



**Australian Government**

**National Measurement  
Institute**

Bradfield Road, West Lindfield NSW 2070

# **Notification of Change**

## **Certificate of Approval No 6/4C/231**

### **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 AHGM-15K 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/231 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 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*.

A handwritten signature in black ink, consisting of stylized cursive letters, likely representing the Chief Metrologist.



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

12 Lyonpark Road, North Ryde NSW 2113

**Certificate of Approval**  
**No 6/4C/231**

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 AHGM-15K 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/231' 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 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 AHGM-15K weighing instrument of 15 kg maximum capacity.

**Variants:** approved 2 June 2005

1. A UWE model AXM-15K weighing instrument.
2. Certain other models and capacities of the AHGM & AXM series as listed in Table 1.
3. Without certain features including the extended indicating device.

Technical Schedule No 6/4C/231 describes the pattern and variants 1 to 3.

#### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/231 dated 3 June 2005

Technical Schedule No 6/4C/231 dated 3 June 2005 (incl. Table 1 and Test Procedure)

Figures 1 to 3 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/231

**Pattern:** UWE Model AHGM-15K 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 AHGM-15K 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 piece counting function which 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 Tedeo Huntleigh model 1022P load cell of 20 kg maximum capacity.

## 1.2 Zero

Zero is automatically corrected to within  $\pm 0.25e$  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/231
Maximum capacity	<i>Max</i> ..... kg *
Minimum capacity	<i>Min</i> ..... kg *
Verification scale interval	<i>e</i> = ..... kg *
Tare capacity	<i>T</i> = - ..... 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

A UWE model AXM-15K weighing instrument (Figure 3 and Table 1). The model AXM is similar to the model AHGM however it does not have the piece counting function.

### 2.2 Variant 2

Certain other models and capacities of the AHGM and AXM series instruments as listed in Table 1.

TABLE 1

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

### 2.3 Variant 3

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:

- $\pm 0.5 e$  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  $2\,000 < m \leq 10\,000$ .

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

FIGURE 6/4C/231 – 1



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

UWE Model AHGM-15K Weighing Instrument



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FIGURE 6/4C/231 – 2



Sealing location beneath platter.  
Ensure seal does not interfere with the platform.

Showing Sealing Locations

FIGURE 6/4C/231 – 3



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

UWE Model AXM-15K Weighing Instrument