6/9C/272
16 October 2007

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 6/9C/272
Change No 1

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

The following changes are made to the approval documentation for the

Scale Components Model FS2000 TuffDeck Floor Scale Weighing Instrument

submitted by Scale Components Pty Ltd
288 Musgrave Road
COOPERS PLAINS QLD 4108.

In Certificate of Approval No 6/9C/272 dated 27 March 2003;

1. The Condition of Approval referring to the review of the approval should be amended to read:

   "This approval becomes subject to review on 1 November **2012**, and then every 5 years thereafter."

2. The FILING ADVICE should be amended by adding the following:

   "Notification of Change No 1 dated 16 October 2007"

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

6/9C/272
27 March 2003

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 6/9C/272

Issued 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

Scale Components Model FS2000 TuffDeck Floor Scale Weighing Instrument

submitted by Scale Components Pty Ltd
288 Musgrave Road
Coopers Plains QLD 4108.

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.

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CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 November 2007, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/272 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 NSC P 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 Commission-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 components where they are approved separately.

DESCRIPTIVE ADVICE

Pattern: approved 1 October 2002

- A Scale Components model FS2000 TuffDeck Floor Scale self-indicating weighing instrument of 1500 kg maximum capacity.

Variants: approved 1 October 2002

1. FS2000 Tuffdeck Floor Scale series in capacities from 100 kg up to 149 999 kg.
2. HS2100 Hopper Scale series with the load receptor in the form of a hopper or bag.

Variant: approved 24 March 2003

3. CS2200 Conveyor Scale series with a conveyor fitted to the load receptor.

Technical Schedule No 6/9C/272 describes the pattern and variants 1 to 3.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/9C/272 dated 27 March 2003
Technical Schedule No 6/9C/272 dated 27 March 2003 (incl. Test Procedure)
Figures 1 and 2 dated 27 March 2003

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

TECHNICAL SCHEDULE No 6/9C/272

Pattern: Scale Components Model FS2000 TuffDeck Floor Scale Weighing Instrument

Submittor: Scale Components Pty Ltd
288 Musgrave Road
Coopers Plains QLD 4108

1. Description of Pattern

A Scale Components model FS2000 TuffDeck Floor Scale 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 FS2000 Tuffdeck 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 Kelba model KA1000 C3 load cells of 1000 kg capacity are used mounted as shown in Figure 1. The load cells are described in the documentation of NSC approval No S155B.

1.3 Indicator

A Gedge Systems model GS1650Mk3 digital indicator is used. The indicator is described in the documentation of NSC approval No S193B.

1.4 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Scale Components Pty Ltd
Indication of accuracy class	(III)
Maximum capacity	*Max* ..... kg *
Minimum capacity	*Min* ..... kg *
Verification scale interval	*e* = ... kg *
Tare capacity (if less then *Max)*	T = - ..... kg
Serial number of the instrument	.....
Pattern approval mark for the instrument	NSC No 6/9C/272
Pattern approval mark for the load cells	NSC No ...
Pattern approval mark for the indicator	NSC No ...

* These markings shall also be shown near the display of the result if they are not already located there.

1.5 Verification/Certification Provision

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

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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 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.

2. Description of Variants

2.1 Variant 1

The FS2000 TuffDeck Floor Scale series in capacities as listed below:

- from 100 kg up to 1499 kg;
- from 1500 kg up to 14 999 kg; and
- from 15 000 kg up to 149 999 kg.

2.2 Variant 2

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 14 999 kg. Instruments are then known as the HS2100 Hopper Scale 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.

2.3 Variant 3

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 CS2200 Conveyor Scale 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.

TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

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:

$\pm 0.5\ e$ for loads $0 \leq m \leq 500$;
$\pm 1.0\ e$ for loads $500 < m \leq 2\,000$; and
$\pm 1.5\ e$ for loads $2\,000 < m \leq 10\,000$.

