



Australian Government

**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

**Cancellation
Certificate of
Approval No 6/4C/75A**

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

This is to certify that the approval for use for trade granted in Approval No 6/4C/75A
in respect of the

Teraoka Seiko Model DS-640 Weighing Instrument

submitted by W W Wedderburn Pty Ltd
90 Parramatta Road
SUMMER HILL NSW 2130

has been cancelled in respect of new instruments as from 1 April 2005.

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

A handwritten signature in black ink, appearing to be 'J. G. T.', written in a cursive style.



National Standards Commission

Certificate of Approval

No 6/4C/75A

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

Teraoka Seiko Model DS-640 Weighing Instrument

submitted by W W Wedderburn Pty Ltd
90 Parramatta Road
SUMMER HILL NSW 2130.

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 Certificate is issued upon completion of a review of NSC approval No 6/4C/75.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 January 2004, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/75A 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 11 December 1998

- A Teraoka Seiko model DS-640 single-interval self-indicating weighing instrument of 15 kg maximum capacity.

Variants: approved 11 December 1998

1. In certain other capacities.
2. As multi-interval instruments of certain capacities.

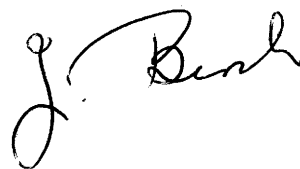
Technical Schedule No 6/4C/75A describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/75A dated 22 March 1999
Technical Schedule No 6/4C/75A dated 22 March 1999 (incl. Test Procedure)
Figure 1 dated 22 March 1999

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.



TECHNICAL SCHEDULE No 6/4C/75A

Pattern: Teraoka Seiko Model DS-640 Weighing Instrument.

Submittor: W W Wedderburn Pty Ltd
90 Parramatta Road
SUMMER HILL NSW 2130.

1. Description of Pattern

A Teraoka Seiko model DS-640 single-interval self-indicating weighing instrument (Figure 1) of 15 kg maximum capacity with a verification scale interval of 0.005 kg.

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

1.1 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.

The initial zero-setting device has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

1.2 Tare

A semi-automatic subtractive tare device of up to 9.995 kg capacity may be fitted.

1.3 Display Check

A display check is initiated whenever the DISPLAY button is pressed.

1.4 Levelling

Instruments are provided with adjustable feet and a level indicator.

1.5 Verification/Certification Provision

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

1.6 Sealing Provision

Provision is made for access to the calibration adjustments to be sealed by means of a destructible label over the adjustment switch access cover located under the load receptor.

1.7 Markings

Instruments carry the following markings, in the form shown at right:

Manufacturer's mark, or name written in full	Teraoka Seiko Co Ltd
Indication of accuracy class	Ⓜ
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Maximum subtractive tare	T = - kg
Serial number of the instrument
Pattern approval mark for the instrument	NSC No 6/4C/75A

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

2. Description of Variants

2.1 Variant 1

Of certain capacities as listed below:

- (i) Of 6 kg maximum capacity with a verification scale interval of 0.002 kg.
- (ii) Of 9.995 kg maximum capacity with a verification scale interval of 0.005 kg.
- (iii) Of 30 kg maximum capacity with a verification scale interval of 0.01 kg.

2.2 Variant 2

As multi-interval instruments of certain capacities as listed below:

- (i) With a verification scale interval (e_1) of 0.001 kg up to 3 kg and with a verification scale interval (e_2) of 0.002 kg from 3 kg up to the maximum capacity of 6 kg.
- (ii) With a verification scale interval (e_1) of 0.002 kg up to 6 kg and with a verification scale interval (e_2) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg.
- (iii) With a verification scale interval (e_1) of 0.005 kg up to 15 kg and with a verification scale interval (e_2) of 0.01 kg from 15 kg up to the maximum capacity of 30 kg.

The tare capacity does not exceed Max_1 , the capacity of the low range.

Instruments are marked with the 'Maximum capacity' and with the 'Verification scale interval' for both interval ranges, in addition to the other data specified in clause **1.7 Markings**.

TEST PROCEDURE

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

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 $2\,000 < m \leq 10\,000$.

For multi-interval instruments with verification scale intervals of e_1, e_2, \dots , apply e_1 for zero adjustment, and for maximum permissible errors apply e_1, e_2, \dots , as applicable for the load.

FIGURE 6/4C/75A - 1

