets	45.8	27.7
<b>Total non-current assets</b>	<b>5,833.8</b>	<b>5,873.3</b>
<b>TOTAL ASSETS</b>	<b>8,403.7</b>	<b>7,948.1</b>
<b>Current liabilities</b>		
Payables	851.3	815.4
Derivative financial instruments	8.6	20.8
Interest-bearing liabilities	613.6	421.0
Provisions	313.3	281.6
Disposal groups and liabilities held for sale	112.5	3.0
<b>Total current liabilities</b>	<b>1,899.3</b>	<b>1,541.8</b>
<b>Non-current liabilities</b>		
Derivative financial instruments	45.2	57.1
Interest-bearing liabilities	2,279.3	2,102.2
Deferred tax liabilities	-	78.9
Provisions	123.6	108.0
<b>Total non-current liabilities</b>	<b>2,448.1</b>	<b>2,346.2</b>
<b>TOTAL LIABILITIES</b>	<b>4,347.4</b>	<b>3,888.0</b>
<b>NET ASSETS</b>	<b>4,056.3</b>	<b>4,060.1</b>
<b>Equity</b>		
Contributed equity	3,778.0	3,770.9
Retained earnings	238.0	241.1
Reserves	40.3	48.1
<b>TOTAL EQUITY</b>	<b>4,056.3</b>	<b>4,060.1</b>

1 The 2012 comparatives have been restated to present the net deferred tax position.

## 28. RELATED PARTY DISCLOSURES

### (A) TRANSACTIONS WITH RELATED PARTIES IN THE WHOLLY-OWNED GROUP

Throughout the year, the parent entity, Arrium Limited, entered into the following transactions with members of the wholly-owned group:

- Loans were received
- Interest was paid
- Dividends were received
- Tax related transactions occurred within the tax consolidated group.

### (B) TRANSACTIONS WITH JOINTLY CONTROLLED ENTITY

TRANSACTION TYPE	CONSOLIDATED	
	2013 \$m	2012 \$m
Product sales to jointly controlled entity	1.5	2.7
Product purchases from jointly controlled entity	8.0	16.3
Dividends received from jointly controlled entities	0.6	-
Repayment of loan (from)/loan to jointly controlled entity	0.5	0.3
Amounts receivable from jointly controlled entity	1.0	0.2
Amounts payable to jointly controlled entity	-	2.0

These transactions were undertaken on commercial terms and conditions.

### (C) TRANSACTIONS WITH ASSOCIATE

TRANSACTION TYPE	CONSOLIDATED	
	2013 \$m	2012 \$m
Product sales to associate	-	9.3
Product purchases from associate	-	7.6
Amounts receivable from associate	-	0.7

### (D) ULTIMATE CONTROLLING ENTITY

The ultimate controlling entity of the Arrium Group is Arrium Limited.

## 29. EMPLOYEE BENEFITS

	CONSOLIDATED	
	2013 NUMBER	2012 NUMBER
Employees as at 30 June	10,078	11,007

	2013 \$m	2012 \$m
The aggregate employee benefit liability is comprised of:		
Provisions (current)	259.9	277.2
Provisions (excluding defined benefit liability) (non-current)	39.5	49.4
Total employee benefit liabilities	299.4	326.6

### (A) SELF-INSURED WORKERS' COMPENSATION PROVISION

Obligations under self-insurance workers' compensation licences included in provision for employee benefits:

	CONSOLIDATED	
	2013 \$m	2012 \$m
New South Wales	19.0	26.4
Queensland	1.5	2.3
Victoria	4.4	4.3
South Australia	2.6	2.6
Western Australia	0.9	0.6
Total self-insurance workers' compensation provision	28.4	36.2



## 29. EMPLOYEE BENEFITS CONTINUED

Arrium provides the following share and rights plans for employees:

### (B) EMPLOYEE SHARE PLANS

Arrium has two share plans under which eligible employees may acquire ordinary shares in the Company. The most recent offer under the employee share plan was made in May 2013 to eligible employees as at 1 April 2013. All Australian resident permanent employees (excluding Arrium Directors) are eligible to participate in either, or both, the Tax Exempt or Tax Deferred Share Plans. Both the Tax Exempt and Tax Deferred Plans enable participating employees to make salary sacrifice contributions to purchase shares on-market on a monthly basis. Under both plans, the Company also grants to contributing participants a parcel of fully paid ordinary shares to the value of \$125 (\$375 employee contribution) or \$250 (\$750 employee contribution) per year for employees participating in the Tax Exempt Plan and \$333 per year for employees participating in the Tax Deferred Plan for a minimum \$1,000 employee contribution. The shares must be held in the plan for a minimum of three years whilst the participant remains an employee of Arrium for both the Tax Exempt Plan and Tax Deferred Plan before they can be withdrawn.

The matching shares granted by the Company are purchased on-market or allocated from surplus shares forfeited under either the employee share plan or the executive share plan. The matching shares are allocated each month at the same time as the employee contributed shares, which are purchased on the 15th of each month. The number of shares allocated to the employee is the offer amount divided by the weighted average price at which the Company's shares are traded on the Australian Securities Exchange on the date of the purchase.

Offers under the scheme are at the discretion of the Company. All Arrium shares acquired under the Tax Exempt and Tax Deferred plans rank equally with all other Arrium shares and carry dividend and voting rights.

All plan management and administration costs relating to the plans are met by the Company.

	2013	2012
Total number purchased by employees during the year ('000s)	4,685	4,017
Weighted average fair value of shares granted during the period (\$)	0.84	1.05

### (C) LONG-TERM INCENTIVE (LTI) PERFORMANCE RIGHTS PLAN (PRP)

The PRP for senior management provides for Rights to fully paid Arrium Limited ordinary shares. In addition, a special Service Rights allocation in 2011 provides for Rights to fully paid Arrium Limited ordinary shares. Rights are held in trust until vested to the participant. There are no voting entitlements attached to the Rights held in trust, nor are any dividends paid until such time as the Rights vest and the shares are allotted.

Vesting of Performance Rights is subject to the Company achieving specific performance hurdles and a three-year qualifying period. Vesting of the Service Rights is subject to a two-year service condition. There are no retesting provisions if Performance Rights fail to vest at the conclusion of the Performance Period. In addition, all or some of these Rights may vest to an individual on termination when special circumstances apply. At the discretion of the Board these include redundancy, death and permanent disability. There are no cash settlement alternatives. No consideration is required in accepting the Performance Rights.

The Performance Rights have two hurdles including Arrium's EPS growth measured against EPS targets as determined by the Board and Arrium's Total Shareholder Return (TSR) measured against the Comparator Index, the S&P/ASX 200 Index (excluding the consumer discretionary, consumer staples, financial services, health, information technology and telecommunications services sectors). For each instalment, 50% of the Rights will vest subject to Arrium's TSR performance to the Base Comparator Index and the remaining 50% of Rights will vest subject to Arrium's EPS growth against set targets.

	2013	
	NUMBER '000S	WEIGHTED AVERAGE FAIR VALUE \$
Outstanding at the beginning of the year	9,570	1.09
Rights issued during the year	13,318	0.50
Rights vested during the year	-	-
Outstanding at the end of the year	22,888	0.75

	2012	
	NUMBER '000S	WEIGHTED AVERAGE FAIR VALUE \$
Outstanding at the beginning of the year	-	-
Rights issued during the year	9,570	1.09
Rights vested during the year	-	-
Outstanding at the end of the year	9,570	1.09

The fair values of the Performance Rights granted is estimated at the grant date using either a Monte Carlo Simulation analysis or a binomial tree approach taking into account the terms and conditions upon which the Rights were granted. The fair value of the Service Rights is estimated at grant date using either a binomial tree approach or the Black Scholes model.

The following table lists the inputs to the models used.

GRANT DATE	PERFORMANCE HURDLE	DIVIDEND YIELD	EXPECTED VOLATILITY	RISK-FREE RATE	EXPECTED LIFE	WEIGHTED AVERAGE SHARE PRICE AT GRANT DATE
01/07/2011	Service	3.59%	–	4.84%	2 years	\$1.84
30/08/2011	TSR	4.66%	40%	3.78%	3 years	\$1.41
30/08/2011	EPS	4.66%	40%	3.78%	3 years	\$1.41
01/09/2011	Service	4.26%	–	3.85%	2 years	\$1.55
24/02/2012	Service	6.24%	–	3.71%	2 years	\$1.03
24/02/2012	TSR	6.24%	60%	3.71%	3 years	\$1.03
24/02/2012	EPS	6.24%	60%	3.71%	3 years	\$1.03
5/11/2012	TSR	7.00%	60%	2.60%	3 years	\$0.39
5/11/2012	EPS	7.00%	60%	2.60%	3 years	\$0.58
21/12/2012	Service	5.40%	60%	2.69%	3 years	\$0.78
21/12/2012	TSR	5.40%	60%	2.69%	3 years	\$0.58
21/12/2012	EPS	5.40%	60%	2.69%	3 years	\$0.78

The expected volatility reflects the assumption that the historical volatility is indicative of future trends which may also not necessarily be the actual outcome.

#### (D) LONG-TERM INCENTIVE (LTI) SHARE PLAN

During the year ended 30 June 2012, the Company replaced the existing LTI Share Plan with a new Performance Rights Plan (PRP) which continues to operate in the year ended 30 June 2013. The new PRP applied from 1 July 2012, with the previous LTI Share Plan remaining in operation until all unvested awards have either vested or the executive's entitlement lapses. No further awards have been granted under the previous LTI Share Plan since it was replaced by the PRP.

The LTI Share Plan for senior management provides for grants of Arrium Limited ordinary shares. The shares granted are held in trust until vested to the participant. The shares held in trust carry voting rights and the holder is entitled to any dividends paid during the vesting period.

Vesting is subject to the Company achieving specific performance hurdles and a three-year qualifying period. If the shares do not vest immediately at the end of the three-year qualifying period, provisions exist that enable retesting of the performance hurdles. In addition, all or some of these shares may vest to an individual on termination when special circumstances apply. At the discretion of the Board these include redundancy, death and permanent disability. There are no cash settlement alternatives.

