



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Supplementary Certificate of Approval
No S476

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 Digi DC-788 Digital Indicator

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 December 2011.

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 'M. J. ...', written over a horizontal line.



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Supplementary Certificate of Approval

No S476

Issued by the Chief Metrologist 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 Digi DC-788 Digital Indicator

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 approval has been granted with reference to document NMI R 76, *Non-automatic Weighing Instruments, Parts 1 and 2*, dated July 2004.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 October 2011, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S476' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S476' in addition to the approval number of the instrument.

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 National Measurement Institute (NMI) 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 document NMI P 106.

The National Measurement Institute 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.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

DESCRIPTIVE ADVICE

Pattern: approved 25 September 2006

- A Teraoka model Digi DC-788 single interval digital indicator.

Technical Schedule No S476 describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No S476 dated 26 October 2006

Technical Schedule No S476 dated 26 October 2006 (incl. Table 1 and Test Procedure)

Figures 1 and 2 dated 26 October 2006

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. K. T.', located at the bottom right of the page.

TECHNICAL SCHEDULE No S476

Pattern: Teraoka Model Digi DC-788 Digital Indicator

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

1. Description of Pattern

A Teraoka model Digi DC-788 single interval digital indicator (Figure 1 and Table 1) which is approved for use with up to 5000 verification scale intervals.

Instruments are not for trading direct with the public, and are so marked.

Power supply may be either:

- supplied by an AC/DC mains adaptor; or
- internal rechargeable battery.

Note: The AC/DC mains adaptor supplied was a Hon-Kwang model 09100SA power supply (9 V DC, 1000 mA); the submittor should be consulted regarding the acceptability of alternative power supply units.

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

The integral basework is either disabled or may be retained when a second basework is connected as described in clause **1.8 Baseworks**.

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 and/or non-automatic keyboard-entered pre-set subtractive tare device, each of up to 50% of maximum capacity, may be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Verification/Certification Provision

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

1.5 Sealing Provision

Provision is made for access to the calibration adjustments to be sealed by means of a destructible adhesive label which covers the recess on the base of the instrument that contains an access hole to the calibration switch, and also a screw which prevents access within the instrument housing (Figure 2). Hence it is important that the screw shown in Figure 2 is in place prior to sealing with the destructible adhesive label.

1.6 Markings and Notices

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	S476
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.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

1.7 Management Functions

Instruments may be fitted with a number of management functions including set point, counting, 'inventory' and 'total qty'. These functions, buttons and displays are not approved for trade use.

1.8 Baseworks

Instruments may be connected to up to two baseworks. If two baseworks are provided, one shall be integral with the indicator (as shown in Figure 1 and as described in the documentation of approval NMI 6/4C/245) in which case instruments are marked 'NMI 6/4C/245' in addition to 'NMI S476'.

The basework to be used is selected using the 1<>2 button and is indicated by either the 'SCALE 1' or 'SCALE 2' light illuminating in the display.

The counting functions of the two platforms may interact, however the weighing and taring functions are independent and do not interact.

TABLE 1 – Specifications

Maximum number of verification scale intervals	5000
Minimum sensitivity	1 μ V / scale interval
Excitation voltage	5 V DC
Maximum excitation current	70 mA #

This indicator is able to supply a maximum excitation current of 70 mA. Where two baseworks are connected the total of the excitation currents required by both baseworks shall not exceed 70 mA. Where the internal basework is used this draws 11.6 mA.

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:

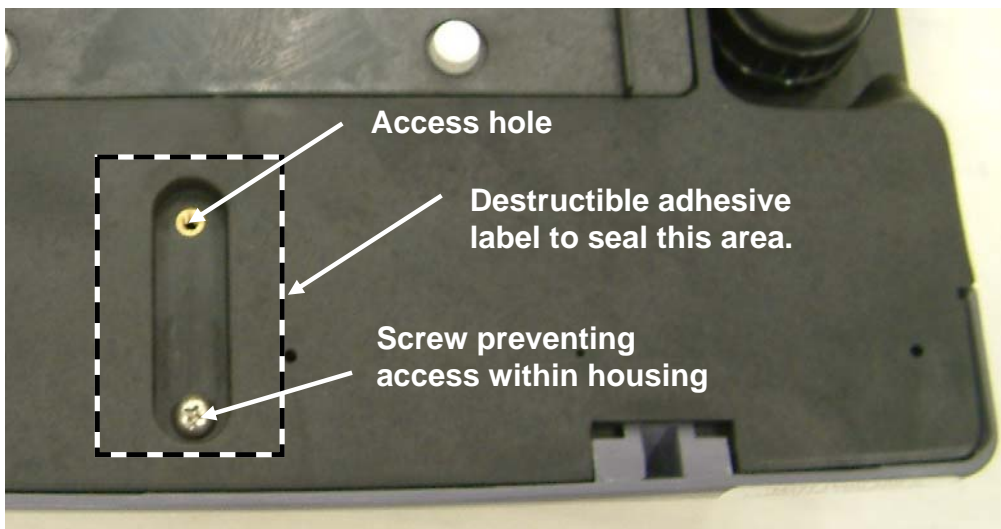
- $\pm 0.5 e$ for loads $0 \leq m \leq 500$;
- $\pm 1.0 e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5 e$ for loads $2\,000 < m \leq 10\,000$.

FIGURE S476 – 1



Teraoka Model Digi DC-788 Digital Indicator

FIGURE S476 – 2



Sealing arrangement