



Australian Government  
Department of Industry,  
Innovation and Science

## National Measurement Institute

# Certificate of Approval NMI 6/4C/297

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.

Nuweigh Model JAD-989 Weighing Instrument

submitted by Newcastle Weighing Services Pty Ltd  
104-110 Hannell Street  
Wickham NSW 2293

**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 1/07/21, and then every 5 years thereafter.

### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – interim certificate issued	4/06/15
1	Pattern & variants 1 to 3 amended (validity) – interim certificate issued	4/12/15
2	Pattern & variants 1 to 3 approved – certificate issued	28/04/16

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/297' 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 Certificate No S1/0B.

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

A handwritten signature in black ink, appearing to read 'A Rawlinson', with a horizontal line underneath.

**Dr A Rawlinson**

TECHNICAL SCHEDULE No 6/4C/297

**1. Description of Pattern** **approved on 4/06/16**

A Nuweigh model JAD-989 class  $\text{III}$  single interval self-indicating non-automatic weighing instrument (Figure 1 and Table 1) with a maximum capacity of 6 kg and a verification scale interval of 0.002 kg. The instrument has an ABS plastic enclosure with an LED display for display of the weight value.

Instruments shall be marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

The instrument may be fitted with output sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices. The connection of peripheral and/or auxiliary devices shall not be able to change the instrument set up and measurement data.

The instrument has a 'Unit Change Key' which shall be disabled and the measurement unit shall be set as 'kg' or 'g'.

Power for the model JAD 989 instrument may be supplied by:

- an AC/DC mains adaptor; and/or
- an internal 6 V rechargeable battery.

Note: The AC/DC mains adaptor supplied for the instrument was a Shenzhen model SW-120080 (12 V DC, 0.8 A) adaptor – the submitter should be consulted regarding the acceptability of alternative power supply units.

Instruments may be fitted with accumulative weighting, piece counting and check weighing functions. These functions and displays are not approved for trade use.

The instrument may be fitted with a ticket printer. The ticket format shall comply with NMI R76-1 and NMI S1/0B requirements.

**1.1 Zero**

A zero-tracking device may be fitted. The initial zero-setting device 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.

**1.2 Tare**

A semi-automatic subtractive tare device, of up to maximum capacity may be fitted.

**1.3 Levelling**

The instrument is provided with adjustable feet and adjacent to the level indicator is a notice stating 'Instrument must be level when in use' or similar wording.

**1.4 Display Check**

A display check is initiated whenever power is applied.

**1.5 Additional Features**

Instruments may be fitted with accumulative weighting, piece counting and check weighing functions. These functions and displays are not approved for trade use.

## 1.6 Verification Provision

Provision is made for the application of a verification mark.

## 1.7 Sealing Provision

Access to the calibration switch is underneath the instrument, inside the battery box. Provision is made for this access to the calibration switch to be sealed by applying a destructible adhesive label seal over the access hole Figure 2. Also one or more suitable destructible adhesive label seals are to be placed to prevent access through the housing (Figure 2).

## 1.8 Descriptive Markings and Notices

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	Nuweigh
Name or mark of manufacturer's agent	Newcastle Weighing
Indication of accuracy class	Ⓜ
Pattern approval number for the instrument	NMI 6/4C/297
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	.....

#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*.

Multiple range instruments (see variants) shall be marked with the maximum capacity, minimum capacity and verification scale interval of each range, in addition to the markings listed above.

In addition, instruments shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

## 2. Description of Variant 1

approved on 4/06/15

The pattern as single interval instruments of certain other capacities (and verification scale intervals) as listed below in Table 1. (The pattern is shown in bold type.)

**TABLE 1 – Single Range Instrument Capacities**

Maximum Capacity	Verification Scale Interval	Resolution	Load Cell Capacity
3 kg	0.001 kg	3000	5 kg
<b>6 kg</b>	<b>0.002 kg</b>	<b>3000</b>	<b>10 kg</b>
15 kg	0.005 kg	3000	20 kg
30 kg	0.005 kg	3000	50 kg

**3. Description of Variant 2**

**approved on 4/06/15**

The pattern as multiple range instruments of certain capacities (and verification scale intervals) as listed below in Table 2.

**TABLE 2 – Multiple-Range Instrument Capacities**

<b>Maximum Capacity (Range 1 / Range 2)</b>	<b>Verification Scale Interval (Range 1 / Range 2)</b>	<b>Resolution (Range 1 / Range 2)</b>	<b>Load Cell Capacity</b>
3 kg / 6 kg	0.001 kg / 0.002 kg	3000 / 3000	10 kg
6 kg / 15 kg	0.002 kg / 0.005 kg	3000 / 3000	20 kg
15 kg / 30 kg	0.005 kg / 0.01 kg	3000 / 3000	50 kg

**4. Description of Variant 3**

**approved on 4/06/15**

The pattern and variants mounted in a stainless steel housing (Figure 3).

**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*.

**Tests**

For multiple range instruments with verification scale intervals of  $e_1, e_2 \dots$ , apply  $e_1$  for zero adjustment, and maximum permissible errors apply  $e_1, e_2 \dots$ , as applicable for the load.

FIGURE 6/4C/297 – 1



Nuweigh Model JAD-989 Weighing Instrument (pattern)

FIGURE 6/4C/297 – 2



Typical Mechanical Sealing (pattern & variants 1 & 2)

FIGURE 6/4C/297 – 3



Model JAD-989 Weighing Instrument in Stainless Steel Housing (variant 3)

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