Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4C/287

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.

Adam Equipment Model WBW 15M Weighing Instrument

submitted by Adam Equipment (S.E. Asia) Pty Ltd
Unit 2/71 Tacoma Circuit
Canning Vale WA 6155

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 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on 1/09/19, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – certificate issued	15/08/14

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number ‘NMI 6/4C/287’ 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.

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

Dr A Rawlinson

TECHNICAL SCHEDULE No 6/4C/287

1. Description of Pattern approved on 15/08/14

The Adam Equipment model WBW 15M class (III) single interval self-indicating non-automatic weighing instrument (Figure 1 and Table 1) of 15 maximum capacity with a verification scale interval of 0.005 kg.

The instrument is fitted with one LCD display for display of the weight value.

Instruments shall be marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

Power for the model WBW 15M instrument may be supplied by either:

- an AC/DC mains adaptor; or/and
- an internal 6 V rechargeable battery.

Note: The AC/DC mains adaptor supplied for the instrument was an Adam model VA8E-120080 (12 V DC, 0.8 A) – the submittor should be consulted regarding the acceptability of alternative power supply units.

1.1 Zero

The initial zero-setting device 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.

A zero-tracking device may be fitted.

1.2 Tare

A semi-automatic subtractive tare device of up to maximum capacity may be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

The instrument is provided with adjustable feet and adjacent to the level indicator is a notice stating 'Instrument must be level when in use' or similar wording.

1.5 Additional Features

Instruments may be fitted with a checkweighing function (HI, OK, LO). The function and display are not approved for trade use.

1.6 Software

The software is designated version number U2.51.

The software version number appears in the switch-on display sequence when the power is first applied to the instrument.

1.7 Verification Provision

Provision is made for the application of a verification mark.

1.8 Sealing Provision

Provision is made for access to the calibration pin within the instrument to be sealed by means of 'lead and wire' type seals with a drilled screw and housing as shown in Figure 2a or destructible adhesive labels placed over the joint in the instrument housing and screw hole as shown in Figure 2b.

Alternatively the instrument is sealed by recording the audit trail counters on verification. Access to allow changing of set-up parameters including calibration parameters must be protected by a passcode.

The instrument automatically increments a configuration and/or calibration value (audit trail number) each time the instrument is re-configured and/or calibrated. The value of the counters can be seen in the switch-on display sequence (when power is first applied to the indicator).

The value(s) of these counters may be recorded on a destructible adhesive label attached to the instrument (e.g. as CALCnt xxx, PArCnt yyy).

Any subsequent alteration to the calibration or configuration will be evident as the recorded values and the current counter values will differ.

1.9 Descriptive Markings and Notices

(a) Instruments carry the following markings:

Manufacturer's mark, or name written in full	Adam Equipment Pty Ltd
Indication of accuracy class	(III)
Pattern approval mark for the instrument	NMI 6/4C/287
Maximum capacity	*Max* ...../..... g or kg #
Minimum capacity	*Min* ..... g or kg #
Verification scale interval	*e* = .../..... g or kg #
Serial number of the instrument	…….

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

(b) Where **only** an operator display is provided, instruments shall be marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

2. Description of Variant 1 **approved on 15/08/14**

The WBW *M series in certain other models and capacities as listed in Table 1.

TABLE 1

Model	Maximum Capacity (*Max*)	Verification Scale Interval (*e*)	ZEMIC L6D Load Cell Maximum Capacity E_{max}
WBW 3M	3 kg	0.001 kg	5 kg
WBW 6M	6 kg	0.002 kg	8 kg
WBW 15M	**15 kg**	**0.005 kg**	**20 kg**

The pattern is shown in **bold** text.

TEST PROCEDURE

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

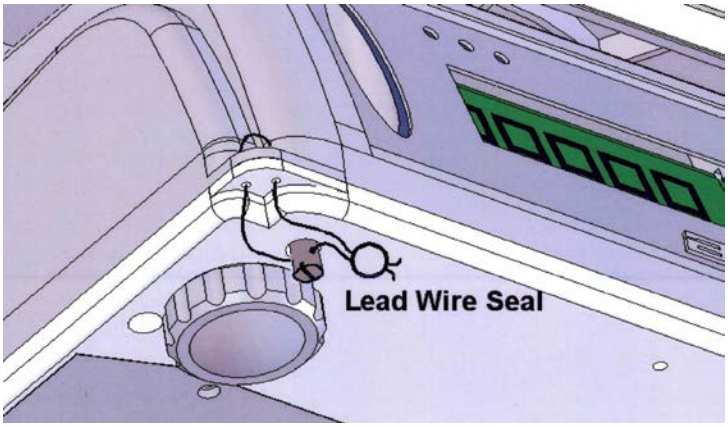
Maximum Permissible Errors

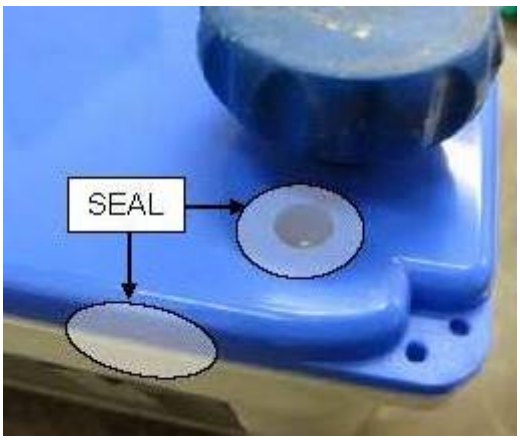
The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

FIGURE 6/4C/287 – 1

Adam Equipment Model WBW M Series Weighing Instrument

FIGURE 6/4C/287 – 2





Examples of Typical Mechanical Sealing

~ End of Document ~