The performance hurdles relate to two comparative groups, namely the Australian Consumer Price Index plus 5% (Base Index) and the S&P/ASX 200 Index (excluding banks, media and telecommunications) (Comparator Index) that are measured against Arrium's performance in terms of TSR. For each instalment, 50% of the shares will vest subject to Arrium's TSR performance to the Base Index and the remaining 50% of shares will vest subject to Arrium's performance to the Comparator Index.

	2013		2012 <sup>1</sup>	
	NUMBER '000S	WEIGHTED AVERAGE FAIR VALUE \$	NUMBER '000S	WEIGHTED AVERAGE FAIR VALUE \$
Outstanding at the beginning of the year	5,621	4.53	5,877	4.54
Shares vested during the year	–	–	–	–
Shares forfeited during the year	(1,450)	5.89	(256)	4.84
Outstanding at the end of the year	4,171	3.73	5,621	4.53

1 In the prior period, the above table incorrectly excluded shares forfeited during the year. Management has restated this balance to correctly include all shares forfeited during 2012.

There were no shares purchased or granted during the year.

## 30. KEY MANAGEMENT PERSONNEL DISCLOSURES

### (A) DETAILS OF KEY MANAGEMENT PERSONNEL

#### Compensation of Key Management Personnel

	CONSOLIDATED	
	2013 \$	2012 \$
Short-term benefits	11,294,455 <sup>2,5</sup>	11,587,731 <sup>1,4</sup>
Long-term benefits	336,301	487,430 <sup>3,4</sup>
Post-employment benefits	331,316	442,255
Share-based payments	3,953,260	3,443,534
	15,915,332	15,960,950

1 The 2012 comparatives have been restated to exclude the gross up amounts relating to reportable fringe benefits.

2 Inclusive of accrued short-term leave entitlements during the period.

3 Inclusive of accrued long-term leave entitlements during the period.

4 The 2012 comparatives have been restated to include accrued leave entitlements during the period.

5 In 2012, G J Plummer was awarded a deferred STIP component of \$320,000 contingent on achieving personal targets relating to iron ore and port development projects in South Australia in 2013. This amount was paid in 2013 and has been included in short-term benefits.

The Company has applied the exemption under Corporations Regulation 2M.3.03 which relieves listed companies from providing detailed remuneration disclosures in relation to their key management personnel in their annual financial reports by Accounting Standard AASB 124 Related Party Disclosures. These remuneration disclosures are provided in the Remuneration Report section of the Directors' Report which has been audited.

#### Loans to Key Management Personnel

There were no loans made to or outstanding from Key Management Personnel during the current or prior year.

#### Other transactions and balances with Key Management Personnel

Key Management Personnel of Arrium Limited and its related parties or their related entities, conduct transactions with entities within the Arrium Group that occur within a normal employee, customer or supplier relationship on terms and conditions no more favourable than those with which it is reasonable to expect the entity would have adopted if dealing with the Key Management Personnel or their related entity at an arm's length in similar circumstances. These transactions include the following and have been quantified below where the transactions are considered to be of interest to users of these financial statements.

### (B) SHAREHOLDINGS OF KEY MANAGEMENT PERSONNEL<sup>1</sup>

2013	HELD AT 1 JULY 2012	GRANTED AS REMUNERATION	NET CHANGE OTHER	HELD AT 30 JUNE 2013
	NUMBER	NUMBER	NUMBER	NUMBER
<b>Directors</b>				
R B Davis	188,995	-	-	188,995
C R Galbraith, AM	200,000	-	-	200,000
P G Nankervis	116,890	-	30,000	146,890
G J Plummer	3,683,868	-	(305,461)	3,378,407
D A Pritchard	143,921	-	-	143,921
A G Roberts	339,467	-	(57,344)	282,123
P J Smedley	410,455	-	-	410,455
G J Smorgon, AM	15,107	-	-	15,107
R Warnock	10,837	-	11,538	22,375
<b>Executives</b>				
R C Bakewell	109,254	-	7,573	116,827
G D A Feurtado	51,572	-	(9,830)	41,742
S H Hamer	315,745	-	(49,771)	265,974
L J Selleck	579,583	-	(47,517)	532,066
G A Waters	231,726	-	257	231,983
Total	6,397,420	-	(420,555)	5,976,865

2012	HELD AT 1 JULY 2011	GRANTED AS REMUNERATION <sup>1</sup>	NET CHANGE OTHER	HELD AT 30 JUNE 2012
	NUMBER	NUMBER	NUMBER	NUMBER
<b>Directors</b>				
R B Davis	88,995	-	100,000	188,995
C R Galbraith, AM	156,056	-	43,944	200,000
P G Nankervis	56,890	-	60,000	116,890
G J Plummer	3,683,868	-	-	3,683,868
D A Pritchard	143,921	-	-	143,921
A G Roberts	339,467	-	-	339,467
P J Smedley	410,455	-	-	410,455
G J Smorgon, AM	15,107	-	-	15,107
R Warnock	10,244	-	593	10,837
<b>Executives</b>				
R C Bakewell	103,196	-	6,058	109,254
G D A Feurtado	51,572	-	-	51,572
S H Hamer	315,745	-	-	315,745
M R Parry	261,339	-	(255,302)	6,037
L J Selleck	572,324	-	7,259	579,583
G A Waters	231,535	-	191	231,726
Total	6,440,714	-	(37,257)	6,403,457

1 Include ordinary shares held directly, indirectly or beneficially including held by their related parties.

The shareholdings of former Key Management Personnel, at the date they ceased to be Key Management Personnel, were as follows:

2012	HELD AT 1 JULY 2011	GRANTED AS REMUNERATION	NET CHANGE OTHER	HELD ON CEASING TO BE KMP
	NUMBER	NUMBER	NUMBER	NUMBER
<b>Executive</b>				
M R Parry	261,339	-	(255,302)	6,037

### (C) RIGHTS HOLDINGS OF KEY MANAGEMENT PERSONNEL<sup>1</sup>

2013	HELD AT 1 JULY 2012	GRANTED AS REMUNERATION <sup>1</sup>	NET CHANGE OTHER	HELD AT 30 JUNE 2013
	NUMBER	NUMBER	NUMBER	NUMBER
<b>Directors</b>				
R B Davis	-	-	-	-
C R Galbraith, AM	-	-	-	-
P G Nankervis	-	-	-	-
G J Plummer	1,637,531	2,575,757	-	4,213,288
D A Pritchard	-	-	-	-
A G Roberts	487,506	681,818	-	1,169,324
P J Smedley	-	-	-	-
G J Smorgon, AM	-	-	-	-
R Warnock	-	-	-	-
<b>Executives</b>				
R C Bakewell	487,506	757,575	-	1,245,081
G D A Feurtado	449,047	515,151	-	964,198
S H Hamer	487,506	681,818	-	1,169,324
L J Selleck	460,930	681,818	-	1,142,748
G A Waters	446,568	681,818	-	1,128,386
Total	4,456,594	6,575,755	-	11,032,349

## 30. KEY MANAGEMENT PERSONNEL DISCLOSURES CONTINUED

2012	HELD AT	GRANTED AS	NET CHANGE	HELD AT
	1 JULY 2011	REMUNERATION <sup>1</sup>	OTHER	30 JUNE 2012
	NUMBER	NUMBER	NUMBER	NUMBER
<b>Directors</b>				
R B Davis	-	-	-	-
C R Galbraith, AM	-	-	-	-
P G Nankervis	-	-	-	-
G J Plummer	-	1,637,531	-	1,637,531
D A Pritchard	-	-	-	-
P J Smedley	-	-	-	-
G J Smorgon, AM	-	-	-	-
R Warnock	-	-	-	-
<b>Executives</b>				
R C Bakewell	-	487,506	-	487,506
G D A Feurtado	-	449,047	-	449,047
S H Hamer	-	487,506	-	487,506
A G Roberts	-	487,506	-	487,506
L J Selleck	-	460,930	-	460,930
G A Waters	-	446,568	-	446,568
Total		4,456,594	-	4,456,594

<sup>1</sup> Rights granted as remuneration to the MD&CEO and Executives are held in trust on the participant's behalf during the performance period. Participants are not able to withdraw shares from the trust until shares vest as a result of the performance conditions being achieved.

## 31. AUDITORS' REMUNERATION

	CONSOLIDATED	
	2013 \$	2012 \$
Amounts paid or payable to the auditor of Arrium Limited, for:		
An audit or review of the financial report of the entity and any other entity in the consolidated group	1,704,704	1,640,884
Other services in relation to the entity and any other entity in the consolidated group		
Other regulatory audits	137,500	152,075
Other assurance related work	78,879	14,000
Other services	91,880	330,150
	2,012,963	2,137,109
Amounts paid or payable to other auditors for:		
An audit or review of the financial report of certain controlled entities in the consolidated group	-	178,836
	-	178,836

## 32. FINANCIAL RISK MANAGEMENT

### FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial instruments comprise receivables, payables, bank loans and overdrafts, US Private Placements (Senior Notes), finance leases, cash and short-term deposits and derivative financial instruments. The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk, commodity price risk, credit risk and liquidity risk.

The Group manages its exposure to key financial risks including interest rate and currency risk in accordance with the Group's financial risk management policy. It is, and has been throughout the period under review, the Group's policy that no speculative trading in financial instruments shall be undertaken. The objective of the policy is to support the delivery of the Group's financial targets whilst protecting future financial security.

The Group enters into derivative transactions, principally interest rate swaps, cross-currency interest rate swaps and forward foreign exchange contracts. Derivatives classified as held for trading are based on limits set by the Board. Although they provide an economic hedge, they do not qualify for hedge accounting under AASB 139.

The Group uses different methods to measure and manage different types of risks to which it is exposed. These include monitoring levels of exposure to interest rates and foreign currency risk and assessments of market forecasts for interest rate, foreign exchange and commodity prices. Ageing analyses and monitoring of specific credit allowances are undertaken to manage credit risk. Liquidity risk is monitored through the rolling cash flow forecasts comparing projected debt levels for the next 12 months against total committed facilities.

Primary responsibility for identification and control of financial risks rests with the Treasury Committee under the authority of the Board. The Board reviews and agrees policies for managing each of the risks identified below.

