



Australian Government

National Measurement  
Institute

Bradfield Road, West Lindfield NSW 2070

## Certificate of Approval

### NMI 6/9C/271

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.

AWE Model L.P. 1500 Weighing Instrument

submitted by Australian Weighing Equipment Pty Ltd  
50 Mandarin Street  
Fairfield East NSW 2165

**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 **1/03/17**, and then every 5 years thereafter.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 4 approved – interim certificate issued	22/02/02
1	Pattern & variants 1 to 4 approved – certificate issued	25/03/02
2	Pattern & variants 1 to 4 reviewed – notification of change issued	9/11/07
3	Pattern & variants 1 to 4 reviewed & updated – certificate issued	8/06/12

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/9C/271' 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.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0/A or No S1/0B.

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.


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.

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, positioned to the right of the signature text.

TECHNICAL SCHEDULE No 6/9C/271

**1. Description of Pattern** **approved on 22/02/02**

An AWE model L.P. 1500 class  self-indicating weighing instrument of 1500 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

**1.1 Basework**

The model L.P. 1500 basework (Figure 1) has the load receptor directly supported by load cells fitted with self-aligning supporting feet.

If approach ramps are provided care shall be taken to ensure that these do not interfere with the platform.

**1.2 Load Cells**


Four Weightronix model WBP 1.25k load cells of 625 kg capacity are used mounted as shown in Figure 1. The load cells are described in the documentation of approval NSC No S265A.

**1.3 Indicator**

A Ranger Instruments model 5100 digital indicator is used. The indicator is described in the documentation of approval NSC No S363.

**1.4 Descriptive Markings**

Instruments are marked with the following data, together in one location:

Manufacturer's mark, or name written in full	Australian Weighing Equipment
Name or mark of manufacturer's agent	.....
Indication of accuracy class	
Maximum capacity	<i>Max</i> ..... g or kg #1
Minimum capacity	<i>Min</i> ..... g or kg #1
Verification scale interval	<i>e</i> = ..... g or kg #1
Maximum subtractive tare	<i>T</i> = - ..... g or kg #2
Serial number of the instrument	.....
Pattern approval mark for the instrument	NMI No 6/9C/271
Pattern approval mark for the load cells	NSC No ...
Pattern approval mark for the indicator	NSC No ...

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

#2 This marking is required if *T* is not equal to *Max*.

**1.5 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.

## 1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed as described in the approval documentation for the indicator.

## 1.7 Verification Provision

Provision is made for the application of a verification mark.

## 2. Description of Variant 1 approved on 22/02/02

Other models in the L.P. \*\*\* (#) series in capacities as listed below:

- from 100 kg up to 1499 kg; and
- from 1500 kg up to 14 999 kg.

## 3. Description of Variant 2 approved on 22/02/02

With an alternative low profile load receptor as shown in Figure 2 in capacities from 100 kg up to 14 999 kg. Instruments are then known as the X.L.P. \*\*\* (#) series.

## 4. Description of Variant 3 approved on 22/02/02

With a conveyor assembly fitted on the load receptor in capacities from 100 kg up to 14 999 kg. Instruments are then known as the C.P. \*\*\* (#) series. The weight of the conveyor assembly shall be included as part of the dead load for the purposes of General Certificate No 6B/0 calculations.

Instruments are approved for static weighing only.

## 5. Description of Variant 4 approved on 22/02/02

With the load receptor in the form of a hopper or bag suspended from the base frame (Figure 3) in capacities from 100 kg up to 14 999 kg. Instruments are then known as the H.P. \*\*\* (#) series.

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.

(#) '\*\*\*' represents the maximum capacity in kilograms.

