



Australian Government

National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/14G/16

Issued by the Chief Metrologist 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 instruments herein described.

Dibal Model 2300 Automatic Catchweighing Instrument

submitted by Accuweigh Pty Ltd
3 Kurrara Street
Lansvale NSW 2166

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.

This approval has been granted with reference to document NMI R 51, *Automatic Catchweighing instruments*, dated July 2004.

This approval becomes subject to review on **1/11/17**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – interim certificate issued	30/10/06
1	Pattern & variants 1 to 3 approved – interim certificate issued	22/01/07
2	Pattern & variants 1 to 3 reviewed & updated – certificate issued	30/07/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/14G/16' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) 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 document NMI P 106.

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

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

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



Mr C Davies

TECHNICAL SCHEDULE No 6/14G/16

1. Description of Pattern approved on 30/10/06

A Dibal model 2300 class Y(a) automatic catchweighing instrument (Figure 1) which is approved for use to weigh objects statically.

Instruments are not for retail counter use, and are so marked.

1.1 Details

The pattern is a single interval class Y(a) automatic catchweighing instrument with a maximum capacity of 6 kg, a verification scale interval of 0.005 kg and a minimum capacity of 0.100 kg.

The instrument operates statically (package stops on the weighing receptor). The maximum belt speed of the weighing receptor is 1.36 m/s.

The throughput (packs per minute) is variable and depends on several factors, e.g. size of label, size and weight of pack.

Instruments may be fitted with sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices, and for the external programming of PLU and labelling data.

The pattern comprises:

- A terminal/indicator with an LCD display/keyboard;
- A weighing unit and conveyor system with associated controller; and
- A printing unit located above the conveyor.

1.2 Zero

The initial zero-setting device of the pattern has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument, capable of setting zero to within $\pm 0.25e$.

Zero is automatically corrected to within $\pm 0.25e$ whenever the instrument comes to rest within $0.5e$ of zero.

1.3 Tare

A semi-automatic subtractive taring device of up to 5.998 kg capacity may be fitted. This device may only be activated (tare obtained) whilst the conveyors are stationary.

The instrument has a pre-set subtractive taring device of up to 5.998 kg capacity. Pre-set tare values are stored in association with product-look-up (PLU) items.

1.4 Operation

In dynamic mode, an object to be weighed moves from the infeed and separator conveyors onto the weighing receptor conveyor and then stops to be weighed statically. After weighing, the object continues onto the outfeed conveyor where a label is then printed and applied to the object.

1.5 Terminal/Indicator (Figure 2a)

The terminal/indicator is fitted with an LCD display and keyboard. This is used to control the system and store data such as system parameters (e.g. conveyor speed, printing unit position and label format). It displays the weight (in kg).

Instruments have unit price to \$9999.99/kg, a product-look-up (PLU) facility and a separate 'tare' display.

1.6 Weighing Unit and Conveyor (Figure 2b)

The weighing unit which uses an HBM model PW2GC3 load cell of 18 kg capacity supporting a load receptor which has a belt conveyor of 380 x 345 mm.

The conveyor system comprises an infeed conveyor, the weighing unit/conveyor and an outfeed conveyor, with an associated electric motor and drive arrangement for each conveyor. An controller cabinet is located beneath the conveyors.

Three optical sensors are located along the conveyor path. The infeed conveyors space the objects to be weighed.

1.7 Levelling

The weighing unit is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use.

1.8 Printing Unit

The printing unit includes a thermal printer and a compressed air unit used to apply the label to the weighed object.

1.9 Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Dibal S.A., Spain
Importer's mark, or name written in full	Accuweigh Pty Ltd
Model designation
Serial number
Accuracy class	Y(a)
Pattern approval mark	6/14G/16
Maximum capacity	Max kg (*)
Minimum capacity	Min kg (*)
Verification scale interval	e = kg (*)
Maximum subtractive tare	T = - ... kg
Maximum conveyor speed m/min

(*) These markings are also shown near the display of the result if they are not already located there.

In addition, instruments shall carry a notice stating NOT FOR RETAIL COUNTER USE, or similar wording.

1.10 Verification Provision

Provision is made for the application of a verification mark.

1.11 Sealing Provision

Provision is made for the calibration adjustments in the weighing unit (located inside the controller cabinet is located beneath the conveyors) to be sealed by sealing the cover as shown in Figure 3 to prevent unauthorised access.

2. Description of Variant 1 approved on 30/10/06

Of up to 6 kg maximum capacity with a verification scale interval of 2 g.