#### (A) INTEREST RATE RISK

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt borrowings. The objective of the Group's policy is to neutralise exposures within levels of tolerance acceptable to the Board, minimising interest expense whilst ensuring that an appropriate level of flexibility exists to accommodate potential changes in funding requirements.

Borrowings issued at variable rates expose the Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk where the borrowings are carried at fair value. The Group's policy is to manage its interest expense using a mix of fixed and floating interest rate debt. The Group's policy is to keep 30%-70% or the lesser of, the expected usage of borrowings or the committed exposure to a minimum of five years at fixed rates of interest, using interest rate swaps to achieve this when necessary.

The Group analyses its interest rate exposure on a dynamic basis. Within this analysis, consideration is given to potential renewals of existing positions, alternative hedging positions and the mix of fixed and variable interest rates. Based on the various considerations, the Group manages its interest rate risk by using interest rate swaps. Such swaps have the economic effect of converting interest on borrowings from floating to fixed rates or fixed to floating rates. Under interest rate swaps, the Group agrees with other parties to exchange at specified intervals, the difference between fixed contract rates and floating rate interest amounts calculated by reference to the agreed notional principal amounts.

At balance date, the Group had the following financial assets and liabilities exposed to interest rate risk:

	CONSOLIDATED	
	2013 \$m	2012 \$m
<b>Financial assets</b>		
Cash and cash equivalents	438.3	268.1
Trade receivables	7.1	8.4
<b>Financial liabilities</b>		
Bank loans	(1,966.8)	(1,801.7)
US Private Placement - at fair value	(89.7)	(93.2)
<b>Net exposure before hedging</b>	<b>(1,611.1)</b>	<b>(1,618.4)</b>
Cross-currency and interest rate swaps <sup>1</sup>	345.8	381.8
<b>Net exposure to cash flow and fair value interest rate risk</b>	<b>(1,265.3)</b>	<b>(1,236.6)</b>

1 Notional principal amounts of cross-currency and interest rate swaps.

#### Sensitivity

If interest rates had increased by 100 or decreased by 100 basis points as at 30 June and with all other variables held constant, post-tax profit for the year would have been \$4.5 million lower/\$1.9 million higher (excluding upside sensitivity of a 100 basis points decrease which causes a negative interest rate on USD borrowings in fair value hedge) (2012: \$9.2 million lower/\$14.1 million higher), mainly as a result of higher/lower interest expense resulting on variable rate debt. Other components of equity would have been \$8.2 million higher/\$10.4 million lower (2012: \$11.0 million higher/\$12.5 million lower) as a result of an increase/decrease in the fair value of the cash flow hedges of borrowings.

#### (B) FOREIGN CURRENCY RISK

The Group's primary sources of foreign currency risk are sales of product, including iron ore, and purchases of inventory in a currency other than the functional currency; purchases of commodity inputs; capital expenditure denominated in foreign currency and in its net investment in foreign currency denominated operations.

It is the Group's policy to use forward exchange contracts to eliminate the currency exposures on any individual transactions in excess of USD0.5 million or equivalent. Committed exposures will be 100% covered when the transaction is contracted, whilst projected exposures (contract underpinning) will be 50% covered where there are ongoing sales or purchases and the transaction is relatively certain. It is the Group's policy to negotiate the terms of the forward exchange contracts to exactly match the terms of the underlying purchase to maximise hedge effectiveness.

#### Net investment hedges

The Group seeks to mitigate its exposure to foreign currency translation risk on the value of the net assets of its USD denominated operations by borrowing in US dollars. The first USD1,295.4 million (2012: USD1,343.4 million) of the Group's net investment in foreign operations is hedged in this manner (refer to Note 17 and Note 8).

In addition to its US operations, the Group has foreign currency translation risk arising on the value of the net assets of its Canadian-based operations. This risk is mitigated through the designation of a CAD230.0 million (2012: CAD200.0 million) denominated debt as a net investment hedge.

Arrium also has foreign currency exposure arising from its US Private Placements of Senior Notes (refer Note 17). Part of this exposure has been hedged using a series of cross-currency interest rate swaps designated either as fair value or cash flow hedges.

## 32. FINANCIAL RISK MANAGEMENT CONTINUED

The Group's exposure to foreign currency risk at balance date was as follows (in Australian dollars):

	CONSOLIDATED						
	2013			2012			
	USD \$m	CAD \$m	OTHER <sup>1</sup> \$m	USD \$m	NZD \$m	CAD \$m	OTHER <sup>2</sup> \$m
Cash and cash equivalents	5.3	-	6.3	46.1	5.2	-	-
Net investment in foreign operations	1,439.3	279.3	(7.2)	1,410.9	54.2	232.3	-
Trade and other receivables	42.4	-	1.2	34.9	0.8	-	0.5
Trade and other payables	(42.0)	-	(5.2)	(50.7)	(0.1)	-	(6.0)
Bank loans and US Private Placement debt <sup>3</sup>	(1,487.4)	(236.7)	-	(1,446.9)	-	(192.7)	-
<b>Net exposure</b>	<b>(42.4)</b>	<b>42.6</b>	<b>(4.9)</b>	<b>(5.7)</b>	<b>60.1</b>	<b>39.6</b>	<b>(5.5)</b>
Forward exchange contracts - buy	183.2	-	25.2	247.2	1.0	-	29.6
Forward exchange contracts - sell	(168.5)	(40.1)	(7.8)	(389.5)	(10.9)	(15.5)	-
Cross-currency interest rate swaps	140.2	(50.9)	-	204.6	-	(95.9)	-

1 Japanese Yen, Indonesian Rupiah, New Zealand dollar, Pounds Sterling, Canadian dollar and Euro.

2 Japanese Yen, Indonesian Rupiah, Pounds Sterling, Canadian dollar and Euro.

3 Notional principal amounts.

### Sensitivity

Had the Australian dollar weakened/strengthened against the major foreign currencies detailed in the above table by 10% as at 30 June and with all other variables held constant, the Group's post-tax profit for the year would have been \$7.9 million lower/\$6.5 million higher (2012: \$3.7 million lower/\$3.0 million higher), mainly as a result of foreign exchange gains/losses on translation of the above foreign currency denominated financial instruments. Other components of equity would have been \$1.3 million lower/\$0.7 million higher (2012: \$20.0 million lower/\$16.4 million higher) had the Australian dollar weakened /strengthened by 10% against the major foreign currencies detailed in the above table, arising from translation of net investment in foreign operations and forward exchange contracts, interest rate and cross-currency interest rate swaps designated as cash flow hedges. The Group's exposure to other foreign exchange movements is not material.

### (C) COMMODITY PRICE RISK

The primary sources of commodity price risk for the Group are iron ore sales made in US dollars; copper, nickel and zinc purchases in US dollars; aluminium purchases which are made in Australian dollars but with prices set in US dollars; energy purchases made in Australian dollars that can be subject to long-term contracts; scrap purchases made outside the Arrium Group and diesel purchases. Commodity price risk is measured by the effect of price movement sensitivities applied to annual usage estimated by the business units.

Commodity price risk is managed by either putting in place fixed price contracts, fixed price swaps or options. The Group's exposure to commodity price risk on financial instruments is not significant.

### (D) CREDIT RISK

Credit risk arises from the financial assets of the Group, which comprise cash and cash equivalents, trade and other receivables, and derivative financial instruments. The Group's exposure to credit risk arises from the default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

The Group does not hold any credit derivatives to offset its credit exposure. The credit risk of any one counterparty with respect to receivables and derivative financial instruments is not significant.

The Group trades only with recognised, creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures including an assessment of their independent credit rating, financial position, past experience and industry reputation. Risk limits are set for each individual customer in accordance with parameters set by the Board and are regularly monitored. In addition, receivables are monitored on an ongoing basis with the result that the Group's exposure to bad debt is not significant.

For financial instruments, limits for each counterparty are set primarily on credit rating, adjusted for country rating and the nominal level of shareholders' funds. The Group does not expect any counterparties to fail to meet their obligations given their high credit ratings. For financial assets and liabilities measured at fair value through profit and loss, the amount of change in fair value that is attributable to credit risk is not material.

### (E) LIQUIDITY RISK

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of bank overdrafts, bank loans, US Private Placement of Senior Notes and finance leases. In addition to committed facilities, Arrium has 11am money market lines and an overdraft facility that assists with the intra-month cash management. Debt maturities are spread out to limit risk on debt rollover.

The Group manages liquidity risk by continuously monitoring forecast and actual cash flows and matching the maturity profiles of assets and liabilities.

**Financing arrangements**

The Group had access to the following undrawn borrowing facilities at balance date:

	CONSOLIDATED	
	2013 \$m	2012 \$m
Expiring within one year	5.0	-
Expiring beyond one year	936.9	1,040.4
	941.9	1,040.4

**Maturity analysis of financial liabilities**

The tables below analyse the Group's financial liabilities into relevant maturity groupings based on the remaining period at the balance date to the contractual maturity date. The amounts disclosed in the table reflect all contractually fixed pay-offs for settlement, repayments and interest resulting from recognised financial liabilities. For interest rate swaps, the cash flows have been estimated using forward interest rates applicable at the reporting date.

For all other obligations, the respective undiscounted cash flows are presented. Cash flows for financial liabilities without fixed maturity are based on the conditions existing at balance date.

CONSOLIDATED	LESS THAN 12 MONTHS	1 - 5 YEARS	GREATER THAN 5 YEARS	TOTAL CONTRACTUAL CASH FLOWS
	\$m	\$m	\$m	\$m
2013				
<b>Financial liabilities</b>				
Trade and other payables	1,098.1	0.2	-	1,098.3
Forward contracts				
- (Inflow)	(220.8)	-	-	(220.8)
- Outflow	220.8	-	-	220.8
Option contracts	2.5	-	-	2.5
Interest rate swaps	13.6	20.1	0.2	33.9
Cross-currency interest rate swaps	7.4	188.2	-	195.6
Bank loans	11.3	1,983.2	-	1,994.5
US Private Placement - Senior Notes	34.3	454.4	246.5	735.2
	1,167.2	2,646.1	246.7	4,060.0
2012				
<b>Financial liabilities</b>				
Trade and other payables	1,052.9	0.3	-	1,053.2
Forward contracts				
- (Inflow)	(379.2)	(6.4)	-	(385.6)
- Outflow	365.4	6.3	-	371.7
Option contracts	0.4	-	-	0.4
Interest rate swaps	17.5	25.9	0.7	44.1
Cross-currency interest rate swaps	100.1	194.5	-	294.6
Bank loans	31.4	1,803.3	-	1,834.7
US Private Placement - Senior Notes	58.0	338.9	313.7	710.6
	1,246.5	2,362.8	314.4	3,923.7

**(F) FAIR VALUE MEASUREMENTS**

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement or for disclosure purposes.