### TEST PROCEDURE No 6/9C/271

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 6/9C/271 – 1

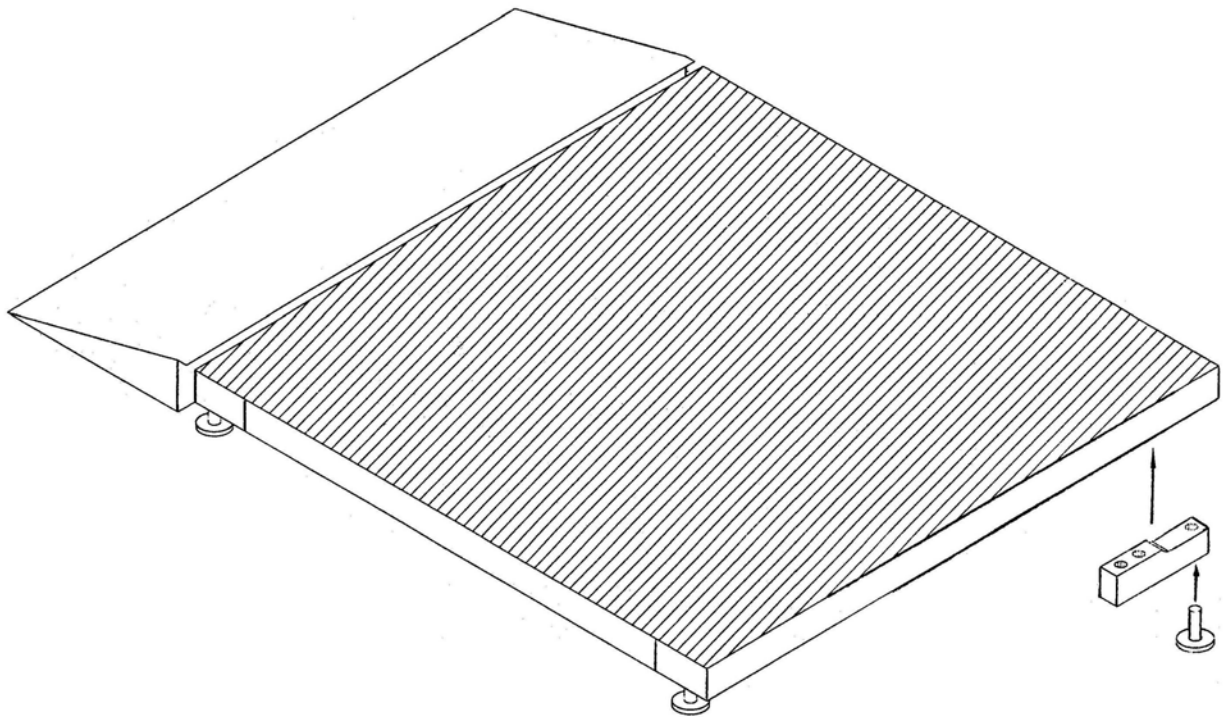
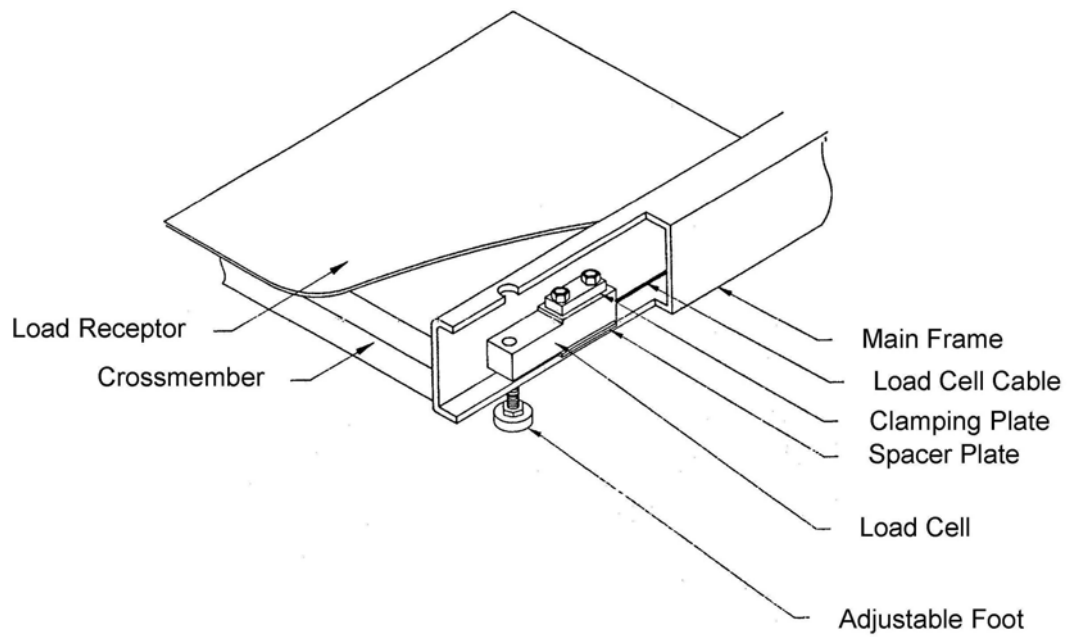