FIGURE 6/9C/272 - 1

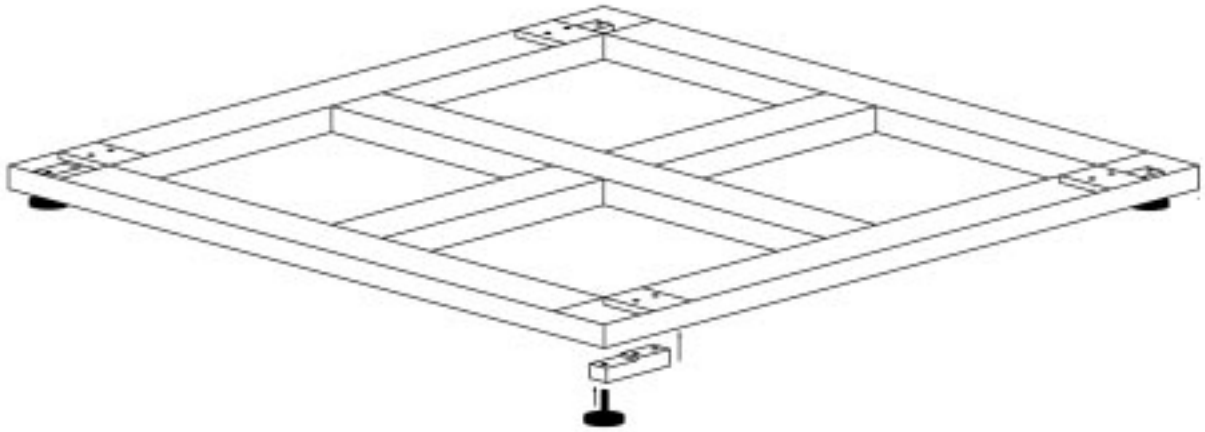
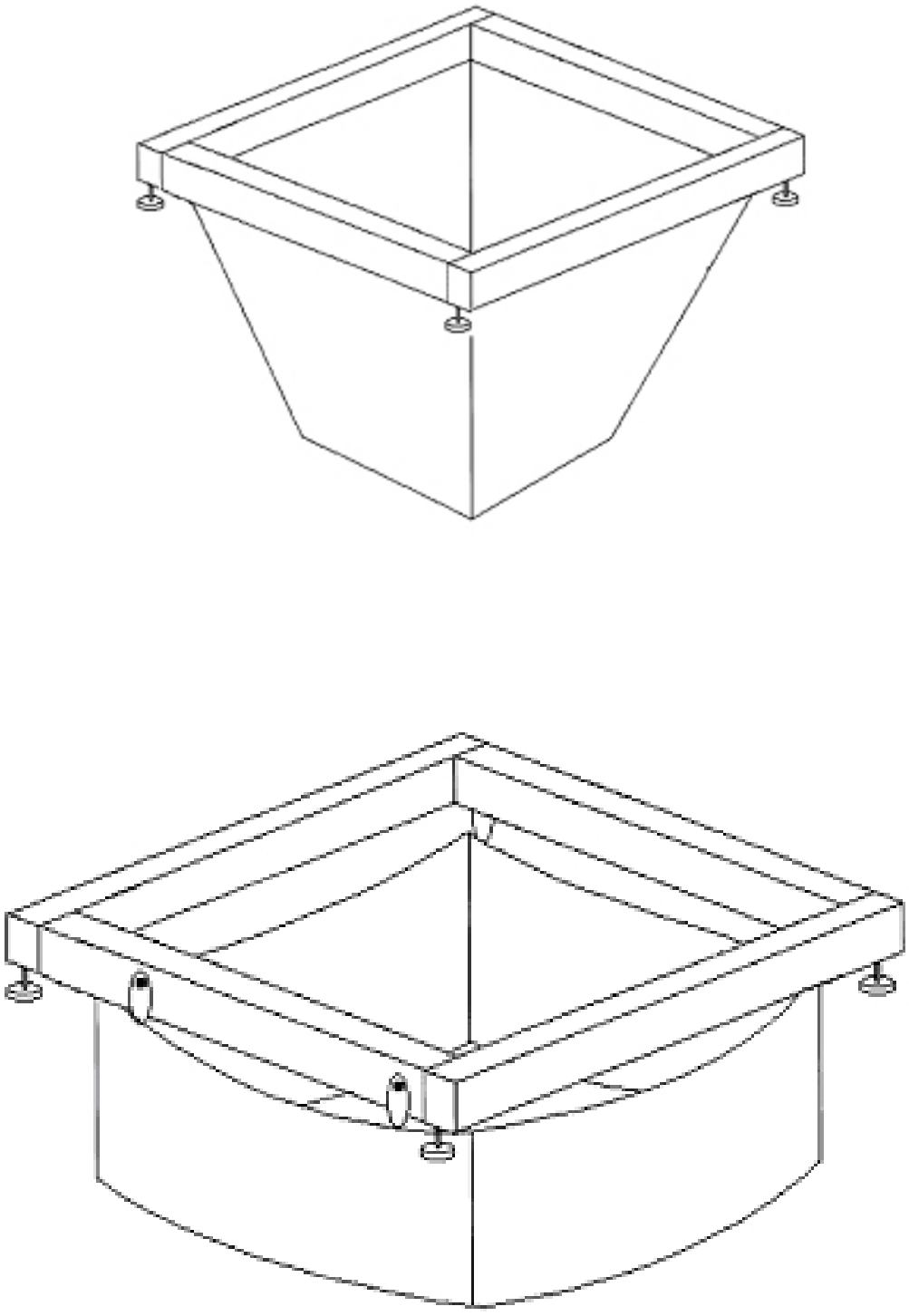


FIGURE 6/9C/272 - 3



Typical HS2100 Hopper Scale Series Load Receptors