The Group uses various methods in estimating the fair value of a financial instrument. These comprise:

Level 1: The fair value is calculated using quoted prices in active markets.

Level 2: The fair value is estimated using inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices).

Level 3: The fair value is estimated using inputs for the asset or liability that are not based on observable market data.



## 32. FINANCIAL RISK MANAGEMENT CONTINUED

The fair value of the financial instruments as well as the methods used to estimate the fair value are summarised below:

	2013		2012	
	VALUATION TECHNIQUE - MARKET OBSERVABLE INPUTS (LEVEL 2)	TOTAL	VALUATION TECHNIQUE - MARKET OBSERVABLE INPUTS (LEVEL 2)	TOTAL
CONSOLIDATED	\$m	\$m	\$m	\$m
<b>Financial assets</b>				
Forward contracts	10.7	10.7	16.2	16.2
Option contracts	0.6	0.6	0.7	0.7
Interest rate swaps	20.3	20.3	27.5	27.5
Cross-currency interest rate swaps	2.9	2.9	2.4	2.4
	34.5	34.5	46.8	46.8
<b>Financial liabilities</b>				
Forward contracts	9.7	9.7	5.1	5.1
Option contracts	2.5	2.5	0.4	0.4
Interest rate swaps	7.9	7.9	13.1	13.1
Cross-currency interest rate swaps	38.1	38.1	62.6	62.6
	58.2	58.2	81.2	81.2

For financial instruments not quoted in active markets, the Group uses valuation techniques such as present value techniques, comparison to similar instruments for which market observable prices exist and other relevant models used by market participants. These valuation techniques use both observable and unobservable market inputs.

Financial instruments that use valuation techniques with only observable market inputs or unobservable inputs that are not significant to the overall valuation include interest rate swaps, cross-currency interest rate swaps and forward exchange contracts not traded on a recognised exchange. These instruments are included in Level 2.

### Transfer between categories

There were no transfers between categories during the year.

### (G) CAPITAL RISK MANAGEMENT

The Group's objective when managing capital is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. The Board also aims to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Group monitors capital on the basis of gearing ratio (net debt to net debt plus equity). The targeted range for debt considered appropriate in the normal circumstances is 30-40%. The Board is comfortable with the current level of gearing given the external environment.

The Group is subject to externally imposed capital requirements and has complied with these requirements during the current and prior year.

The gearing ratios at the balance date were as follows:

	CONSOLIDATED	
	2013 \$m	2012 \$m
Total debt	2,553.2	2,411.4
Less: Cash and cash equivalents	(438.3)	(268.1)
<b>Net debt</b>	2,114.9	2,143.3
Total equity	3,733.5	4,500.6
Less: Non-controlling interests	(2.9)	(61.8)
<b>Equity</b>	3,730.6	4,438.8
<b>Net debt plus equity</b>	5,845.5	6,582.1
<b>Gearing ratio</b>	36.2%	32.6%

### Sensitivity

Had the Australian dollar strengthened/weakened against the USD by 5 cents as at 30 June 2013 and with all other variables held constant, gearing would have been 1% lower/1% higher mainly as a result of foreign exchange losses/gains on the translation of USD denominated debt.

### 33. PARENT ENTITY DISCLOSURES

The parent company of the Group, as at and throughout the financial year ended 30 June 2013, was Arrium Limited.

Presented below is supplementary information about the parent entity.

	PARENT	
	2013 \$m	2012 \$m
<b>Result of the parent entity</b>		
(Loss)/profit after tax	(631.2)	206.5
Other comprehensive income	-	-
Total comprehensive (loss)/income for the year	(631.2)	206.5
<b>Financial position of the parent entity at year end</b>		
Current assets	7.8	0.5
Non-current assets	3,789.9	4,942.5
Total assets	3,797.7	4,943.0
Current liabilities	501.5	962.5
Total liabilities	501.5	962.5
<b>Total equity of the parent entity comprising:</b>		
Share capital	3,778.0	3,770.9
Retained earnings	(506.8)	191.8
Reserves	25.0	17.8
<b>Total Equity</b>	<b>3,296.2</b>	<b>3,980.5</b>

#### GUARANTEES, CONTINGENT LIABILITIES AND CAPITAL COMMITMENTS OF THE PARENT ENTITY

Arrium Limited has given guarantees amounting to \$52.5 million (2012: \$48.9 million) to various state workers' compensation authorities in Australia as a prerequisite for self-insurance. Refer to Note 26.

#### PARENT ENTITY GUARANTEES IN RESPECT OF DEBTS OF ITS SUBSIDIARIES

As explained in Note 27, the Company has entered into a Deed of Cross Guarantee in accordance with a class order issued by the Australian Securities and Investments Commission. Arrium Limited, and all the controlled entities which are party to the deed, have guaranteed the repayment of all current and future creditors in the event that any of these companies are wound up.

The Company is also a guarantor in respect of certain financing arrangements including wholly-owned subsidiaries which are not party to the Deed of Cross Guarantee.

The parent entity does not have any capital commitments for acquisition of property, plant and equipment as at 30 June 2013 (2012: nil).

### 34. DISCONTINUED OPERATIONS

#### (A) DETAILS OF DISCONTINUED OPERATIONS

##### Australian Tube Mills (ATM)

In February 2013, the Arrium Board determined the ATM business, part of the Steel segment, would be held for sale. The ATM business manufactures structural pipe and tube from facilities at Acacia Ridge, QLD, Newcastle, NSW and Somerton, VIC. Accordingly, as at 30 June 2013, the ATM business has been classified as a discontinued operation. The comparatives for the year ended 30 June 2012 have been restated.

##### Merchandising

The non-integrated Merchandising business, part of the Steel segment, met the criteria for classification as held for sale effective 30 June 2013. The Merchandising portfolio comprises a range of businesses that process and distribute steel and other metal products in Australia. Accordingly, as at 30 June 2013, the Merchandising business has been classified as a discontinued operation.

For the year ended 30 June 2012, the Piping Systems and Oil & Gas Pipe (OGP) businesses, forming part of the Merchandising business, were classified as discontinued operations. The sale of the Piping Systems business was completed in March 2012. On 31 May 2012, the Group ceased manufacturing at its OGP business, based in Kembla Grange, NSW.

##### US Recycling

The US Recycling operations, part of the Recycling segment, met the criteria for classification as held for sale as at 30 June 2013. Accordingly, as at 30 June 2013, the US Recycling operations have been classified as discontinued. The comparatives for the year ended 30 June 2012 have been restated.

Divestment of the ATM, Merchandising and US Recycling businesses is being pursued over the next 12 months.

##### Steel & Tube Holdings Limited

On 9 October 2012, Arrium disposed of its 50.3% stake in Steel & Tube Holdings, a public listed company in New Zealand, for a fixed price of NZ\$2.05 per share. Steel & Tube Holdings formed the New Zealand Distribution segment, and upon disposal, New Zealand Distribution ceased to be a reporting segment. As at 30 June 2013, Steel & Tube Holdings was classified as a discontinued operation. The comparatives for the year ended 30 June 2012 have been restated accordingly.

## 34. DISCONTINUED OPERATIONS CONTINUED

### LiteSteel

In December 2011, the Arrium Board decided to exit its LiteSteel business, which previously formed part of the Steel segment. The LiteSteel business sold and marketed LiteSteel beams primarily in Australia and the United States. The LiteSteel business operations have now closed, with the US business assets having been sold in June 2012. As at 30 June 2012, the LiteSteel business was classified as a discontinued operation.

### (B) RESULTS OF THE DISCONTINUED OPERATIONS

The results of the held for sale and discontinued operations for the year until disposal are presented below:

	2013 \$m	2012 \$m
Revenue	756.1	1,279.7
Expenses	(774.4)	(1,202.3)
Gross (loss)/profit	(18.3)	77.4
Other revenues	19.0	18.3
Operating expenses	(149.4)	(248.1)
Finance costs	(0.7)	(3.4)
Impairment of goodwill	(579.4)	(94.2)
Impairment of property, plant and equipment	(81.1)	(39.5)
Impairment of intangible assets	(24.2)	(5.1)
Gain on sale of the business or controlled entity before income tax	2.4	3.1
Loss before tax from discontinued operations	(831.7)	(291.5)
Tax benefit	68.6	58.8
Loss for the year from discontinued operations <sup>1</sup>	(763.1)	(232.7)
<b>Loss per share for profit from discontinued operations attributable to the ordinary equity holders of the parent:</b>		
Basic loss per share (cents per share)	(56.70)	(17.72)
Diluted loss per share (cents per share)	(56.70)	(17.72)

1 Loss for the year from discontinued operations relates to the parent.

### (C) ASSETS AND LIABILITIES HELD FOR SALE

The major classes of assets and liabilities held for sale are as follows:

	2013 \$m	2012 \$m
<b>Assets</b>		
Cash and cash equivalents <sup>1</sup>	-	3.6 <sup>1</sup>
Receivables	86.2	3.5
Inventory	137.5	1.2
Property, plant and equipment	107.5	9.1
Current tax assets	1.0	-
Deferred tax assets	35.1	-
Other assets	1.3	0.1
Assets held for sale	368.6	17.5
<b>Liabilities</b>		
Payables	121.9	2.4
Provisions	50.8	-
Current tax liabilities	-	-
Deferred tax liabilities	2.7	4.4
Liabilities held for sale	175.4	6.8
Net assets	193.2	10.7