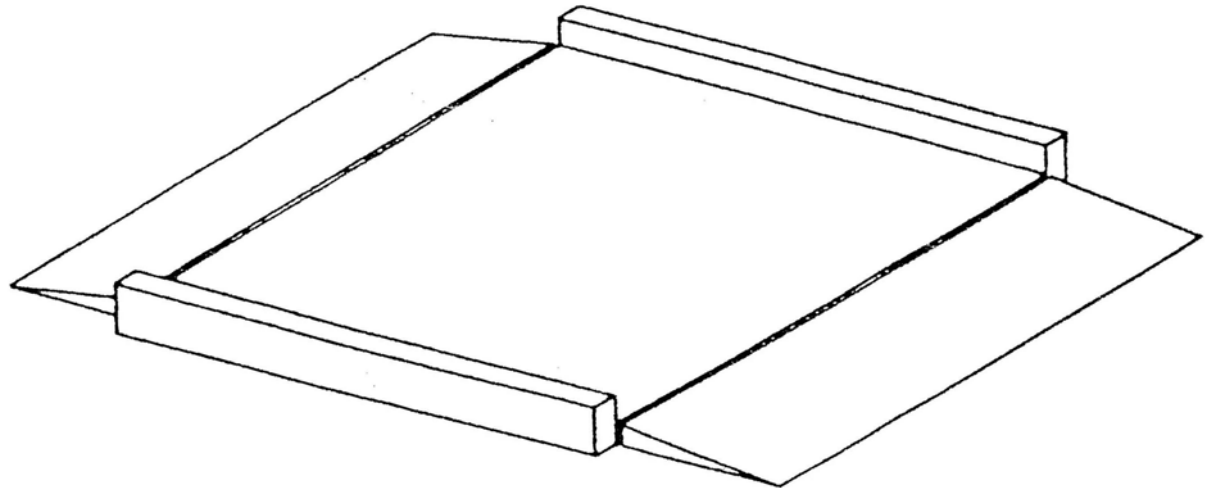
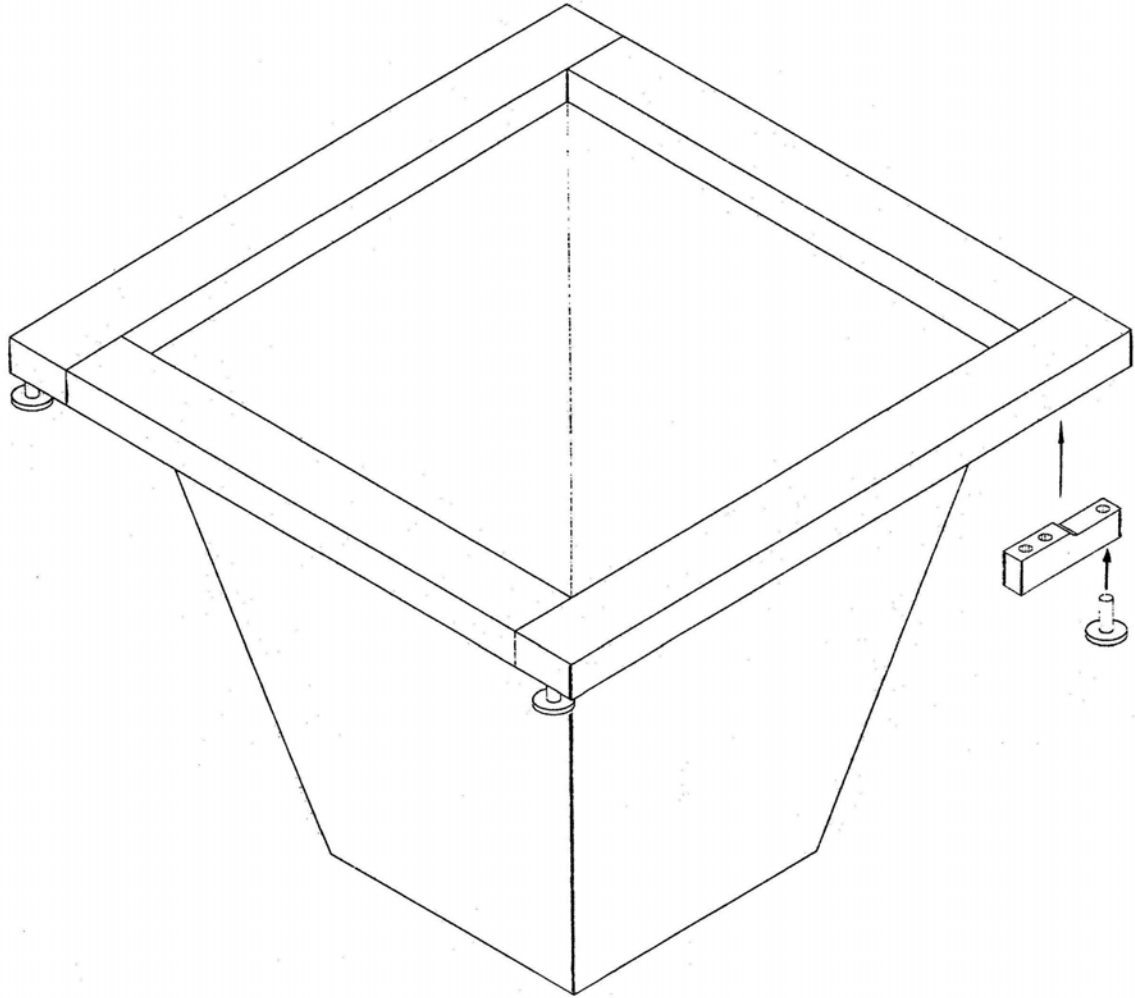


FIGURE 6/9C/271 – 2



Typical X.L.P. Series Weighing Instrument

FIGURE 6/9C/271 – 3



Typical H.P. Series Hopper Weighing Instrument