

Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Cancellation

Certificate of Approval

No 6/9C/255

Issued by the Chief Metrologist under Regulation 60 of the National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in respect of the

United Weighing Model UW-3000-LPF Weighing Instrument

submitted by United Weighing Australia Pty Ltd Cnr Cranwell & Annesley Streets Braybrook VIC 3019

has been cancelled in respect of new instruments as from 1 May 2006.

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



National Standards Commission

Certificate of Approval

No 6/9C/255

Issued under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations

This is to certify that an approval for use for trade has been granted in respect of the

UWA Model UW-3000-LPF Weighing Instrument

submitted by United Weighing Australia Pty Ltd 81-83 Cranwell Street Braybrook VIC 3019.

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 August 2002, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/255 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 Commission 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 the Commission's Document 106.

The Commission 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 load cells and/or indicator, and in other capacities, or with different platform sizes, shall comply with General Certificate No 6B/0.

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 18 July 1997

• A UWA model UW-3000-LPF weighing instrument of 3 000 kg maximum capacity.

Variant: approved 18 July 1997

1. Model UW-600-LPT of 600 kg maximum capacity.

Variants: approved 28 September 1998

- 2. Model UW-5000HW hopper weighing instrument of 5000 kg capacity.
- 3. Model UW-40000HW hopper weighing instrument of 40 000 kg capacity.
- 4. Platform instruments in certain other capacities.

5. Hopper instruments in certain other capacities.

Technical Schedule No 6/9C/255 describes the pattern and variants 1 to 5.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/9C/255 dated 12 October 1998 Technical Schedule No 6/9C/255 dated 12 October 1998 (incl. Test Procedure) Figures 1 to 5 dated 12 October 1998

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

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TECHNICAL SCHEDULE No 6/9C/255

Pattern: UWA Model UW-3000-LPF Weighing Instrument.

Submittor: United Weighing Australia Pty Ltd 81-83 Cranwell Street Braybrook VIC 3019.

1. Description of Pattern

A UWA model UW-3000-LPF self-indicating platform weighing instrument (Figure 1) of 3000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

1.1 Basework

The model UW-3000-LPF basework (Figure 1) has the four load cells directly bolted to the load receptor of 1200×1200 mm. The feet of the instrument are attached to the load cells and may be either (see Figure 2):

- of a rubber-like material (type 1); or
- of a swivel type ball and cup arrangement (type 2 or 3).

If approach ramps are provided (as shown in Figure 1), care shall be taken to ensure that these do not interfere with the platform.

The platform of the instrument may be bolted or welded to the frame.

1.2 Load Cells

Four Kelba model KA-1000-C3 load cells of 1000 kg capacity are used.

The load cells are also described in the approval documentation of NSC approval No S155B.

1.3 Indicator

An A & D Mercury model AD-4323 digital indicator is used.

The indicator is also described in the approval documentation of NSC approval No S251A.

1.4 Verification/Certification Provision

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

1.5 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.

1.6 Markings

Instruments are marked with the following, in the form shown at right:

Manufacturer's mark, or name written in full	United Weighing
Indication of accuracy class	\square
Maximum capacity	<i>Max</i> kg *
Minimum capacity	<i>Min</i> kg *
Verification scale interval	<i>e</i> = kg *
Serial number of the instrument	
Serial number of the load cells #	
Pattern approval mark for the instrument	NSC No 6/9C/255
Pattern approval mark for the indicator	NSC No S
Pattern approval mark for the load cells	NSC No S

- * These markings shall also be repeated adjacent to each reading face, if they are not already located there.
- # Alternatively, these may be marked adjacent to the verification mark.

2. Description of Variants

2.1 Variant 1

A model UW-600-LPT of 600 kg maximum capacity (Figure 3) and approved for use with up to 3000 verification scale intervals.

A Gedge Systems model GS1650 Mk3 digital indicator is used. The indicator is also described in the approval documentation of NSC approval No S193B.

2.2 Variant 2

A model UW-5000HW hopper weighing instrument of 5000 kg capacity and approved for use with up to 3000 verification scale intervals.

The model UW-5000HW weighing instrument basework (Figure 4) has four Precision Transducers model LS2500 (NSC No S224) (**) load cells bolted to the load receptor (which is in the form of a hopper).

(**) Approval No S224 has expired since the pattern examination of this instrument. These load cells shall not be used for new installations, however alternative Commissionapproved load cells may be used in accordance with General Certificate No 6B/0. The load cells rest on dome, cup and ball assemblies (Figure 4) which are located on the frame of the instrument.

An A & D Mercury Model 4323 digital indicator is used. The indicator is also described in the approval documentation of NSC approval No S251A.

2.3 Variant 3

A model UW-40000HW hopper weighing instrument of 40 000 kg capacity.

The model UW-40000HW weighing instrument basework (Figure 5) has four Molen model CSP-M-25t-C3MB-SC-SS load cells (NSC No S133B) supporting a hopper, the top of which is a platform in the form of a grate over which vehicles can drive to deposit material into the hopper.

An A & D Mercury Model 4323 digital indicator is used. The indicator is also described in the approval documentation of NSC approval No S251A.

2.4 Variant 4

Platform weighing instruments in certain other capacities as listed below (where **** represents the capacity in kilograms) and with no less than 4 and with up to 10 load cells:

- Model UW-****-LPF (the pattern) in capacities from 1500 to 14 999 kg; and
- Model UW-****-LPT (variant 1) in capacities from 100 to 1499 kg.

2.5 Variant 5

Hopper weighing instruments in certain other capacities as listed below (where **** represents the capacity in kilograms):

- Model UW-****HW (variant 2) in capacities from 1500 to 14 999 kg; and
- Model UW-****HW (variant 3) in capacities from 15 000 to 149 999 kg.

Instruments are either:

- (a) fitted with 3, 4 or 5 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 4 load cells where the hopper is a non-vertical cylindrical, or other hopper-type load receptor.

Note: Instruments with more than 4 load cells will be acceptable if prior written agreement from the Commission is obtained.

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

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:

 $\pm 0.5e$ for loads $0 \le m \le 500$; $\pm 1.0e$ for loads $500 < m \le 2000$; and $\pm 1.5e$ for loads $2000 < m \le 10000$. FIGURE 6/9C/255 - 1



FIGURE 6/9C/255 - 2



Kelba Model KA-1000-C3 Load Cell and Alternative Feet Arrangements FIGURE 6/9C/255 - 3





