

# National Measurement Institute

# Certificate of Approval NMI 6/9C/286

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.

WA Scale Service Model WASSLP Weighing Instrument

submitted by Radalj Pty Ltd

28 Eversley Street Balcatta WA 6021

**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 **1/12/21**, and then every 5 years thereafter.

# DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 & 2 approved – interim certificate issued	2/11/05
1	Pattern & variants 1 & 2 approved – certificate issued	15/12/05
2	Pattern & variants 1 & 2 reviewed– notification of change issued	19/01/11
3	Pattern & variants 1 & 2 amended, reviewed & updated – variant 3 approved – certificate issued	3/03/16

#### CONDITIONS OF APPROVAL

#### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/9C/286' 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.

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.

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.

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

Dr A Rawlinson

#### TECHNICAL SCHEDULE No 6/9C/286

#### 1. Description of Pattern

# approved on 2/11/05

A WA Scale Service model WASSLP self-indicating class non-automatic weighing instrument of 300 kg maximum capacity and approved for use with a verification scale interval of 0.1 kg.

#### 1.1 Basework

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

This model basework has nominal dimensions of 1200 x 1200 mm.

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

Note: The instrument shown in Figure 1 is designed for a special application and does not have a flat platform. Instruments with conventional platforms are also approved.

#### 1.2 Load Cells

Four Precision Transducers model LS250 load cells of 250 kg capacity are used and are mounted as shown in Figure 1. The load cells are also described in the documentation of approval NMI S342.

#### 1.3 Indicator

An A & D model AD-4406 digital indicator is used. The indicator is described in the documentation of approval NMI S451.

#### 1.4 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.

#### 1.5 Descriptive Markings

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full	WA Scale Service	
Indication of accuracy class	⊕ or ⊕	
Maximum capacity	<i>Max</i> / kg or t	#1
Minimum capacity	<i>Min</i> kg or t	#1
Verification scale interval	e =/ kg or t	#1
Maximum subtractive tare	$T = - \dots kg \text{ or } t$	#2
Serial number of the instrument		
Pattern approval number for the instrument	NMI 6/9C/286	
Pattern approval number for the load cells	NMI S	
Pattern approval number for the indicator	NMI S	

- #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*.

#### 1.6 Verification Provision

Provision is made for the application of a verification mark.

# 1.7 Sealing Provision

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

# 2. Description of Variant 1

# approved on 2/11/05

Various models of the WA Scale Service WASSLP series in capacities as listed below, provided that instruments comply with General Certificate No 6B/0:

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

# 3. Description of Variant 2

# approved on 2/11/05

Other instruments in the WA Scale Service WASSLP series with the load receptor in the form of a hopper or bag suspended from the base frame (Figure 2) in capacities from 100 kg up to 1499 kg, or from 1500 kg to 14 999 kg.

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.

# 4. Description of Variant 3

#### approved on 3/03/16

The Radalj model WASSLP weighing instrument as described for the pattern and variants but as a class non-automatic weighing instrument and having differing configurations, provided that:

- the number of verification scale intervals (i.e. Max / e) shall be not less than 100, and not more than 1000, and
- the minimum capacity shall be not less than 10 e.

Note: If used for the weighing of waste or for the determination of a transport tariff or toll, the minimum capacity shall not be less than 5 e.

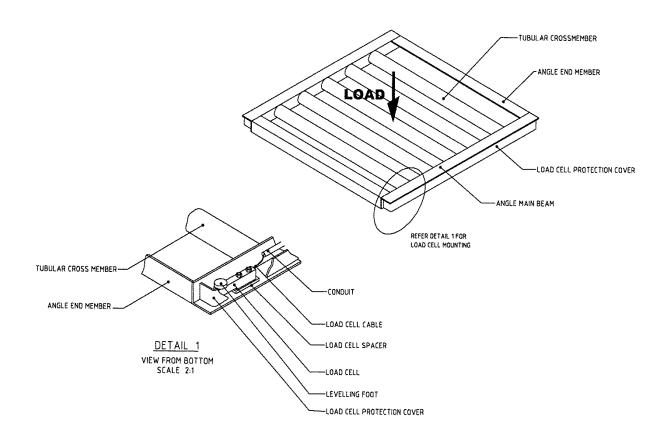
#### TEST PROCEDURE

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

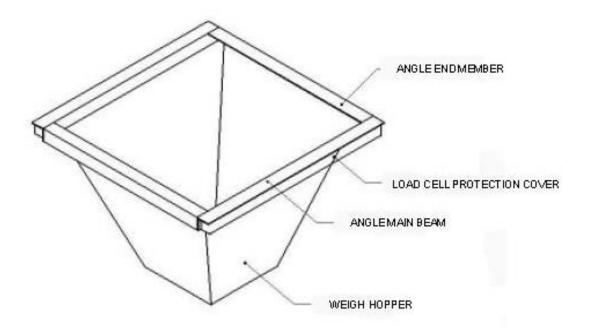
#### Maximum Permissible Errors

The maximum permissible errors are specified in the *National Trade Measurement Regulations* 2009.

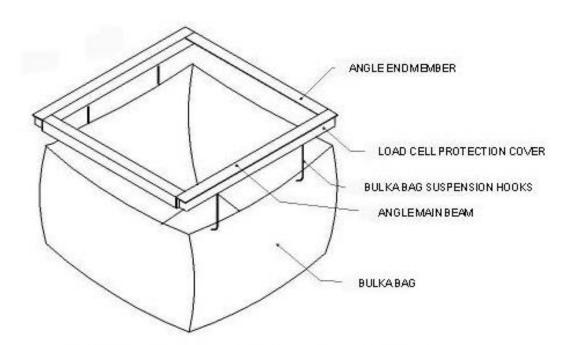


WA Scale Service Model WASSLP Weighing Instrument (incl. load cell mounting) (pattern & variant 1)

# FIGURE 6/9C/286 - 2



Typical Hopper Load Receptor - Variant 2



Typical Suspended-bag Load Receptor - Variant 2