6/9C/252 11 December 2002





National Standards Commission

12 Lyonpark Road, North Ryde NSW

Cancellation

Certificate of Approval

No 6/9C/252

Issued under Regulation 60 of the National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in respect of the

Ishida Model MTX-150 Weighing Instrument

submitted by Ishida Co. Ltd c/o PCC Systems 407 Creek Road Mount Gravatt QLD 4122

has been cancelled in respect of new instruments as from 1 January 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.

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National Standards Commission

Certificate of Approval

No 6/9C/252

Issued under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations

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

Ishida Model MTX-150 Weighing Instrument

submitted by Ishida Co. Ltd c/o PCC Systems 407 Creek Road Mt Gravatt QLD 4122.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 July 2001, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/252 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 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.

DESCRIPTIVE ADVICE

Pattern: approved 4 June 1996

- An Ishida model MTX-150 self-indicating multiple-range weighing instrument with a maximum capacity of 150 kg.
- Variant: approved 4 June 1996
- 1. Model MTB-150 weighing instrument which is battery-operated.

Technical Schedule No 6/9C/252 describes the pattern and variant 1.

Variant: approved 27 November 1997

2. With the indicator of the pattern in an alternative housing.

Technical Schedule No 6/9C/252 Variation No 1 describes variant 2.

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FILING ADVICE

Certificate of Approval No 6/9C/252 dated 2 December 1996 is superseded by this Certificate, and may be destroyed.

The documentation for this approval now comprises:

Supplementary Certificate of Approval No 6/9C/252 dated 6 March 1998 Technical Schedule No 6/9C/252 dated 2 December 1996 (incl. Test Procedure) Technical Schedule No 6/9C/252 Variation No 1 dated 6 March 1998 Figures 1 and 2 dated 2 December 1996 Figure 3 dated 6 March 1998

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.



National Standards Commission

TECHNICAL SCHEDULE No 6/9C/252

Pattern: Ishida Model MTX-150 Weighing Instrument.

Submittor: Ishida Co. Ltd c/o PCC Systems 407 Creek Road Mount Gravatt QLD 4122.

1. Description of Pattern

An Ishida model MTX-150 self-indicating multiple-range weighing instrument (Figure 1) with a maximum capacity of 150 kg.

The instrument is approved for use over a temperature range of -5° C to $+40^{\circ}$ C, and must be so marked.

1.1 Weighing Ranges

The weighing range to be used is manually selected.

The lowest range has a verification scale interval of 0.01 kg and a maximum capacity of 30 kg; the middle range has a verification scale interval of 0.02 kg and a maximum capacity of 60 kg; and the highest range has a verification scale interval of 0.05 kg and a maximum capacity of 150 kg.

1.2 Basework

The Ishida model MT-150 basework (Figure 2) has the platform directly supported by a single load cell.

1.3 Load Cell

An Ishida model YLC-250 L load cell of 250 kg capacity is used and mounted as shown in Figure 2.

1.4 Indicator

An Ishida model MTX-150 digital indicator (Figure 1) is used. The indicator may be fitted with an integral journal printer.

1.4.1 Zero

For the weighing range selected, zero is automatically corrected to within $\pm 0.25e$ whenever power is applied and whenever the instrument comes to rest within 0.5e of zero.

Technical Schedule No 6/9C/252

For the weighing range selected, the instrument has an initial zero-setting device with a nominal range of not more than 20% of the maximum capacity of the range.

1.4.2 Tare

A semi-automatic subtractive taring device may be fitted, of up to 29.99 kg maximum capacity for the low range, 59.98 kg maximum capacity for the middle range, and 149.95 kg maximum capacity for the highest range.

1.4.3 Display Check

A display check is initiated when power is applied.

1.4.4 Management Functions

Instruments may be fitted with a number of management functions which are not approved for trade use, including counting function and UNDER/ACCEPT/OVER facility.

1.5 Levelling

The instrument is provided with adjustable feet and a level indicator.

1.6 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

1.7 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructible label being placed over the access hole at the rear of the indicator.

1.8 Markings

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

| Manufacturer's name or mark Serial number | |
|--|-----------------|
| NSC approval number | NSC No 6/9C/252 |
| Accuracy class | |
| For each range: | |
| Maximum capacity | Max kg * |
| Minimum capacity | Min kg * |
| Verification scale interval | e = kg * |
| Maximum subtractive tare | T= kg |
| Special temperature limits | -5°C / 40°C |

* Repeated adjacent to each reading face.

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2. Description of Variant 1

Model MTB-150 which is similar to the pattern but is battery-operated, has ranges of 60 kg and 150 kg maximum capacity only, and is not fitted with an integral journal printer.

TEST PROCEDURE

Instruments should be tested in conjunction with any relevant tests specified in the Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

For the weighing range selected, the maximum permissible errors for increasing and decreasing loads, expressed in terms of verification scale interval (e), with the instrument adjusted to zero within $\pm 0.25e$ at no load, are:

- ±0.5e for loads from 0 to 500e;
- $\pm 1.0e$ for loads over 500e up to 2000e; and
- $\pm 1.5e$ for loads over 2000e.

Ensure that instruments are being used within the special temperature limits specified in this approval.

TECHNICAL SCHEDULE No 6/9C/252

VARIATION No 1

Pattern: Ishida Model MTX-150 Weighing Instrument.

Submittor: Ishida Co. Ltd c/o PCC Systems 407 Creek Road Mt Gravatt QLD 4122.

1. Description of Variant 2

The indicator of the pattern in an alternative stainless steel housing (Figure 3) and known as a model MTX-150W.

FIGURE 6/9C/252 - 1



Ishida Model MTX-150 Weighing Instrument

FIGURE 6/9C/252 - 2



Showing Load Cell and Mounting

FIGURE 6/9C/252 - 3



Ishida Model MTX-150W