Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval
NMI 6/9C/265

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.

Accuweigh Model A500 Weighing Instrument

submitted by AccuCorp Pty Ltd t/a Accuweigh
now of 12 Kembla Way
Willetton WA 6155

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 to 3 approved – interim certificate issued	9/11/00
1	Pattern & variants 1 to 3 approved – certificate issued	28/02/01
2	Pattern & variants 1 to 3 reviewed – notification of change issued	25/01/06
3	Pattern & variants 1 to 3 amended (submittor address) & reviewed – notification of change issued	5/05/11
4	Pattern & variants 1 to 3 amended (some components), updated & reviewed – variant 4 approved – certificate issued	12/07/16

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI (or NSC) 6/9C/265' 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 NMI-approved load cells and/or indicators, 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 other 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/265

1. Description of Pattern approved on 9/11/00

An Accuweigh model A500 class (III) self-indicating single interval or multiple-range platform weighing instrument (Figure 1) of 3000 kg maximum capacity and approved for use with up to 3000 verification scale intervals per range.

1.1 Basework

The model A500 basework (Figure 1) has the four load cells directly bolted to the 1400 × 1200 mm load receptor. The feet of the instrument are attached to the load cells (Figure 2).

Note that if approach ramps are provided, they shall not interfere with the platform.

1.2 Load Cells

Four CAS model BSA-1t load cells of 1000 kg capacity are used.

The load cells are also described in the approval documentation of approval NMI No S444.

1.3 Indicator

A Systec model IT1000 digital indicator is used.

The indicator is also described in the approval documentation of approval NMI No S472.

1.4 Levelling

The basework may be permanently fixed above ground, with or without loading ramps, or let into a pit with the platform level with the ground; in such cases no level indicator is required.

If the basework is not permanently fixed it shall be fitted with levelling 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	Accuweigh
Indication of accuracy class	(III)
Maximum capacity (for each range)	*Max* ..... kg #1
Minimum capacity (for each range)	*Min* ..... kg #1
Verification scale interval (for each range)	*e* = ... kg #1
Maximum subtractive tare	*T* = - ….. kg #2
Serial number of the instrument	……..
Pattern approval number for the instrument	NMI 6/9C/265
Pattern approval number for the indicator	NMI S…
Pattern approval number for the load cells	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 9/11/00**

In capacities from 1500 kg up to 14 999 kg.

3. Description of Variant 2 **approved on 9/11/00**

In capacities from 100 kg up to 1499 kg.

4. Description of Variant 3 **approved on 9/11/00**

Hopper weighing instruments in capacities from 1500 kg to 14 999 kg. Figure 3 shows typical hopper load cell mounting.

Instruments are either:

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

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

In addition 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.

5. Description of Variant 4 **approved on 12/07/16**

Instruments approved for use with up to 4000 verification scale intervals (subject to the approval parameters of the load cells and indicator), in capacities of:

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

using NMI-approved load cells and an approved digital indicator (in accordance with General Certificate of Approval No 6B/0).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause **4. Wind Effects** of General Certificate of Approval No 6B/0.

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*.

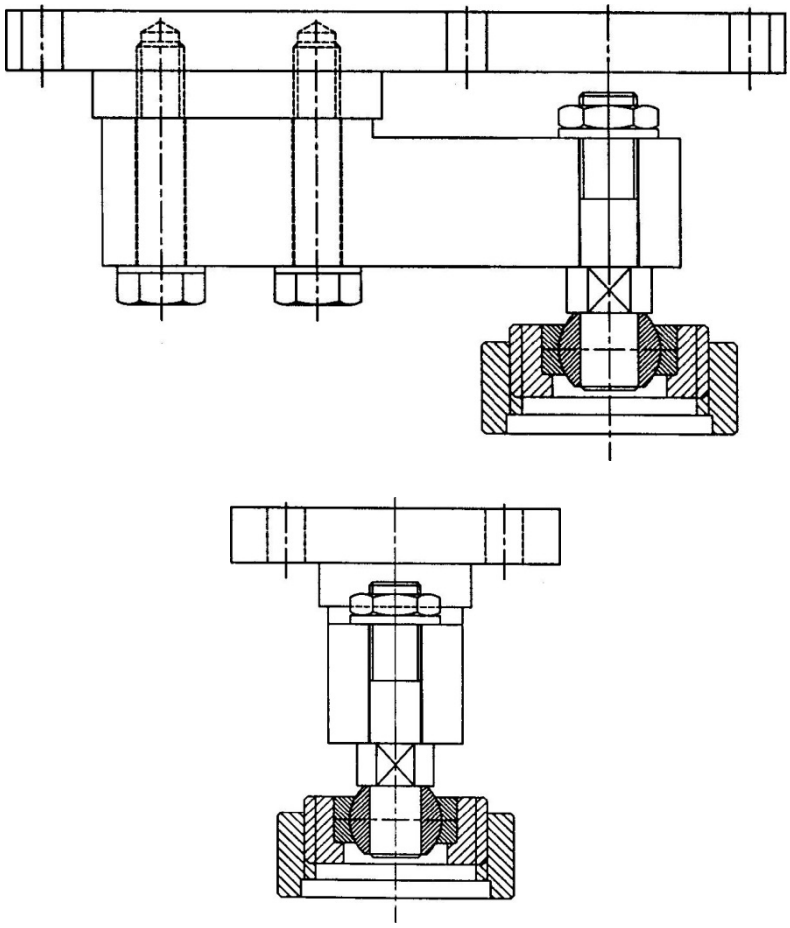
Tests

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

FIGURE 6/9C/265 – 1

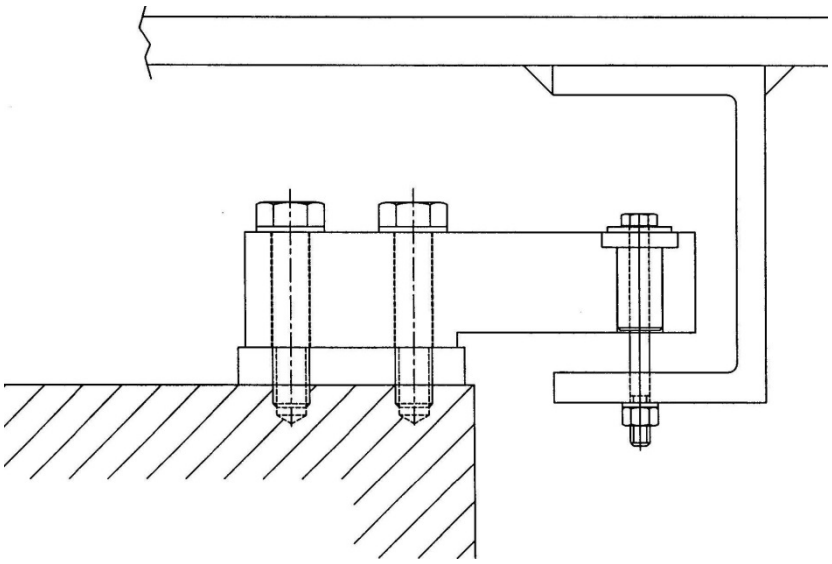
Accuweigh Model A500 Weighing Instrument

FIGURE 6/9C/265 – 2



Typical Load Cell Mounting for Platform Instrument

FIGURE 6/9C/265 – 3



Typical Load Cell Mounting for Hopper Instrument

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