1 Includes bank overdraft subject to master netting arrangements.

**(D) CASH FLOW INFORMATION OF THE DISCONTINUED OPERATIONS**

The net cash flows of discontinued operations are as follows:

	2013 \$m	2012 \$m
Operating activities	(29.5)	142.1
Investing activities	97.1	10.0
Financing activities	-	-
Net cash (outflow)/inflow	67.6	152.1

**(E) DETAILS OF THE SALE OF THE DISCONTINUED OPERATIONS**

	2013 \$m	2012 \$m
Cash consideration received	71.6	82.5
Carrying amount of net assets sold	(135.9)	(79.4)
Non-controlling interests	59.8	-
Reclassified from reserves	6.9	-
Gain on sale before income tax	2.4	3.1
Income tax expense	-	-
Gain on sale after income tax	2.4	3.1

The carrying amounts of assets and liabilities of the discontinued operations as at the date of the sale were:

Cash	2.8	-
Receivables and other assets	50.6	30.4
Inventory	69.5	40.5
Property, plant and equipment	38.4	6.8
Intangibles	31.6	18.3
Deferred tax assets	-	0.9
Payables	(22.2)	(13.9)
Borrowings	(27.7)	-
Provisions	(4.6)	(3.6)
Current tax liabilities	(1.1)	-
Net deferred tax liabilities	(1.4)	-
Net assets	135.9	79.4

**35. BUSINESS COMBINATIONS**

The initial accounting for the acquisition of WPG subsidiaries on 6 October 2011 had been determined provisionally as at that date. In accordance with Accounting Standard AASB3 Business Combinations, the Group has 12 months from the date of acquisition to complete the allocation of the cost of the business combination to the assets, liabilities and contingent liabilities acquired. The finalisation of the allocation on 6 October 2012 had no impact on the financial statements for the year ended 30 June 2012 or the year ended 30 June 2013.

**36. EVENTS AFTER BALANCE SHEET DATE**

On 16 August 2013, the High Court of Australia refused leave sought by BlueScope Steel (A.I.S.) Pty Limited to appeal a decision of the New South Wales Court of Appeal in favour of OneSteel Manufacturing Pty Limited (a wholly owned subsidiary of the Company) in respect of a contractual dispute. The litigation has now been finalised, subject to quantification of legal costs. No adjustment is required in respect of the 30 June 2013 financial statements.

On 19 August 2013, the Company reduced its share capital by \$831.8 million for the amount that is not represented by available assets, reflecting the impairment charges incurred by the Company and Consolidated Entity during the year ended 30 June 2013. This will have the effect of reducing the share capital account and eliminating accumulated losses at the Company and Consolidated Entity level. The transaction has been made in accordance with section 258F of the Corporations Act 2001 (Cth) and will not result in any gains or losses being recognised in future reporting periods. The financial effect of this transaction will not affect the financial statements for the year ended 30 June 2013, but will be included in the financial statements for the year ending 30 June 2014.

On 20 August 2013, the directors have declared the payment of a final dividend of 3.0 cents per fully paid ordinary share. The aggregate amount of the final dividend expected to be paid on 17 October 2013 but not recognised as a liability in the financial statements for the year ended 30 June 2013 is \$40.7 million.

Other than the above, there have been no circumstances arising since 30 June 2013 that have significantly affected or may significantly affect:

- (a) The operations
- (b) The results of those operations, or
- (c) The state of affairs of Arrium Group in future financial years.

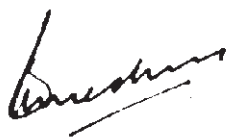
## DIRECTORS' DECLARATION

In the Directors' opinion:

- (a) the consolidated financial statements and accompanying notes set out on pages 63 to 125 and the Remuneration Report in Sections B to F in the Directors' Report are in accordance with the *Corporations Act 2001* (Cth), including:
  - (i) complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the Corporations Regulations 2001, and
  - (ii) giving a true and fair view of the consolidated group's financial position as at 30 June 2013 and of their performance for the financial year ended on that date, and
- (b) the consolidated financial report also complies with International Financial Reporting Standards as disclosed in Note 1
- (c) that there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable, and
- (d) at the date of this declaration, there are reasonable grounds to believe that the members of the extended closed group identified in Note 27 will be able to meet any obligations or liabilities to which they are, or may become, subject by virtue of the deed of cross guarantee described in Note 27.

The Directors have been given the declarations by the Chief Executive Officer and Chief Financial Officer required by section 295A of the *Corporations Act 2001* (Cth).

This declaration is made in accordance with a resolution of the Directors.



**Peter Smedley**  
Chairman

Sydney  
20 August 2013



**Andrew Roberts**  
Managing Director & Chief Executive Officer

# INDEPENDENT AUDITOR'S REPORT

TO THE MEMBERS OF ARRIUM LIMITED



## REPORT ON THE FINANCIAL REPORT

We have audited the accompanying financial report of Arrium Limited (the company), which comprises the consolidated balance sheet as at 30 June 2013, and consolidated income statement and consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated cash flow statement for the year ended on that date, notes 1 to 36 comprising a summary of significant accounting policies and other explanatory information and the directors' declaration of the Group comprising Arrium Limited and the entities it controlled at the year's end or from time to time during the financial year.

### Directors' responsibility for the financial report

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that is free from material misstatement whether due to fraud or error. In note 1(a), the directors also state, in accordance with Australian Accounting Standard AASB 101 Presentation of Financial Statements, that the financial statements of the Group comply with International Financial Reporting Standards.

### Auditor's responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

We performed the procedures to assess whether in all material respects the financial report presents fairly, in accordance with the *Corporations Act 2001* and Australian Accounting Standards, a true and fair view which is consistent with our understanding of the Group's financial position and of its performance.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Independence

In conducting our audit, we have complied with the independence requirements of the *Corporations Act 2001*.

### Auditor's opinion

In our opinion:

- (a) the financial report of the Group is in accordance with the *Corporations Act 2001*, including:
  - (i) giving a true and fair view of the Group's financial position as at 30 June 2013 and of its performance for the year ended on that date; and
  - (ii) complying with Australian Accounting Standards and the Corporations Regulations 2001.
- (b) the financial report also complies with International Financial Reporting Standards as disclosed in Note 1.

## REPORT ON THE REMUNERATION REPORT

We have audited Sections B to F of the Remuneration Report included in pages 51 to 62 of the Directors' Report for the year ended 30 June 2013. The Directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with Section 300A of the *Corporations Act 2001*. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with auditing standards.

### Auditor's opinion

In our opinion, the Remuneration Report of Arrium Limited for the year ended 30 June 2013, complies with Section 300A of the *Corporations Act 2001*.

KPMG

A W Young  
Partner

Sydney  
20 August 2013

# SHAREHOLDER INFORMATION

SHAREHOLDER INFORMATION AS AT 30 AUGUST 2013

As at 30 August 2013, there were 87,103 shareholders holding 1,355,433,903 fully paid ordinary shares. The Company's constitution specifies the general terms with respect to issued share capital and variation of rights.

## RANGE OF HOLDERS

RANGE	TOTAL HOLDERS	SECURITIES
1 – 1,000	34,776	17,803,712
1,001 – 5,000	35,374	83,068,181
5,001 – 10,000	8,721	64,219,825
10,001 – 100,000	7,866	186,766,563
100,001 and over	366	1,003,575,622
<b>Total</b>	<b>87,103</b>	<b>1,355,433,903</b>

## TOP 20 HOLDERS

RANK	NAME	SECURITIES	% ISSUED CAPITAL <sup>1</sup>
1	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	210,720,769	15.55
2	CITICORP NOMINEES PTY LIMITED	209,729,326	15.47
3	J P MORGAN NOMINEES AUSTRALIA LIMITED	170,010,067	12.54
4	NATIONAL NOMINEES LIMITED	147,131,037	10.86
5	JP MORGAN NOMINEES AUSTRALIA LIMITED <CASH INCOME A/C>	30,835,046	2.27
6	CPU SHARE PLANS PTY LTD <OST DEF CONTROL A/C>	14,704,537	1.08
7	AMP LIFE LIMITED	13,905,844	1.03
8	BNP PARIBAS NOMS PTY LTD <DRP>	13,106,461	0.97
9	RBC INVESTOR SERVICES AUSTRALIA NOMINEES PTY LIMITED <GSAM A/C>	11,010,321	0.81
10	EQUITY TRUSTEES LIMITED <SGH20>	8,006,000	0.59
11	RAYLOU INVESTMENTS PTY LTD <THE RAYMOND 2009 A/C>	7,753,072	0.57
12	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED <NT-COMNWLTH SUPER CORP A/C>	6,780,305	0.50
13	QIC LIMITED	6,216,539	0.46
14	NEWECONOMY COM AU NOMINEES PTY LIMITED <900 ACCOUNT>	6,126,941	0.45
15	ARGO INVESTMENTS LIMITED	6,079,109	0.45
16	SHARE DIRECT NOMINEES PTY LTD <10026 A/C>	4,870,000	0.36
17	CPU SHARE PLANS PTY LTD <OST LTI CONTROL A/C>	4,725,457	0.35
18	CPU SHARE PLANS PTY LTD <OST EXE CONTROL A/C>	4,538,935	0.34
19	MILTON CORPORATION LIMITED	3,995,301	0.30
20	PANDA INVESTMENTS (VIC) PTY LTD	3,722,602	0.27
<b>Total top 20 holders</b>		<b>883,967,669</b>	<b>65.22</b>
<b>Total remaining holders</b>		<b>471,466,234</b>	<b>34.78</b>

<sup>1</sup> Rounded to two decimal places.

## HOLDERS OF AN UNMARKETABLE PARCEL

There were 15,481 holders with less than a marketable parcel of 444 securities as at 30 August 2013.

## ASX LISTING

Arrium Limited listed on ASX on 23 October 2000. The Company's fully paid ordinary securities are quoted under ASX Issuer Code ARI.

