

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation

Certificate of Approval No 6/4D/311

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 respect of the

Teraoka Model RM-40 Weighing Instrument

submitted by W W Wedderburn Pty Ltd now of 101 Williamson Road Ingleburn NSW 2565

has been cancelled in respect of new instruments as from 1 December 2013.

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

Dr A Rawlinson





National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 6/4D/311

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

Teraoka Model RM-40 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.

Certificate of Approval No 6/4D/311

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CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 April 2008, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/311 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.

DESCRIPTIVE ADVICE

Pattern: approved 14 March 2003

• A Teraoka model RM-40 multi-interval self-indicating price-computing weighing instrument with a maximum capacity of 15 kg.

Variants: approved 14 March 2003

- 1. Certain Teraoka model RM-40 multi-interval weighing instruments.
- 2. Certain Teraoka model RM-40 single interval weighing instruments.
- 3. With the customer display mounted on a column.
- 4. Any model RM-40 approved herein as a mass only weighing instrument.
- 5. Powered by a rechargeable internal battery.

Variants: approved 8 April 2003

- 6. Models of the RM-40 series connected in a network.
- 7. With one or two displays.

Technical Schedule No 6/4D/311 describes the pattern and variants 1 to 7.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4D/311 dated 10 April 2003 Technical Schedule No 6/4D/311 dated 10 April 2003 (incl. Test Procedure) Figures 1 to 4 dated 10 April 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 6/4D/311

Pattern: Teraoka Model RM-40 Weighing Instrument

Submittor: W W Wedderburn Pty Ltd 90 Parramatta Road Summer Hill NSW 2130

1. Description of Pattern

A Teraoka model RM-40 multi-interval self-indicating price-computing weighing instrument (Figure 1) 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.

The instrument has a double-sided alphanumeric LED display integral within the instrument (Figure 1).

Instruments are fitted with an integral printer, for printing of labels or tickets.

Instruments have unit price to \$9999.99/kg, price to \$99999.99, a product look up (PLU) facility, and may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

Instruments are provided with a 32 key PLU keyboard.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25e_1$ 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 and/or a keyboard-entered pre-set subtractive taring device, each of up to 5.998 kg maximum capacity, may be fitted.

A separate display for tare values is provided.

Pre-set tare values may be associated with product look up (PLU) items.

1.3 Levelling

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

1.4 Display Check

A display check is initiated whenever power is applied.

1.5 Verification/Certification Provision

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

Technical Schedule No 6/4D/311

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed as shown in Figure 2.

1.7 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Teraoka
Name or mark of manufacturer's agent	Wedderburn
Indication of accuracy class	
Pattern approval mark for the instrument	NSC No 6/4D/311
Maximum capacity	<i>Max</i> / kg *
Minimum capacity	<i>Min</i> kg *
Verification scale interval	e =/ kg *
Tare capacity	<i>T</i> = kg
Serial number of the instrument	

* 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

Certain Teraoka model RM-40 multi-interval weighing instruments as listed below:

- 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. A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device, each of up to 2.999 kg maximum capacity, may be fitted.
- 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. A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device, each of up to 14.995 kg maximum capacity, may be fitted.

2.2 Variant 2

Certain Teraoka model RM-40 single interval weighing instruments as listed below:

- With a maximum capacity of 3 kg and a verification scale interval of 0.001 kg. A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device, each of up to 1.499 kg maximum capacity, may be fitted.
- With a maximum capacity of 6 kg and a verification scale interval of 0.002 kg. A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device, each of up to 2.998 kg maximum capacity, may be fitted.

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- With a maximum capacity of 15 kg and a verification scale interval of 0.005 kg. A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device, each of up to 7.495 kg maximum capacity, may be fitted.
- With a maximum capacity of 30 kg and a verification scale interval of 0.01 kg. A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device, each of up to 14.99 kg maximum capacity, may be fitted.

2.3 Variant 3

With the customer display mounted on a column (Figures 3 and 4).

2.4 Variant 4

Any model RM-40 approved herein as a mass only weighing instrument.

2.5 Variant 5

Powered by a rechargeable internal battery.

2.6 Variant 6

The models of the RM-40 series may be connected in a network with compatible Teraoka instruments, to share common PLU data, for totalisation across instruments ('floating system'), and to accumulate and retrieve management information. In addition, the network may be interfaced with a computer for the collection of management data, or the downloading of PLU data.

Note: The weighing and price-computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate reverification of any other weighing instrument in the network.

2.7 Variant 7

Any model instrument of this approval fitted with either one or two displays.

Instruments fitted with a single display only are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

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:

 $\begin{array}{l} \pm 0.5 \ e \ for \ loads \ 0 \leq m \leq 500; \\ \pm 1.0 \ e \ for \ loads \ 500 < m \leq 2 \ 000; \ and \\ \pm 1.5 \ e \ for \ loads \ 2 \ 000 < m \leq 10 \ 000. \end{array}$

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



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Notification of Change Certificate of Approval No 6/4D/311 Change No 1

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

The following change is made to the approval documentation for the

Teraoka Model RM-40 Weighing Instrument

submitted by W W Wedderburn Pty Ltd 90 Parramatta Road Summer Hill NSW 2130.

In Technical Schedule No 6/4D/311 dated 10 April 2003, the second paragraph of clause **1. Description of Pattern** should be amended to read:

'The instrument has a double-sided alphanumeric **red** LED **type** display (Figure 1) or a green LCD type display integral within the instrument.'

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



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Notification of Change Certificate of Approval No 6/4D/311 Change No 2

The following changes are made to the approval documentation for the

Teraoka Model RM-40 Weighing Instrument

submitted by W W Wedderburn Pty Ltd 90 Parramatta Road Summer Hill NSW 2130.

In Certificate of Approval No 6/4D/311 dated 10 April 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 April **2013**, and then every 5 years thereafter."

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

"Notification of Change No 1 dated 14 December 2006 Notification of Change No 2 dated 5 May 2008"

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

FIGURE 6/4D/311 - 1



Teraoka Model RM-40 Weighing Instrument

FIGURE 6/4D/311 - 2

Sealable Screws or Destructible Label



Sealing of Calibration Access

FIGURE 6/4D/311 - 3



Teraoka Model RM-40 With Column-mounted Display

FIGURE 6/4D/311 - 4



Teraoka Model RM-40 With Alternative Column-mounted Display