



**Australian Government**  
**National Measurement  
Institute**

Bradfield Road, West Lindfield NSW 2070

**Notification of Change**  
**Certificate of Approval No 6/10B/77**  
**Change No 1**

Issued by the Chief Metrologist under Regulation 60  
of the  
*National Measurement Regulations 1999*

The following changes are made to the approval documentation for the  
Scale Components Model SC3000 Weighing Instrument

submitted by       Scale Components Pty Ltd  
                          now of 4 Dan Street  
                          Slacks Creek    QLD    4127.

- A.    In Certificate of Approval No 6/10B/77 dated 18 June 2004;
1.    The Condition of Approval referring to the review of the approval should be amended to read:
- “This approval becomes subject to review on 1 March **2014**, and then every 5 years thereafter.”
2.    The FILING ADVICE should be amended by adding the following:
- “Notification of Change No 1 dated 18 November 2010”
- B.    In Certificate of Approval No 6/10B/77 and its Technical Schedule both dated 18 June 2004, all references to the address of the submitter should be amended to read:
- “4 Dan Street  
      Slacks Creek    QLD    4127.”

Signed by a person authorised by the Chief Metrologist  
to exercise his powers under Regulation 60 of the  
*National Measurement Regulations 1999*.

A handwritten signature in black ink, consisting of a series of loops and flourishes, positioned above a horizontal line.



# Australian Government

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## National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

### Certificate of Approval

**No 6/10B/77**

Issued under Regulation 60  
of the  
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the

Scale Components Model SC3000 Weighing Instrument

submitted by Scale Components Pty Ltd  
288 Musgrave Street  
Coopers Plains QLD 4108.



**NOTE:** This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

### CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 March 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/10B/77 and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document NSC P 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

The pattern as approved herein or with substitute Commission-approved load cells and/or indicators and in other capacities, or with different platform sizes, shall comply with General Certificate No 6B/0.

Note: New instruments manufactured under this approval shall only use load cells and/or indicators with current NSC supplementary certificates.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

### DESCRIPTIVE ADVICE

**Pattern:** approved 6 February 2004

- A Scale Components model SC3000 self-indicating weighing instrument of 80 000 kg maximum capacity.

**Variants:** approved 6 February 2004

1. Scale Components model SC3100 in capacities from 15 000 to 300 000 kg.
2. Scale Components model SC3200 hopper, tank or silo weighing instruments.

Technical Schedule No 6/10B/77 describes the pattern and variants 1 & 2.

### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/77 dated 18 June 2004  
Technical Schedule No 6/10B/77 dated 18 June 2004 (incl. Test Procedure)

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.



TECHNICAL SCHEDULE No 6/10B/77

**Pattern:** Scale Components Model SC3000 Weighing Instrument

**Submittor:** Scale Components Pty Ltd  
288 Musgrave Street  
Coopers Plains QLD 4108



## 1. Description of Pattern

A Scale Components model SC3000 self-indicating weighing instrument approved for use with a maximum capacity of 80 000 kg and approved for use with up to 3000 verification scale intervals.

### 1.1 Basework

The model SC3000 basework has the platform fully supported by 8 load cells.

### 1.2 Load Cells

Eight Revere Transducers model ASC load cells of 30 000 kg capacity are used.

The load cells are also described in the approval documentation of NSC approval No S425.

### 1.3 Indicator

A Ranger model 5000 digital indicator is used.

The indicator is also described in the approval documentation of NSC approval No S363.

### 1.4 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed as described in the approval documentation for the indicator used.

### 1.5 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Scale Components Pty Ltd
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NSC No 6/10B/77
Pattern approval mark for the indicator	NSC No S...
Pattern approval mark for the load cells	NSC No S...
Maximum capacity	Max ..... kg *
Minimum capacity	Min ..... kg *
Verification scale interval	e = ..... kg *
Serial number of the instrument	.....

\* These markings shall also be shown near the display of the result if they are not already located there.

### 1.6 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

## 1.7 Levelling

Where instruments are liable to be tilted (i.e. they are not installed in a permanently fixed location) they are provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice stating 'instrument must be level when in use', or similar wording.

## 2. Description of Variants

### 2.1 Variant 1

Scale Components model SC3100 instruments in capacities from 15 000 to 300 000 kg, with no less than 4 and with up to 16 Commission-approved load cells. Instruments are approved for use with up to 5000 verification scale intervals (subject to the approval parameters of the load cells and indicator).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause 4. **Wind Effects** of General Certificate of Approval No 6B/0.

### 2.2 Variant 2

Scale Components model SC3200 instruments with the load receptor in the form of a hopper, tank or silo in capacities from 15 000 to 300 000 kg.

Instruments are either:

- (a) fitted with 3, 4 or 5 Commission-approved load cells (arranged symmetrically to ensure even loading of each cell) where the hopper is a vertical cylindrical or tank-type load receptor directly supported by the load cells; or
- (b) fitted with 3, 4 or 5 Commission-approved load cells (arranged symmetrically to ensure even loading of each cell) with a load receptor in the form of a vertical cylindrical or tank type load receptor or bag, suspended from the base frame, or directly from the load cells; or
- (c) fitted with 4 Commission-approved load cells where the hopper is a non-vertical cylindrical, or other hopper-type load receptor.

Note: Instruments with more than 4 load cells may be acceptable if prior written agreement from the Commission is obtained.

Suitable provision must be made for the application of suitable verified masses to the instrument as required for verification and certification purposes. It may be necessary for such masses to be incorporated within the design of the instrument.

Instruments are approved for use with up to 5000 verification scale intervals (subject to the approval parameters of the load cells and indicator).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause 4. **Wind Effects** of General Certificate of Approval No 6B/0.

## TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

### **Maximum Permissible Errors at Verification/Certification**

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads,  $m$ , expressed in verification scale intervals,  $e$ , are:

- $\pm 0.5 e$  for loads  $0 \leq m \leq 500$ ;
- $\pm 1.0 e$  for loads  $500 < m \leq 2\,000$ ; and
- $\pm 1.5 e$  for loads  $2\,000 < m \leq 10\,000$ .