## SUBSTANTIAL SHAREHOLDERS

Substantial shareholders, as defined by the *Corporations Act 2001* (Cth) as at 30 August 2013 were:

NAME	SECURITIES
Government of Singapore Investment Corporation Pty Ltd	95,706,659
LSV Asset Management	69,672,044
Dimensional Entities	67,760,580

## SHARE REGISTRY

Shareholders with queries about their holding should contact Arrium's Share Registry, Boardroom Pty Limited (Boardroom) by telephone on 1300 131 856 (toll free within Australia) or +61 2 9290 9688 (for callers outside Australia) or by email: [arrium@boardroomlimited.com.au](mailto:arrium@boardroomlimited.com.au). Alternatively, shareholders may write to:

Boardroom Pty Ltd  
GPO Box 3993  
Sydney NSW 2001  
Australia

Details of individual shareholdings can be checked conveniently and simply by visiting [www.investorserve.com.au](http://www.investorserve.com.au) via 'Individual Investment Access'. For security reasons, you will be required to enter your Securityholder Reference Number (SRN) or Holder Identification Number (HIN) and postcode.

## DIVIDENDS

Where considered appropriate by the Board, Arrium expects to pay any dividends declared for the half year ending 31 December in April and for the full year ending 30 June in October by electronic direct deposit. Record, ex-dividend and payment dates are released to the ASX.

## DIVIDEND STATEMENTS

The Company provides dividend statements in accordance with shareholder's communication preferences. To update your communication preferences or request a dividend statement, contact Arrium's Share Registry, Boardroom.

## DIVIDEND REINVESTMENT PLAN

As an alternative to receiving cash dividends, eligible shareholders may elect to participate in the Dividend Reinvestment Plan (DRP). The DRP enables shareholders to use cash dividends to purchase fully paid ordinary shares. Participation in the DRP is optional.

To view Arrium's Dividend Reinvestment Plan Rules, visit our website, [www.arrium.com](http://www.arrium.com).

## TAX FILE NUMBERS

Arrium is required to withhold tax on unfranked components of dividends or interest paid to investors residing in Australia who have not supplied the Company with a Tax File Number (TFN) or exemption form. Shareholders are encouraged to submit a TFN notification to Arrium's Share Registry, Boardroom, but are not required by law to provide their TFN.

## INTERNET ADDRESS

[www.arrium.com](http://www.arrium.com)

## BUY BACKS

There are no current on-market buy-backs in operation.

## PUBLICATIONS AND SHAREHOLDER COMMUNICATIONS

Shareholders wishing to receive Company information electronically are encouraged to register their email address online with Arrium's Share Registry, Boardroom. Visit [www.investorserve.com.au](http://www.investorserve.com.au) to register your email address. Please note, you will need your Securityholder Reference Number (SRN) or your Holder Identification Number (HIN) to successfully register your email address against your holding.

## CHANGE OF ADDRESS

Issuer sponsored shareholders should notify Arrium's Share Registry, Boardroom of any change to their registered address. For added security, shareholders should quote their previous address and Securityholder Reference Number (SRN). CHESS shareholders should advise their sponsoring broker or non-broker participant.

## REMOVAL FROM MAILING LIST

Shareholders who do not wish to receive communications should contact Arrium's Share Registry, Boardroom.

## CHANGE OF NAME

Shareholders who change their name should notify Arrium's Share Registry, Boardroom. A certified copy of your marriage certificate or deed poll will be required.



# STATISTICAL SUMMARY

YEAR ENDED 30 JUNE

SA MILLIONS	FY13	FY12	FY11	FY10	FY09	FY08	FY07	FY06	FY05	FY04 <sup>3</sup>	% CHANGE
											JUN-13 TO JUN-12
<b>Group Results<sup>1</sup></b>											
Sales revenue	6,841.0	7,594.5	7,133.0	6,204.6	7,241.5	7,434.3	4,300.6	4,004.6	3,938.5	3,269.2	(9.9%)
Other revenue/income	113.9	121.8	44.2	56.3	66.3	50.5	33.9	39.0	34.6	70.1	(6.5%)
Total income	6,954.9	7,716.3	7,177.2	6,260.9	7,307.8	7,484.8	4,334.5	4,043.6	3,973.1	3,339.3	(9.9%)
Gross profit	1,051.4	1,197.7	1,484.6	1,234.0	1,587.5	1,681.2	837.2	798.7	787.0	642.6	(12.2%)
EBITDA	589.6	581.0	642.0	617.6	661.2	807.7	436.1	396.7	377.1	324.2	1.5%
Depreciation, amortisation & impairment	(273.5)	(221.4)	(213.5)	(203.9)	(199.5)	(194.9)	(96.2)	(94.0)	(97.5)	(87.1)	(23.5%)
EBIT	316.1	359.6	428.5	413.7	461.7	612.8	339.9	302.7	279.6	237.1	(12.1%)
Finance costs	(118.1)	(121.1)	(101.1)	(89.2)	(172.2)	(159.6)	(55.8)	(56.7)	(53.6)	(42.2)	2.5%
Profit before tax	198.0	238.5	327.4	324.5	289.5	453.2	284.1	246.0	226.0	194.9	(17.0%)
Tax benefit/(expense)	(27.6)	(37.5)	(84.8)	(81.6)	(64.1)	(128.0)	(74.7)	(60.8)	(55.4)	(53.4)	26.3%
Profit after tax	170.4	201.0	242.6	242.9	225.4	325.2	209.4	185.2	170.6	141.5	(15.2%)
Non-controlling interests	(2.1)	(5.9)	(7.2)	(2.3)	(10.1)	(10.2)	(11.9)	(13.6)	(17.5)	(12.4)	64.4%
Net profit after tax	168.3	195.1	235.4	240.6	215.3	315.0	197.5	171.6	153.1	129.1	(13.8%)
<b>Non-trading items, net of tax</b>											
- Restructuring costs	(65.7)	(29.8)	(6.2)	(1.2)	(46.8)	(58.1)	-	-	-	-	(120.4%)
- Impairment	(895.3)	(125.4)	(1.5)	-	-	(12.0)	-	-	49.7	-	(614.1%)
- Transaction costs	-	(18.7)	(13.9)	-	-	-	-	-	-	-	100.0%
- Goodwill amortisation	-	-	-	-	-	-	-	-	-	(21.0)	-
- Tax adjustments & other items	98.0	36.5	16.5	19.0	61.0	-	9.5	15.9	-	19.8	168.6%
Net profit after tax - statutory	(694.7)	57.7	230.3	258.4	229.5	244.9	207.0	187.5	202.8	127.9	(1304.0%)
Total assets	8,611.6	8,931.4	8,343.3	7,067.7	6,933.1	7,291.5	3,569.5	3,138.8	3,087.1	2,803.2	(3.6%)
Total liabilities	4,878.1	4,430.8	3,837.6	2,575.0	2,596.8	3,862.1	1,919.5	1,637.2	1,698.8	1,429.8	10.1%
Total equity	3,733.5	4,500.6	4,505.7	4,492.7	4,336.3	3,429.4	1,650.0	1,501.6	1,388.3	1,373.4	(17.0%)
Net debt <sup>2</sup>	2,114.9	2,143.3	1,728.4	963.7	1,223.9	1,947.2	769.8	638.8	645.3	669.0	(1.3%)
Funds employed	5,848.4	6,643.9	6,234.1	5,456.4	5,560.2	5,376.6	2,419.8	2,140.4	2,033.6	2,042.4	(12.0%)
Number of shares on issue (millions)	1,355.4	1,345.7	1,338.1	1,331.6	1,325.8	878.7	575.7	569.3	563.8	554.8	0.7%
Operating cash flow	595.7	519.5	463.1	653.2	370.8	522.2	515.3	417.8	235.9	188.3	14.7%
Free cash flow	131.0	68.8	225.7	480.0	183.2	215.3	157.4	203.4	109.0	43.9	90.4%
Capital and investment expenditure	459.2	719.0	1,244.2	206.8	190.9	2,475.0	360.5	227.6	127.5	151.4	(36.1%)
Return on equity % (PAT/average total equity)	4.1%	4.5%	5.4%	5.5%	5.8%	9.5%	13.3%	12.8%	12.4%	10.7%	-0.3pp
Return on funds employed % (EBIT/average funds employed)	5.1%	5.6%	7.3%	7.5%	8.4%	11.4%	14.9%	14.5%	13.7%	11.9%	-0.5pp
Sales margin %	4.6%	4.7%	6.0%	6.7%	6.4%	8.2%	7.9%	7.6%	7.1%	7.3%	-0.1pp
Gross profit margin %	15.4%	15.8%	20.8%	19.9%	21.9%	22.6%	19.5%	19.9%	20.0%	19.7%	-0.4pp
Earnings per share (cents)	12.7	14.6	17.7	18.2	21.2	34.9	34.7	30.5	27.5	19.6	(13.0%)
Dividends per share (cents)	5.0	6.0	10.0	11.0	10.0	21.5	18.5	17.0	13.5	12.0	-1cents
Dividend payout ratio %	40.2%	41.4%	56.8%	60.9%	49.2%	59.9%	69.6%	56.3%	49.6%	51.4%	-1.1pp
Gearing %	36.2%	32.3%	27.7%	17.7%	22.0%	36.2%	31.8%	29.8%	31.7%	32.8%	3.9pp
Interest cover (times EBITDA, 12m rolling basis)	5.0	4.8	6.4	6.9	3.8	5.1	7.8	7.0	7.0	7.7	0.2 times
Net tangible assets per share (\$)	1.25	1.2	1.39	1.77	1.66	1.53	2.38	2.15	1.95	1.93	4.2%
Employees	10,078	11,007	11,598	10,598	11,104	11,678	7,526	7,527	7,395	7,272	(8.4%)
Sales per employee (\$000s)	679	690	615	585	652	637	571	532	533	450	(1.6%)
Iron ore tonnes sold (Mt)	8.28	6.29	6.04	6.03	5.07	4.46	-	-	-	-	31.6%
Raw steel production (Mt)	2.50	2.50	2.32	2.15	2.03	2.70	1.73	1.63	1.35	1.62	0.0%
Steel tonnes despatched (Mt)	3.55	3.68	3.19	2.75	2.76	3.53	2.28	2.27	2.26	2.15	(3.5%)

1 Unless otherwise stated, certain financial measures referred to in this document, including underlying results and ratios based on underlying results are non-statutory financial measures, which have not been audited or reviewed as part of KPMG's report on the 2013 Financial Report. However, KPMG have undertaken a set of procedures to agree the financial information in this document to underlying information supplied by the company. The Directors believe that using these non-statutory financial measures appropriately represents the financial performance of the Group's total operations including continuing and discontinued operations. All balance sheet items are based on statutory financial information. Details of the reconciliation of non-statutory to statutory results can be found on page 32 of this Annual Report.

