6/4C/232
25 March 2011

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

Notification of Change
Certificate of Approval No 6/4C/232
Change No 2

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

UWE Model ADW-15KE Weighing Instrument

submitted by Universal Weight Enterprise Co Ltd
2-5F, No 39 Pao Shing Road
Hsin Tien City 231
Taipei Hsien
Taiwan ROC.

In Certificate of Approval No 6/4C/232 dated 3 June 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 July **2015**, and then every 5 years thereafter."

2. The FILING ADVICE should be amended by adding the following:

   "Notification of Change No 1 dated 8 July 2005
   Notification of Change No 2 dated 25 March 2011"

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

6/4C/232
3 June 2005

Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Certificate of Approval

No 6/4C/232

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

UWE Model ADW-15KE Weighing Instrument

submitted by Universal Weight Enterprise Co Ltd
2-5F, No 39 Pao Shing Road
Hsin Tien City 231,
Taipei Hsien
Taiwan ROC.

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 July 2010, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4C/232' and only by persons authorised by the submittor.

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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.

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

DESCRIPTIVE ADVICE

Pattern: approved 2 June 2005

- A UWE model ADW-15KE weighing instrument of 15 kg maximum capacity.

Variants: approved 2 June 2005

1. Certain models and capacities of the ADW-**E & ADW-**C series as listed in Table 1.
2. Certain models and capacities of the ADM series as listed in Table 2.
3. Certain models and capacities of the AQM series as listed in Table 3.
4. Without certain features including the extended indicating device.

Technical Schedule No 6/4C/232 describes the pattern and variants 1 to 4.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/232 dated 3 June 2005
Technical Schedule No 6/4C/232 dated 3 June 2005 (incl. Tables 1 to 3, and Test Procedure)
Figures 1 to 6 dated 3 June 2005

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 6/4C/232

Pattern: UWE Model ADW-15KE Weighing Instrument

Submittor: Universal Weight Enterprise Co Ltd
2-5F, No 39 Pao Shing Road
Hsin Tien City 231,
Taipei Hsien
Taiwan ROC

1. Description of Pattern

A UWE model ADW-15KE self-indicating weighing instrument (Figure 1 and Table 1) with a verification scale interval of 0.005 kg and with a maximum capacity of 15 kg.

The instrument has the load receptor directly supported by a single load cell. The load receptor has maximum nominal dimensions of 215 x 250 mm.

Instruments may be provided with a single display on the operators side of the instrument, or may be provided with two displays, one on each side of the instrument.

Instruments are NOT FOR TRADING DIRECT WITH THE PUBLIC and shall be so marked.

The instrument may be fitted with an extended indicating device which can temporarily (for a period of less than 5 seconds) indicate weighing results with a scale interval less than the verification scale interval. Such indications are not approved for trade use.

The instrument has an additional function, setting target values and implementing HI/OK/LO checking, this function is not approved for trade use.

Instruments are approved for use over a temperature range of 0°C to 40°C and are so marked.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

The instrument is powered via an internal rechargeable battery (6 V) or via a mains adaptor (which also can recharge the internal battery).

Note: The AC/DC mains adaptor supplied was a Yuh-Nian Electronics Enterprise model YAD-0900700SAA power supply (output 9 V DC, 700 mA) – the submittor should be consulted regarding the acceptability of alternative power supply units.

1.1 Load Cell

The load cell used is a Tedea Huntleigh model 1022P load cell of 20 kg maximum capacity.

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1.2 Zero

Zero is automatically corrected to within ±0.25e whenever power is applied and whenever the instrument comes to rest at zero (with the zero light illuminated).

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.

1.3 Tare

A semi-automatic subtractive taring device of up to the maximum capacity of the instrument may be fitted.

An automatic subtractive taring device of up to the maximum capacity of the instrument may be also be fitted.

1.4 Display Check

A display check is initiated whenever power is applied.

1.5 Levelling

Instruments 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.

1.6 Markings and Notices

Instruments carry the following markings:

Manufacturer’s mark, or name written in full	UWE Co Ltd, Taiwan
Indication of accuracy class	
Pattern approval mark for the instrument	NMI 6/4C/232
Maximum capacity	*Max* ..... kg *
Minimum capacity	*Min* ..... kg *
Verification scale interval	*e* = ... kg *
Tare capacity	*T* = - ..... kg
Serial number of the instrument	.....
Special temperature limits	0°C to +40°C

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

Instruments are marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

1.7 Verification/Certification Provision

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

1.8 Sealing Provision

Provision is made for the calibration adjustments to be sealed.

