6/4D/314
18 October 2013

Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation

Certificate of Approval No 6/4D/314

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 SM-700EV 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

6/4D/314
4 September 2003

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Certificate of Approval

No 6/4D/314

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 SM-700EV 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.

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CONDITIONS OF APPROVAL

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

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/314 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.

Special Condition of Approval:

Certain aspects of this instrument (in particular label and ticket formats) are able to be configured by the user. Whilst the Commission believes that acceptable label and ticket formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

DESCRIPTIVE ADVICE

Pattern: approved 18 July 2003

- A Teraoka model SM-700EV multi-interval self-indicating price-computing weighing instrument with a maximum capacity of 6 kg.

Variants: approved 18 July 2003

1. Of 15 kg maximum capacity.
2. Of 30 kg maximum capacity.
3. A model SM-710.
4. A model SM-700P.
5. A model SM-700B.
6. A model SM-700H.
7. Any model of this approval in a stainless steel housing.
8. Any model of this approval without a customer display, e.g. model SM-700BS.
9. Models of the SM-700 series connected in a network.
10. In a self-service arrangement.
11. As single interval instruments.

Technical Schedule No 6/4D/314 describes the pattern and variants 1 to 11.

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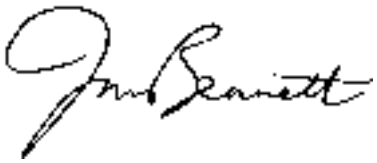
FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4D/314 dated 4 September 2003
Technical Schedule No 6/4D/314 dated 4 September 2003 (incl. Table 1 and Test Procedure)
Figures 1 to 6 dated 4 September 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/314

Pattern: Teraoka Model SM-700EV Weighing Instrument.

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

1. Description of Pattern

A Teraoka model SM-700EV multi-interval self-indicating price-computing weighing instrument (Figure 1) 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.

The instrument has a touch screen/display for the operator and a display for the customer mounted on a column attached to the instrument. Both displays are used for the presentation of weight, tare, unit price and price information; an image plus a product description relating to product look up (PLU) items may also be displayed. By use of the touch screen capability, the operator display also serves as the instrument keyboard. Additional information and/or images may also be presented on the displays provided that any information/image does not in any way impede or confuse the primary indications of the instrument.

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.

(#) Refer to the Special Condition of Approval.

The touch screen operator display and the customer display may be any of the following:

- VGA 157 mm (6.2”) nominal size;
- SVGA 254 mm (10”) nominal size; or
- SVGA 304 mm (12”) nominal size.

1.1 Zero

Zero is automatically corrected to within +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 Display Check

A display check is initiated during the power up sequence.

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1.3 Tare

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.

A separate display for tare values is provided.

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

1.4 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.

1.5 Verification/Certification Provision

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

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of either method shown in Figure 2a.

1.7 Descriptive 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	(III)
Pattern approval mark for the instrument	NSC No 6/4D/314
Maximum capacity	*Max* …./…. kg *
Minimum capacity	*Min* …….. kg *
Verification scale interval	*e* = …../….. kg *
Tare capacity	*T* = …..…… 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

As a multi-interval self-indicating price-computing weighing instrument 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.

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.

2.2 Variant 2

As a multi-interval self-indicating price-computing weighing instrument 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.

2.3 Variant 3

The model SM-710 (Figure 3) which is similar to the pattern but which is provided in various modules as listed below, which may be located separately from each other.

Note: The location of the various modules shall be at the discretion of the applicable trade measurement authority, who may require in particular that operator and customer displays are located in a clear visual relationship to the platform.

- SM-710 – controller module
- SM-710 – printer module
- SM-710 – operator display
- SM-710 – customer display
- SM-710 or DS-780 platform – Provision is made for the DS-780 to be sealed means of either method shown in Figure 2b.

2.4 Variant 4

The Teraoka model SM-700P (Figure 4) which is similar to the pattern but has the operator touch screen/display attached directly to the main instrument housing, rather than mounted on a column.

2.5 Variant 5

The Teraoka model SM-700B which is similar to the pattern but has both the operator touch screen/display and the customer display attached directly to the main instrument housing, rather than mounted on a column.

2.6 Variant 6

The model SM-700H (Figure 5) which is similar to the pattern but with a hanging load receptor. The instrument is firmly mounted to a mounting rod and is provided with a level indicator; adjacent to the level indicator is a notice advising that the instrument must be level when in use.

2.7 Variant 7

The pattern or any variant in stainless steel housings.

2.8 Variant 8

The pattern or any variant without a customer display, i.e. only with a touch screen/display for the operator. For example, the model SM-700BS as shown in Figure 6.

Instruments are marked NOT FOR TRADING DIRECT WITH THE PUBLIC unless the instrument is used in a self-service arrangement (variant 10).

2.9 Variant 9

The pattern or any variant 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.

2.10 Variant 10

The pattern or any variant used in a self-service arrangement. An instrument used in a self-service arrangement may be provided without a customer display (i.e. only with a touch screen/display for the operator). For example, the model SM-700BS as shown in Figure 6.

In this self-service arrangement, stored tare values may be associated with product look up (PLU) keys. However the use of stored tare values associated with PLU keys shall be at the discretion of the applicable trade measurement authority, who may require various operational instructions and notes regarding the appropriate container for each product.

Other tare facilities and operator keys shall be disabled, other than the 'REZERO' and 'PRINT' keys (to facilitate operation by untrained operators).