2 Net debt for the FY04 have been adjusted to include securitisation which was previously classified as off-balance sheet.

3 The financial information presented for FY04 have been presented under previous AGAAP and have not been restated under International Financial Reporting Standards (IFRS). The nature of the main adjustments to make the information comply with IFRS include:

- recognition of additional provisions relating to rehabilitation and make good and defined benefit obligations;
- restatement of deferred tax balances using the balance sheet method;
- consolidation of the employee share plan trust; and
- recognition of derivative financial instruments on balance sheet at fair value and application of hedge accounting.

Note that the underlying earnings presented for FY04 has been adjusted to exclude goodwill amortisation.

# RESERVES AND RESOURCES STATEMENT

## ORE RESERVES AND MINERAL RESOURCES

The information in this report that relates to the mineral resources and ore reserves is based on information compiled by Paul LeEVERS, a member of the Australasian Institute on Mining and Metallurgy.

Mr LeEVERS is a full-time employee of a wholly-owned subsidiary of Arrium Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr LeEVERS consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## MIDDLEBACK RANGES

The Arrium Middleback Ore Reserve has been derived at a cut-off grade of 53% Fe. Hematite reserves have reduced by 2.3Mt after depletion of 4.6Mt and the addition of the Iron Cavalier Deposit 5.2Mt and removal of the Duchess North 5.3Mt. Change in cut-off grade from 55% Fe to 53% Fe has resulted in an additional 2.9Mt to reserve. The change in cut-off grade reflects current mine plans and sales forecasts. Additional resource was identified in Iron Chieftain and Monarch Mining Area.

Magnetite Reserves have reduced by 4.2Mt, which is inline with depletion. Magnetite reserves are inclusive of magnetite stockpiles which will be depleted during life of mine.

Arrium has reviewed all previously mined areas and is furthering exploration activity to establish the potential to further increase hematite reserves. Arrium holds an exploration lease that extends from Iron Knob in the North to Iron Duke in the South that covers an area of significant mineralisation. Exploration will continue in the new financial year.

## SOUTHERN IRON

The Southern Iron Ore Resource and the Southern Iron Ore Reserve is represented by the Peculiar Knob and Hawks Nest Deposits which are wholly-owned by Arrium.

The Southern Iron Ore Reserve represents an increase of 8Mt after depletion of 1.5Mt due to sales, addition of the Hawks Nest Deposit of 9.9Mt and reduction of 0.3Mt at Peculiar Knob based on resource updates. Exploration actively continues at Peculiar Knob and in the Hawks Nest Area where the Buzzard Deposit is located. The Hawks Nest Area contains the resources of Buzzard and Tui.

All resource and reserve figures represent estimates at the end of June 2013, unless otherwise stated. Rounding of tonnes and grade information may result in small differences presented in the totals. Moisture is estimated at 3% and grades are reported uncalcined.

### MIDDLEBACK RANGES HEMATITE RESERVES

		AS AT 30 JUNE 2013						AS AT 30 JUNE 2012			ARRIUM INTEREST (%)	COMPETENT PERSON			
CATEGORY	ORE TYPE	PROVED ORE RESERVE			PROBABLE ORE RESERVE			TOTAL ORE RESERVES					TOTAL ORE RESERVES		
		TONNES (m)	Fe GRADE (%)	P (%)	TONNES (m)	Fe GRADE (%)	P (%)	TONNES (m)	Fe GRADE (%)	P (%)	TONNES (m)	Fe GRADE (%)	P (%)		
Total quantity	Hematite, Goethite, Limonite, Minor magnetite	4.5	59.0	0.06	37.7	58.2	0.08	42.2	58.3	0.08	44.4	59.5	0.09	100	P LeEVERS

### MIDDLEBACK RANGES MAGNETITE RESERVES

		AS AT 30 JUNE 2013						AS AT 30 JUNE 2012			ARRIUM INTEREST (%)	COMPETENT PERSON			
CATEGORY	ORE TYPE	PROVED ORE RESERVE			PROBABLE ORE RESERVE			TOTAL ORE RESERVES					TOTAL ORE RESERVES		
		TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)		
Total quantity	Magnetite	43.3	43.5	39.8	23.0	38.7	37.3	66.3	41.8	38.9	70.5	42.8	40.2	100	P LeEVERS

### SOUTHERN IRON HEMATITE RESERVES

		AS AT 30 JUNE 2013						AS AT 30 JUNE 2012			ARRIUM INTEREST (%)	COMPETENT PERSON			
CATEGORY	ORE TYPE	PROVED ORE RESERVE			PROBABLE ORE RESERVE			TOTAL ORE RESERVES					TOTAL ORE RESERVES		
		TONNES (m)	Fe GRADE (%)	P (%)	TONNES (m)	Fe GRADE (%)	P (%)	TONNES (m)	Fe GRADE (%)	P (%)	TONNES (m)	Fe GRADE (%)	P (%)		
Total quantity	Hematite, Goethite, Limonite, Minor magnetite	0.7	61.2	0.02	23.7	62.0	0.03	24.5	62.0	0.03	16.4	63.1	0.01	100	P LeEVERS

## MINERAL RESOURCES

The table on the following page shows Arrium's in situ resource base adjacent to existing operations at a cut-off grade of Fe >50% and SiO<sub>2</sub> <20%.

The Total Mineral Resource includes all resources, including those used to derive ore reserves.

Mineral Resources that have not been used for estimation of ore reserves are shown separately.

Additional hematite resources were identified primarily at the Iron Chieftain and Iron Monarch Areas where exploration is continuing.

## RESERVES AND RESOURCES STATEMENT CONTINUED

The magnetite resource represents a decrease of 41.1Mt after depletion of 4.1Mt and removal of 37.0Mt of exclusive resources outside of the current operation due to further drilling.

MIDDLEBACK RANGES HEMATITE RESOURCES													AS AT 30 JUNE 2013		AS AT 30 JUNE 2012		ARRIUM INTEREST (%)	COMPETENT PERSON
CATEGORY	TYPE	MEASURED RESOURCES		INDICATED RESOURCES		INFERRED RESOURCES		TOTAL RESOURCES 2013		TOTAL RESOURCES 2012								
		TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)							
Total quantity	Hematite, Goethite, Limonite, Minor magnetite	18.9	58.3	69.9	59.0	55.1	56.8	143.8	58.0	153.2	58.0	100	P Leever's					
Quantity excluded from ore reserves	Hematite, Goethite, Limonite, Minor magnetite	7.9	59.4	30.7	59.3	43.3	56.8	81.9	58.0	91.9	57.0	100	P Leever's					

MIDDLEBACK RANGES MAGNETITE RESOURCES													AS AT 30 JUNE 2013			AS AT 30 JUNE 2012			ARRIUM INTEREST (%)	COMPETENT PERSON
CATEGORY	TYPE	MEASURED RESOURCES			INDICATED RESOURCES			INFERRED RESOURCES			TOTAL RESOURCES 2013			TOTAL RESOURCES 2012						
		TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)	TONNES (m)	DTR GRADE (%)	Fe GRADE (%)				
Total quantity	Magnetite	47.2	43.6	39.9	74.6	36.5	36.5	65.3	31.8	29.5	187.1	36.7	34.9	228.2	38.8	39.7	100	P Leever's		
Quantity excluded from ore reserves	Magnetite	5.3	47.4	38.3	45.2	36.8	36.7	61.7	31.9	29.4	112.2	34.6	32.8	150.4	39.6	39.5	100	P Leever's		

SOUTHERN IRON HEMATITE RESOURCES													AS AT 30 JUNE 2013		AS AT 30 JUNE 2012		ARRIUM INTEREST (%)	COMPETENT PERSON
CATEGORY	TYPE	MEASURED RESOURCES		INDICATED RESOURCES		INFERRED RESOURCES		TOTAL RESOURCES 2013		TOTAL RESOURCES 2012								
		TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)	TONNES (m)	Fe GRADE (%)							
Total quantity	Hematite, Goethite, Limonite, Minor magnetite	0.7	61.2	30.3	62.2	9.9	60.2	40.9	61.7	32.5	63.2	100	P Leever's					
Quantity excluded from ore reserves	Hematite, Goethite, Limonite, Minor magnetite	0.0	0.0	5.1	60.9	7.0	60.3	12.0	60.6	15.8	62.4	100	P Leever's					

## ARRIUM – IRON BARON AND SOUTH MIDDLEBACK RANGE ORE BENEFICIATION STOCKPILES

These are resources currently held in historically built and newly constructed stockpiles that will be beneficiated to yield usable ore.

Ore beneficiation commenced in the 2005 financial year at Iron Duke and in the 2012 financial year at Iron Baron, drawing feed from the ore beneficiation stockpiles and mining.

Ore suitable for beneficiation is constantly being added to stockpiles at the mining operations due to recovery of resource outside of declared reserve.

Beneficiation stockpile tonnes have reduced slightly after additions to these stockpiles from mining have been offset by depletion due to processing by the ore beneficiation operations.

The ore beneficiation stockpiles with a mean estimated grade exceeding 45% Fe that can be beneficiated to meet current export grade specifications comprise the mineral resources in the following table.

Tonnes are reported before considering beneficiation yield, and grades are reported uncalcined. The estimates are valid as at 30 June 2013.