This is achieved by setting a jumper on the main board within the instrument to a 'LOCK' location, and then preventing access within the instrument housing.

It is possible to determine that the jumper is in the 'LOCK' location by:

- Starting with the instrument switched off.
- Hold down the MODE key and press the ON/ZERO key.
- If the jumper is in the 'LOCK' location, the instrument will briefly display 'S1=on'. In this case the instrument may be verified/certified (press ON/ZERO to return to normal operation).
- Otherwise the instrument will indicate 'CAL?' in which case the instrument should not be verified/certified until the jumper has been correctly located in the 'LOCK' location.

Sealing to prevent access within the instrument housing may be achieved as shown in Figure 2.

2. Description of Variants

2.1 Variant 1

Certain models and capacities of the ADW-**E & ADW-**C series as listed in Table 1.

The UWE model ADW-**C instruments (Figure 3) are similar to the model ADW-**E, but have a liquid crystal display (LCD) rather than the light emitting diode (LED) display of the ADW-**E.

TABLE 1

Instrument Models	Maximum Capacity	Verification Scale Interval (*e*)	Load Cell Maximum Capacity (E_{max})
ADW-30KE and ADW-30KC	30 kg	0.01 kg	35 kg
ADW-15KE and ADW-15KC	15 kg	0.005 kg	20 kg
ADW-6000E and ADW-6000C	6000 g	2 g	10 kg
ADW-3000E and ADW-3000C	3000 g	1 g	5 kg

2.2 Variant 2

Certain models and capacities of the ADM-** series as listed in Table 2.

The ADM-** series (Figure 4) are similar to the ADW-**KE series, but do not have the HI/OK/LO checking feature. The ADM-** series have LCD displays.

TABLE 2

Instrument Models	Maximum Capacity	Verification Scale Interval (*e*)	Load Cell Maximum Capacity (E_{max})
ADM-30K	30 kg	0.01 kg	35 kg
ADM15K	15 kg	0.005 kg	20 kg
ADM-6000	6000 g	2 g	10 kg
ADM-3000	3000 g	1 g	5 kg

2.3 Variant 3

Certain models and capacities of the AQM-** series as listed in Table 3.

The AQM-** series (Figure 5) are similar to the ADW-**KE series, but do not have the HI/OK/LO checking feature; they also have a smaller casing and smaller load receptor (170 x 200 mm). The AQM-** series have LCD displays.

The location for sealing of the AQM-** series is shown in Figure 6.

TABLE 3

Instrument Models	Maximum Capacity	Verification Scale Interval (*e*)	Load Cell Maximum Capacity (E_{max})
AQM-6000	6000 g	2 g	10 kg
AQM-3000	3000 g	1 g	5 kg

2.4 Variant 4

The pattern or variants fitted with software in which the extended indicating device and the automatic subtractive taring device are not available.

When such instruments are fitted with two indicators (one for the operator and one for the customer), the instrument is acceptable for trading direct with the public and the notice prohibiting such use is not required.

Note: The software can be identified by keeping the MODE button pressed for approximately two seconds. If the indication provides an additional digit (flashing), the extended indicating device is present and the instrument is not fitted with the software applicable to this variant.

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:

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

Ensure that instruments are only being used within the special temperature limits stated elsewhere in this Technical Schedule.

6/4C/232
8 July 2005

Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Notification of Change
Certificate of Approval No 6/4C/232
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

UWE Model ADW-15KE Weighing Instrument

submitted by Universal Weight Enterprise Co Ltd
2-5F, No 39 Pao Shing Road
Hsin Tien City 231,
Taipei Hsien Taiwan ROC.

1. In Certificate of Approval No 6/4C/232 dated 3 June 2005, the DESCRIPTIVE ADVICE should be amended by adding the following to the description of the pattern:

   "May also be known as a 'Wedderburn' instrument of the same model."

2. In Technical Schedule No 6/4C/232 dated 3 June 2005, clause **1. Description of Pattern** should be amended by adding the following after the first paragraph:

   "Instruments may also be known as 'Wedderburn' instruments of the same model numbers as the pattern and variants. There may be minor cosmetic differences from the instruments shown in Figures 1 to 5. The 'Manufacturer's mark, or name written in full' may be shown as 'Manufactured for W W WEDDERBURN Pty Ltd', rather than 'UWE Co Ltd, Taiwan' as shown in clause **1.6 Markings and Notices**."

