

National Standards Commission



Certificate of Approval

No 6/4C/79

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 MG-3000 Weighing Instrument

submitted by Ishida Scales Mfg Co. Ltd
44 Sanno-cho, Shogoin
Sakyo-ku Kyoto JAPAN.

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 is subject to review on or after 1/1/98.
This approval expires in respect of new instruments on 1/1/99.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/79 and only by persons authorised by the submittor.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

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 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.

DESCRIPTIVE ADVICE

Pattern: approved 4/12/92

. An Ishida model MG-3000 self-indicating dual-range weighing instrument.

Technical Schedule No 6/4C/79 describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/79 dated 1/3/93
Technical Schedule No 6/4C/79 dated 1/3/93 (incl. Test Procedure)
Figure 1 dated 1/3/93

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.

A handwritten signature in black ink, appearing to be 'S. Key', is written over a horizontal line.



National Standards Commission

TECHNICAL SCHEDULE No 6/4C/79

Pattern: Ishida Model MG-3000 Weighing Instrument.

Submittor: Ishida Scales Mfg Co. Ltd
44 Sanno-cho, Shogoin
Sakyo-ku Kyoto JAPAN.

1. Description of Pattern

An Ishida model MG-3000 self-indicating dual-range weighing instrument (Figure 1) with a maximum capacity of 6 kg.

Instruments may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

1.1 Weighing Ranges

The weighing range is selected using the CHG/VAL button. One range has a verification scale interval of 0.001 kg and a maximum capacity of 3 kg, while the second range has a verification scale interval of 0.002 kg and a maximum capacity of 6 kg.

1.2 Zero

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.

1.3 Tare

A semi-automatic subtractive taring device may be fitted, of up to the maximum capacity of the range selected.

1.4 Under/Over Facility

The instrument may be fitted with an Under/Accept/Over facility and associated display.

1.5 Display Check

A display check is initiated whenever power is applied.

1.6 Levelling

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

1.7 Verification/Certification Provision


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

1.8 Sealing

No provision for sealing is required. The calibration adjustments can only be accessed via a complex sequence of keyboard operations.

1.9 Markings

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

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/4C/79
Accuracy class	
For each weighing range:	
Maximum capacity	Max g *
Verification scale interval	e = d = g *
Minimum capacity	Min g *
Maximum subtractive tare	T = - g

* Repeated adjacent to each reading face.

TEST PROCEDURE

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

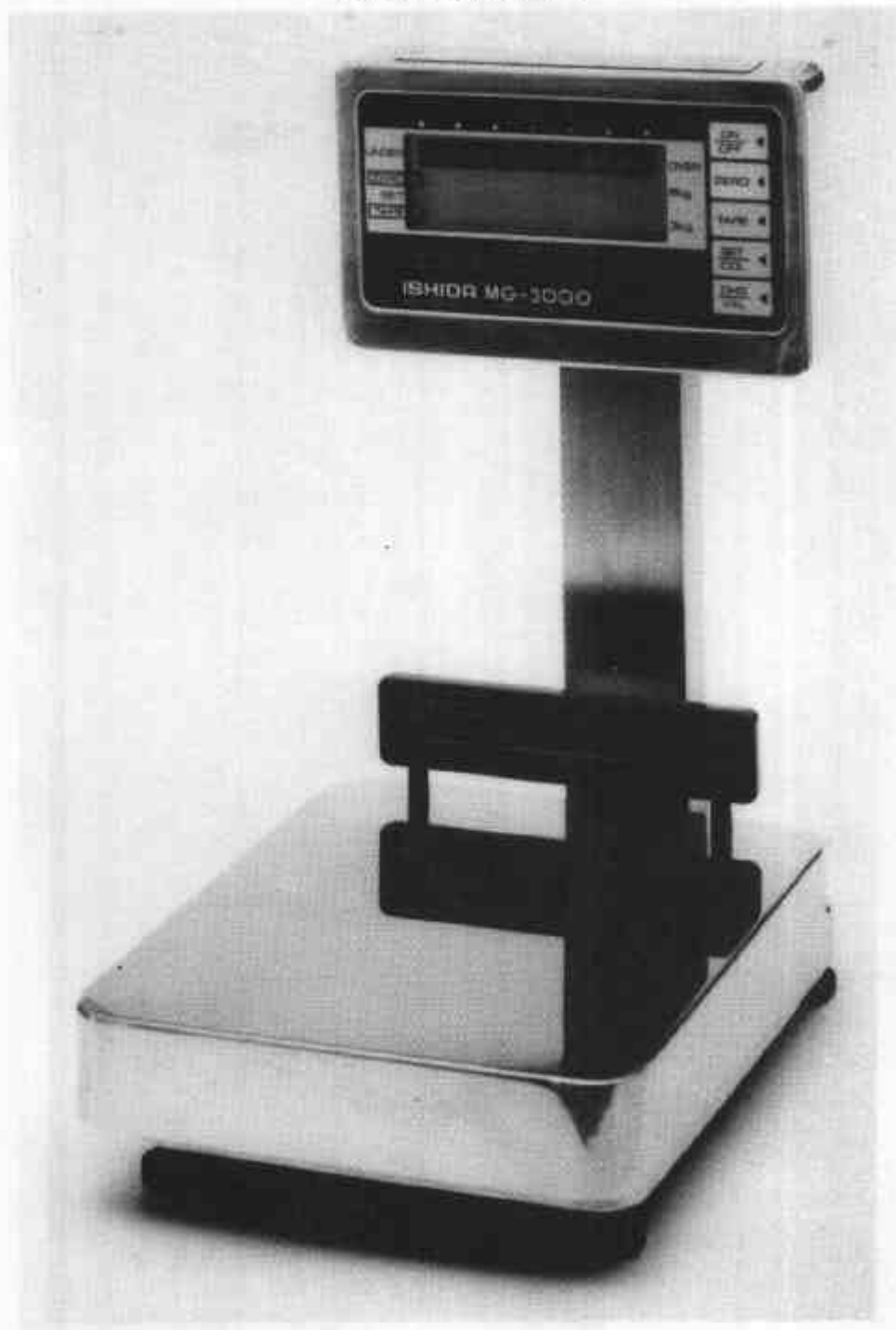
Each weighing range should be tested separately.

Maximum Permissible Errors at Verification/Certification

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:

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

FIGURE 6/4C/79 - 1



Ishida Model MG-3000 Weighing Instrument