ARRIUM ORE BENEFICIATION STOCKPILES													AS AT 30 JUNE 2013		AS AT 30 JUNE 2012		ARRIUM INTEREST (%)	COMPETENT PERSON
CATEGORY	TYPE	MEASURED RESOURCES		INDICATED RESOURCES		INFERRED RESOURCES		TOTAL RESOURCES 2013		TOTAL RESOURCES 2012								
		TONNES (MT DRY)	Fe GRADE (% UNCALCINED)	TONNES (MT DRY)	Fe GRADE (% UNCALCINED)	TONNES (MT DRY)	Fe GRADE (% UNCALCINED)	TONNES (MT DRY)	Fe GRADE (% UNCALCINED)	TONNES (MT DRY)	Fe GRADE (% UNCALCINED)							
Total quantity	Hematite, Goethite, Limonite, Minor magnetite	2.7	53.6	7.3	53.3	8.7	53.6	18.7	53.5	19.2	53.5	100	P Leever's					

# GLOSSARY

**The company** - Arrium Limited and/or its subsidiaries, as the context admits. Also referred to as Arrium.

**The group** - Arrium Limited and/or its subsidiaries, as the context admits. Also referred to as Arrium.

**The Moly-Cop Group** - the Moly-Cop and AltaSteel businesses acquired by Arrium on 31 December 2010 from Anglo American plc.

**Billet** - Billet is a section of cast steel approximately 127mm to 175mm square and 12 metres long which is used to produce rod and bar.

**Blast furnace** - Furnace used for converting iron ore into pig iron.

**Corporations Act** - *Corporations Act 2001* (Cth)

**Despatches** - Term used for total tonnes sold to end markets.

**Electric arc furnace** - Furnace used to convert scrap steel into molten steel.

**Grinding media** - Used in the process of extracting minerals from ore.

**Hematite** - An iron oxide with the chemical formula Fe<sub>2</sub>O<sub>3</sub>.

**Integrated steelworks** - An integrated steelworks uses blast furnace and basic oxygen steelmaking technology to manufacture steel from iron ore.

**Lost Time Injury Frequency Rate** - A statistical measure of safety performance. A lost time injury is an injury which is attributable to a workplace incident and which results in at least one full shift of work being lost at some time (not necessarily immediately) after the shift during which the injury occurred.

Lost time injury frequency rate is the number of lost time injuries per million hours worked and is calculated as follows: lost time injury frequency rate equals number of lost time injuries per reporting period times one million, divided by hours worked per reporting period.

**Magnetite** - An iron oxide with the chemical formula Fe<sub>3</sub>O<sub>4</sub>.

**Medical Treatment Injury Frequency Rate** - A statistical measure of safety performance.

A medical injury is an injury which is attributable to a workplace incident, requires medical treatment (including restricted work) and results in less than a full shift of work being lost. Injuries which result in a least one full shift of work being lost are classified as lost time injuries (refer above).

The medical treatment injury frequency rate is the number of medical treatment injuries per million hours worked and is calculated as follows: medical treatment injury frequency rate equals number of medical treatment injuries per reporting period times one million, divided by hours worked per reporting period.

**Non-CIS** - In the context of prices for Asian imports of hot rolled coil, it refers to product not sourced from the region previously known as the Soviet Union.

**Ore** - Mineral bearing rock.

**Ore Reserve** - Represents what is currently economically feasible to mine.

**Ore Resource** - Refers to the total ore body.

**Pellet plant** - The pellet plant takes iron ore and produces hard balls of iron ore that can be fed into the blast furnace.

**Plate** - Large flat sections of steel used for the manufacture of tanks, pressure vessels etc.

**Platts** - Global provider of energy and metals information and source of benchmark price assessments in the physical energy markets.

**Production** - Term used to define total tonnes produced in particular product.

**Project Magnet** - Project commenced in 2005 to convert Arrium's Whyalla Steelworks to magnetite iron ore feed, enabling export sales of hematite iron ore reserves.

**Raw steel** - Raw steel is produced at the Whyalla Steelworks and the Sydney Steel Mill and is cast in the form of billet, bloom and slab steel.

**Reinforcing steel** - Used for reinforcing concrete.

**Rod and bar** - Rod and bar is semi-finished product that can be used for further value-added products such as wire, reinforcing steel, grinding media, posts etc.

**Scope 1** - Direct emissions generated. Emissions that are the release of greenhouse gases into the atmosphere as a direct result of an activity, or series of activities (including ancillary activities) that constitute the facility.

**Scope 2** - Indirect emissions generated. Emissions that are the release of greenhouse gases into the atmosphere as a direct result of one or more activities that generate electricity, heating, cooling or steam that is consumed by the facility but do not form part of the facility.

**Sheet and coil** - Sheet and coil is purchased from outside steel producers and processed and distributed by OneSteel or used in the manufacture of pipe and tube.

**Slab** - Slab is a section of cast steel usually 250mm thick and between 600 and 1800mm wide and 12 metres long.

**Steel & Tube NZ** - Steel & Tube Holdings Limited and/or its subsidiaries, as the context admits.

**Steel Transformation Plan** - (STP) is a \$300 million program introduced by the Australian Federal Government operating over six payment years from 2011/12 that aims to encourage investment, innovation and competitiveness in the Australian steel manufacturing industry in order to assist the industry to transform into an efficient and economically sustainable industry in a low carbon economy. The STP aims to support manufacturers of integrated iron and steel and manufacturers of carbon steel from cold ferrous feed that satisfy the eligibility requirements outlined in the *Steel Transformation Plan Act 2011*. Arrium is a beneficiary of the STP.

**Structural steel** - Large steel sections used for frames for buildings, factories, bridges and other infrastructure.

**TEX Report** - A daily newspaper published in Japan that reports news on trade in steel products, coal and coke, iron ore, pig iron and ferrous scrap and ferro-alloys.

**WPG Resources** - WPG Resources Limited and/or its subsidiaries, as the context admits. Also referred to as WPG.

# ABBREVIATIONS

ABBREVIATION	NAME
ABS	Australian Bureau of Statistics
ARC	Australian Reinforcing Company
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
ATM	Australian Tube Mills
AUD	Australian Dollar
BMA	BHP Billiton Mitsubishi Alliance
C&F	Cost and Freight, as used in international sales contracts to signify that the seller must pay the cost and freight necessary to bring goods to a port of destination
CFR	Cost and freight, amount includes freight cost
CO <sub>2</sub>	Carbon Dioxide
CPI	Consumer Price Index
CRU	A London based consulting group that provides business information and market analysis in the areas of non-ferrous metals, steel, ferrous-alloys, wire and cable
CY	Calendar Year
DMTU	Dry Metric Tonne Unit
DRP	Dividend Reinvestment Plan
DSO	Direct Shipped Ore
EAF	Electric Arc Furnace
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings before interest, tax, depreciation and amortisation
EPA	Environment Protection Authority
EPS	Earnings per Share.
ETS	Emissions Trading Scheme
Fe	Iron (element)
FOB	Free On Board, meaning the seller assumes the cost of having goods packaged and ready for shipment from the agreed designated FOB point. The buyer assumes the costs and risks from the FOB point
FTE	Full time equivalent
FY	Financial Year
GFC	Global Financial Crisis
GHG	Greenhouse Gas
GM	General Manager
GST	Goods and Services Tax
HPI	High potential incident
HRD	Hot rolled coil
ISO 31000:2009	Risk management standard - principles and guidelines prepared by Joint Standards Australia/ Standards New Zealand Committee OB-007 to supersede AS/NZS 4360:2004
ISO 9001/9002	Global quality management standard
JORC Code	The 1999 Australasian Code for Reporting of Mineral Resources and Ore Reserves
Kt	Thousand tonnes

ABBREVIATION	NAME
LHS	Left hand side
LME	London Metal Exchange
MRRT	Mineral Resource Rent Tax
Mt	Million tonnes
Mtpa	Million tonnes per annum
NPAT	Net Profit After Tax and Minorities
NZ	New Zealand
OBP	Ore Beneficiation Plant
OSCAs	Outstanding Service to Customer Awards
OHS	Occupational Health and Safety
OZ	Ounce
PCP	Prior corresponding period
RBA	Reserve Bank of Australia
RHS	Right hand side
ROE	Return on Equity
ROFE	Return on Funds Employed
SBB	Steel Business Briefing
SSF	Steel Stewardship Forum
TSR	Total Shareholder Return
Troy ounce	Unit of imperial measure. Most commonly used to gauge the weight of precious metals including gold, silver, platinum and gunpowder.
UK	United Kingdom
USA	United States of America
USD	United States Dollar
VIC	Victoria, Australia
NSW	New South Wales, Australia
WA	Western Australia, Australia
QLD	Queensland, Australia
WMT	Wet metric tonne

# CORPORATE DIRECTORY

AS AT 30 AUGUST 2013

**ACN 004 410 883**  
**ABN 63 004 410 883**

## DIRECTORS

Mr Peter J Smedley (Chairman)  
 Mr R Bryan Davis  
 Mr Colin R Galbraith, AM  
 Mr Peter G Nankervis  
 Mr Dean A Pritchard  
 Mr Andrew G Roberts  
 Mr Graham J Smorgon, AM  
 Ms Rosemary Warnock

## COMPANY SECRETARY

Ms Kara L Nicholls

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## AUDITOR

KPMG

## AUSTRALIAN SECURITIES EXCHANGE

Arrium Limited's fully paid ordinary shares securities are quoted on the Australian Securities Exchange (ASX:ARI).

## FINANCIAL CALENDAR \*(SUBJECT TO CHANGE)

<b>18 November 2013</b>	Annual General Meeting
<b>31 December 2013</b>	End of first half of the financial year
<b>18 February 2014</b>	Half year results and interim dividend announced to ASX
<b>10 March 2014</b>	Interim dividend – ARI securities quoted on an ex basis*
<b>14 March 2014</b>	Interim dividend – Record date
	Interim dividend – last day to elect to participate in Dividend Reinvestment Plan
	Interim dividend – last day to advise Registry of Tax File Number
<b>17 April 2014 (on or around)</b>	Interim dividend – Payment date*
<b>30 June 2014</b>	End of financial year
<b>19 August 2014</b>	Full year results and final dividend announced to ASX
<b>8 September 2014</b>	Final dividend – ARI securities quoted on an ex basis*
<b>12 September 2014</b>	Final dividend – Record date
	Final dividend – last day to elect to participate in Dividend Reinvestment Plan
	Final dividend – last day to advise Registry of Tax File Number
<b>16 October 2014 (on or around)</b>	Final dividend – Payment date*
	Annual Report and Notice of Annual General Meeting dispatched
<b>17 November 2014</b>	Annual General Meeting







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