NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4C/51

This is to certify that an approval for use for trade has been granted in respect of the pattern and variants of the

Ishida Model MS-5030 Weighing Instrument

submitted by Heat and Control Pty Ltd (Greer Division)
(formerly Greer Australia Pty Ltd)
35/170 Forster Road
Mt Waverley Vic 3149.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/7/90.
This approval expires in respect of new instruments on 1/7/91.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/51.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 21/6/85

- A self-indicating dual-interval weighing instrument of 30 kg maximum capacity.

Variant: approved 21/6/85

1. Of 6 kg maximum capacity and known as a model MS-5006.

Technical Schedule No 6/4C/51 describes the pattern and variant 1.

Variant: approved 20/8/86

2. With a set point facility.

Technical Schedule No 6/4C/51 Variation No 1 describes variant 2.

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Filing Advice

Certificate of Approval No 6/4C/51 dated 3/9/85 is superseded by this Certificate and may be destroyed.

The documentation for this approval now comprises:

Certificate of Approval No 6/4C/51 dated 4/2/87
Technical Schedule No 6/4C/51 dated 3/9/85
Technical Schedule No 6/4C/51 Variation No 1 dated 4/2/87
Test Procedure No 6/4C/51 dated 3/9/85
Figure 1 dated 3/9/85

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/51

Pattern: Ishida Model MS-5030 Weighing Instrument

Submittor: Greer Australia Pty Ltd
35/170 Foster Road
Mt Waverley Vic 3149

1. Description of Pattern

A model MS-5030 self-indicating dual-range weighing instrument (Figure 1) of 30 kg maximum capacity with 0.005 kg scale intervals up to 15 kg and 0.010 kg scale intervals from 15 kg up to 30 kg.

The instrument may be fitted with output sockets for the connection of auxiliary and/or peripheral devices and has a double-sided display.

1.1 Zero

Zero is automatically corrected to within 0.25e whenever the instrument comes to rest within 0.5e of zero. If the instrument comes to rest outside that range but within the zero reset range, zero may be reset by pressing the zero button. The zero light illuminates whenever zero is correct within 0.25e.

1.2 Display Check

A display check is initiated, by pressing the SC button.

1.3 Tare

A semi-automatic taring device and/or a keyboard-entered digital taring device of up to maximum capacity may be fitted.

The instrument is provided with a tare light and a tare display.

Operation of the semi-automatic device will override any previously entered digital tare (if it is of a lower value).

1.4 Marking

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

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/4C/51
Accuracy class	(III)
Maximum capacity - High range	Max ..... kg*
- Low range	Max ..... kg*
Minimum capacity	Min ..... kg*
Verification scale interval - High range	e = d = ... kg*
- Low range	e = d = ... kg*
Maximum subtractive tare	T = - ..... kg

The indicator must also be marked NOT FOR RETAIL COUNTER USE.

* These to be repeated adjacent to each reading face.

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1.5 Levelling

The instrument is provided with adjustable feet. Adjacent to the level indicator is a notice advising that the instrument must be level when in use.

1.6 Verification

Provision is made for the application of a verification mark.

2. Description of Variant 1

A model MS-5006 instrument of 6 kg maximum capacity with 0.001 kg scale intervals up to 3 kg and 0.002 kg scale intervals from 3 kg up to 6 kg.

TEST PROCEDURE No 6/4C/51

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

± 0.5e for loads between 0 and 500e;
± 1.0e for loads between 501 and 2000e; and
± 1.5e for loads above 2000e.

Note: The value of verification scale interval (e) to be used in these tests is that applicable to the particular range in use.

1. Zero Test

As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5e of zero, zero should be checked as described in Document 104, with a load equal to, say, 10e on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will then be 10e and 11e respectively.

2. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity (± 2% approximately). With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and press the zero button; the instrument should not rezero.

3. Load Test

Test loads are to be applied to the weighing instrument increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

4. Range of Indicaton

(a) The maximum mass indicated should not exceed the marked maximum capacity (Max) by more than 10e; above this indicated mass the indication should be blank or show non-numerical characters.

(b) Below zero the indication should be blank or show non-numerical characters or display a negative mass.

5. Taring

The semi-automatic tare function should be able to reset the mass indicator to zero within 0.25e at any load within its tare capacity. This may be checked as described for Zero Test. A tare should not be able to be acquired above the marked tare capacity.

TECHNICAL SCHEDULE No 6/4C/51

VARIATION No 1

Pattern: Ishida Model MS-5030 Weighing Instrument

Submittor: Heat and Control Pty Ltd (Greer Division)
35/170 Forster Road
Mt Waverley Vic 3149

1. Description of Variant 2

Model MS-5030C (30 kg) and model MS-5006C (6 kg) with a set point facility for which the upper and lower displays are used.

1.1 Display Check

Pressing the button marked T/S initiates a display check.

1.2 Tare

Instruments are provided with a tare light but not a tare mass display. Selected tare values are displayed as minus values on the mass display when the platter is empty.

FIGURE 6/4C/51 - 1

Ishida Model MS-5030