3. Description of Variant 2 approved on 30/10/06

Certain other models of the 2000 series (Figure 4) with less conveyor units than the pattern (model 2300) as listed below:

- (i) Model 2100 which only has the weighing unit/conveyor; and
- (ii) Model 2200 which only has the weighing unit/conveyor and the outfeed conveyor.

4. Description of Variant 3 approved on 30/10/06

With various additional rejection and/or collection units.

TEST PROCEDURE No 6/14G/16

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

FIGURE 6/14G/16 – 1



Dibal Model 2300 Automatic Catchweighing Instrument – The Pattern

FIGURE 6/14G/16 – 2

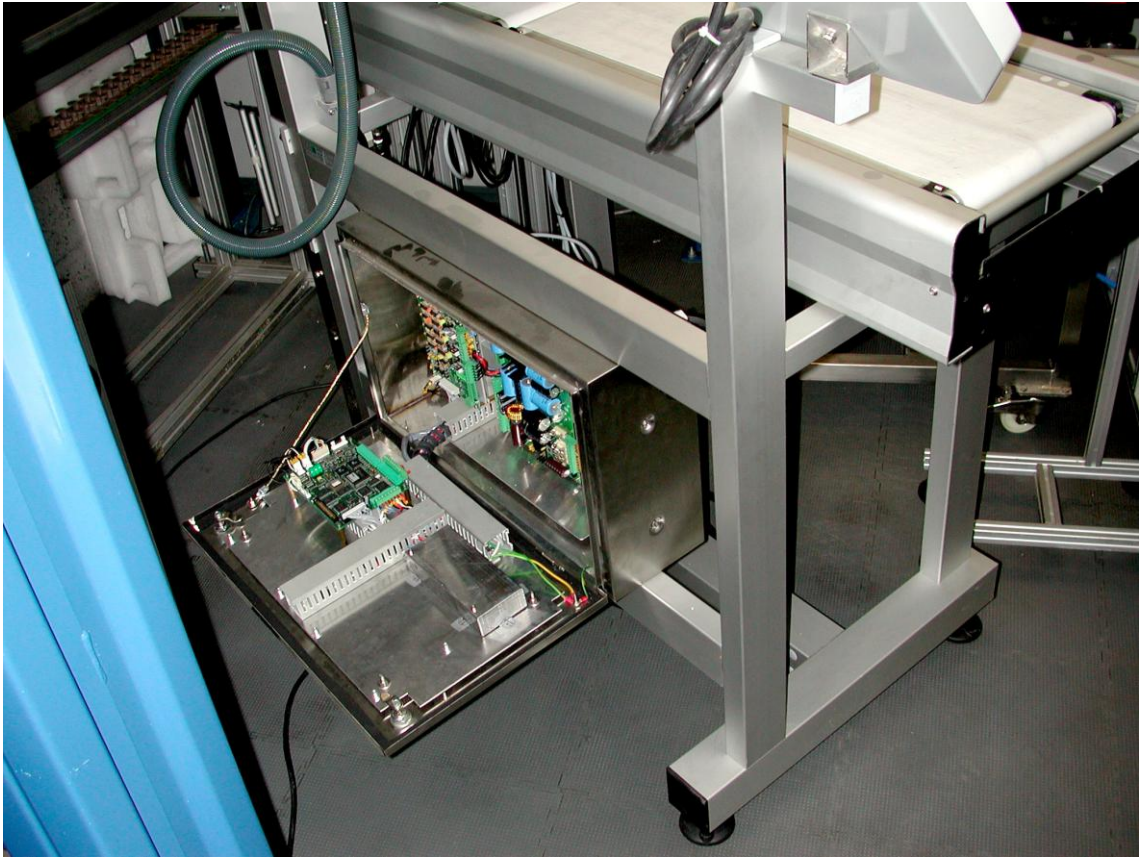


(a) Dibal Terminal/Indicator

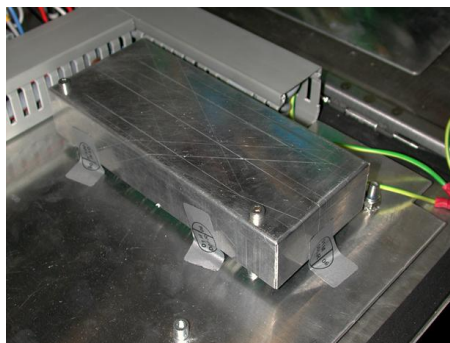


(b) Dibal Weighing Unit/Conveyor

FIGURE 6/14G/16 – 3



(a) Showing Location of Box to be Sealed



(b) Showing Sample Seals in Place

Showing Typical Sealing

FIGURE 6/14G/16 – 4



(a) Bibal Model 2100 – Variant 2



(b) Bibal Model 2200 – Variant 2