The use of a totalisation across instruments ('floating system') arrangement described in Variant 9 is NOT approved in this self-service arrangement. (The collection of management data and downloading of PLU data may occur.)

2.11 Variant 11

The pattern or any variant as a single interval self-indicating price-computing weighing instruments as listed below:

TABLE 1

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Maximum Tare Capacity (*T*)
3 kg	0.02 kg	0.001 kg	-2.999 kg
6 kg	0.04 kg	0.002 kg	-5.998 kg
15 kg	0.1 kg	0.005 kg	-14.995 kg
30 kg	0.2 kg	0.010 kg	-29.990 kg

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:

±0.5 *e* for loads $0 \leq m \leq 500$;
±1.0 *e* for loads $500 < m \leq 2\,000$; and
±1.5 *e* for loads $2\,000 < m \leq 10\,000$.

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.

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 6/4D/314
Change No 1

The following changes are made to the approval documentation for the

Teraoka Model SM-700EV Weighing Instrument

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

In Certificate of Approval No 6/4D/314 dated 4 September 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 August **2013**, and then every 5 years thereafter."

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

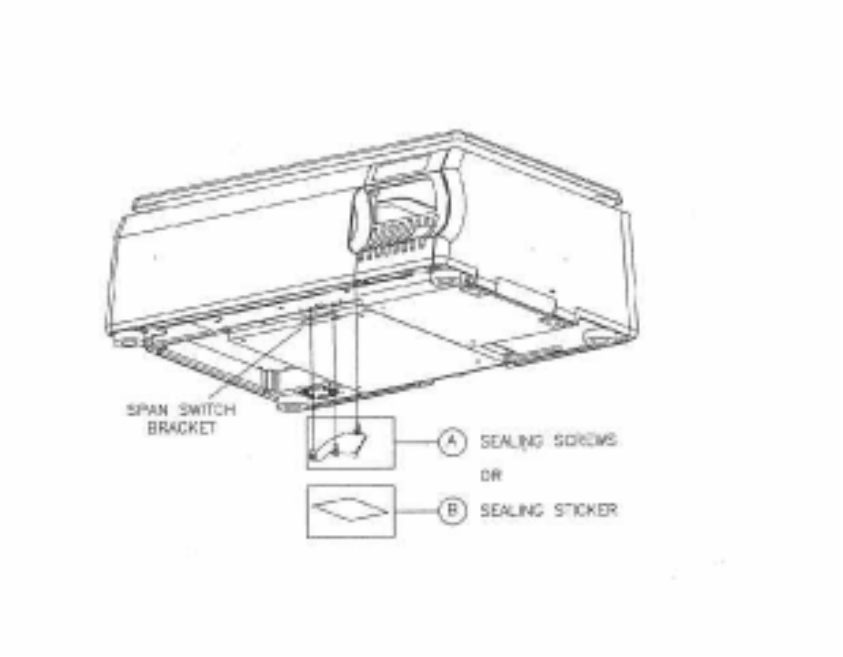
   "Notification of Change No 1 dated 12 September 2008"

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

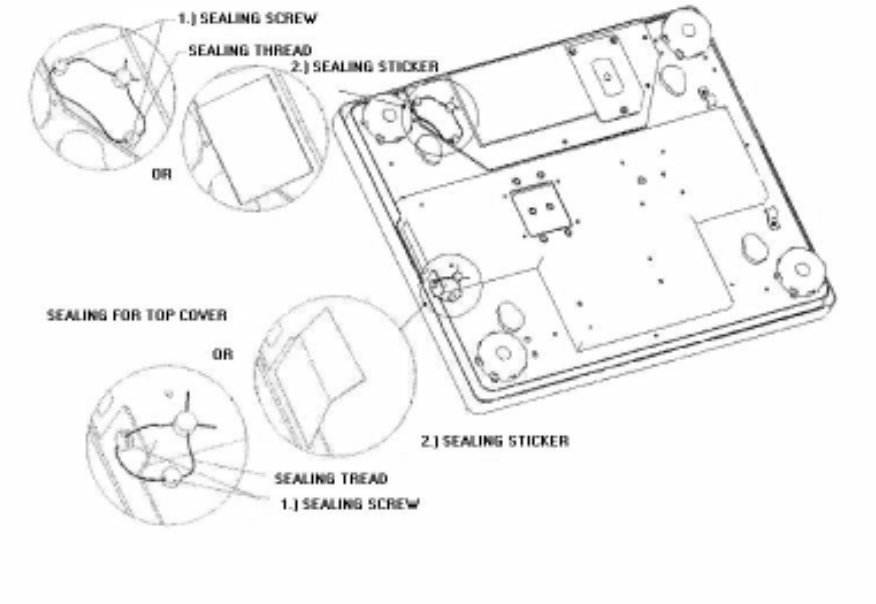
FIGURE 6/4D/314 – 1

Teraoka Model SM-700EV Weighing Instrument

FIGURE 6/4D/314 – 2



SM-700



DS-780

Sealing Methods

FIGURE 6/4D/314 – 3

Teraoka Model SM-710 Weighing Instrument

FIGURE 6/4D/314 – 4

Teraoka Model SM-700P Weighing Instrument

FIGURE 6/4D/314 – 5

Teraoka Model SM-700H Weighing Instrument

FIGURE 6/4D/314 – 6

Teraoka Model SM-700BS Weighing Instrument