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

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FIGURE 6/4C/232 – 1

Note: Instruments must be marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

UWE Model ADW-15KE Weighing Instrument

FIGURE 6/4C/232 – 2

Showing Sealing Location – ADW/ADM Series

FIGURE 6/4C/232 – 3

Note: Instruments must be marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

UWE Model ADW-15KC Weighing Instrument

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FIGURE 6/4C/232 – 4

Note: Instruments must be marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

UWE Model ADM-15K Weighing Instrument

FIGURE 6/4C/232 – 5

Note: Instruments must be marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

UWE Model AQM-3000 Weighing Instrument

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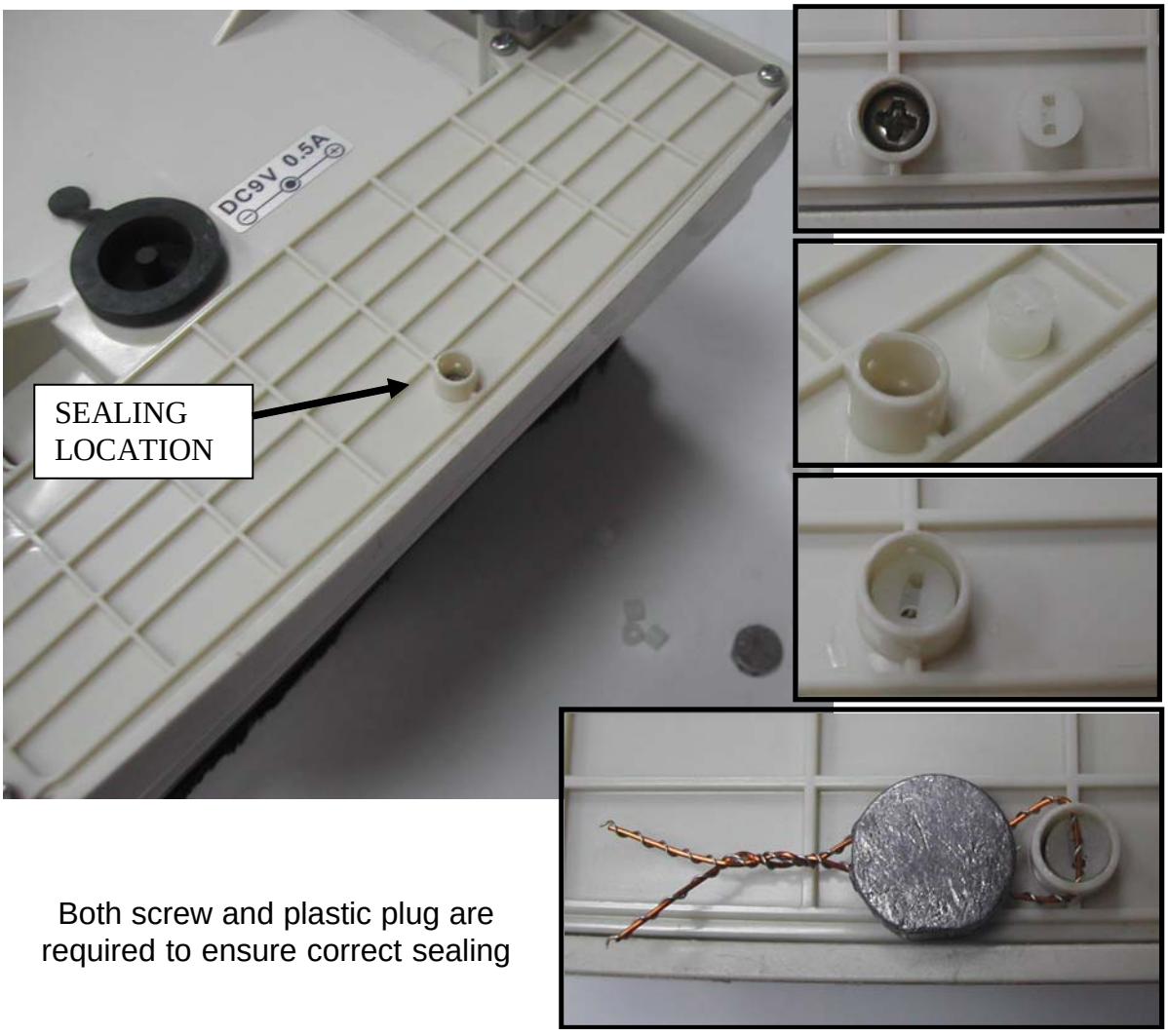
FIGURE 6/4C/232 – 6



Both screw and plastic plug are required to ensure correct sealing

Showing Sealing Location – AQM Series