



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change

Certificate of Approval No 6/10B/55A

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

A1 Weighing Equipment Model KDW300 Weighing Instrument

submitted by A1 Weighing Equipment Pty Ltd
 31 Mort Street
 Toowoomba QLD 4350.

In Certificate of Approval No 6/10B/55A dated 17 November 2005;

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 December **2015**, and then every 5 years thereafter.”
2. The FILING ADVICE should be amended by adding the following:
 “Notification of Change No 1 dated 30 March 2011”

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 a long horizontal stroke at the bottom.



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Certificate of Approval
No 6/10B/55A

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

A1 Weighing Equipment Model KDW300 Weighing Instrument

submitted by A1 Weighing Equipment Pty Ltd
31 Mort Street
Toowoomba QLD 4350.

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 Certificate is issued upon completion of a review of approval No 6/10B/55.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 December 2010, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/10B/55A' 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.

The National Measurement Institute 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 approved load cells and/or approved indicators and in other capacities, or with different platform sizes, shall comply with General Certificate of Approval No 6B/0.

Note: New instruments manufactured under this approval shall only use load cells and/or indicators with current Supplementary Certificates of Approval.

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 16 November 2005

- An A1 Weighing Equipment model KDW300 weighing instrument of 30 000 kg maximum capacity.

Variants: approved 16 November 2005

1. Model KDW300 in capacities from 15 000 to 300 000 kg.
2. Model KDH300 hopper or model KDT300 tank weighing instruments.

Technical Schedule No 6/10B/55A describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/55A dated 17 November 2005
Technical Schedule No 6/10B/55A dated 17 November 2005 (incl. Test Procedure)

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



TECHNICAL SCHEDULE No 6/10B/55A

Pattern: A1 Weighing Equipment Model KDW300 Weighing Instrument
Submittor: A1 Weighing Equipment Pty Ltd
31 Mort Street
Toowoomba QLD 4350

1. Description of Pattern

An A1 Weighing Equipment model KDW300 self-indicating weighing instrument approved for use with a maximum capacity of 30 000 kg and approved for use with up to 3000 verification scale intervals.

1.1 Basework

The model KDW300 basework has the platform fully supported by 4 load cells.

1.2 Load Cells

Four HBM model C16AC3/30t load cells of 30 000 kg capacity are used.

The load cells are also described in the approval documentation of approval NSC S370.

1.3 Indicator

A Gedge Systems model GS1650Mk3 digital indicator is used.

The indicator is also described in the approval documentation of approval NSC S193B.

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	A1 Weighing Equipment Pty Ltd
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	6/10B/55A
Pattern approval mark for the indicator	S...
Pattern approval mark for the load cells	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

A1 Weighing Equipment model KDW300 instruments in capacities from 15 000 to 300 000 kg, with no less than 4 and with up to 16 approved load cells. Instruments are approved for use with up to 4000 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

A1 Weighing Equipment instruments with the load receptor in the form of a hopper (model KDH300) or tank (model KDT300) in capacities from 15 000 to 300 000 kg.

Instruments are either:

- (a) fitted with 3, 4 or 5 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 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 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 National Measurement Institute 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 4000 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 $2\,000 < m \leq 10\,000$.