

National Standards Commission



Supplementary Certificate of Approval

No S273

Issued under Regulation 9
of the
National Measurement (Patterns of Instruments) Regulations

This is to certify that an approval for use for trade has been granted in respect of the

Teraoka Seiko Model DS-480 Digital Indicator

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

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Birch'. The signature is written in a cursive style with a large initial 'J'.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/3/96.
This approval expires in respect of new instruments on 1/3/97.

Instruments purporting to comply with this approval shall be marked NSC No S273 and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S273 in addition to the approval number of the instrument.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the drawings and specifications 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.

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

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.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

DESCRIPTIVE ADVICE

Pattern: approved 12/2/91

. A Teraoka Seiko model DS-480 digital mass indicator.

Technical Schedule No S273 describes the pattern.

FILING ADVICE

The documentation for this approval comprises.

Supplementary Certificate of Approval No S273 dated 22/3/91
Technical Schedule No S273 dated 22/3/91 (incl. Table 1 and Test
Procedure)
Figure 1 dated 22/3/91



National Standards Commission

TECHNICAL SCHEDULE No S273

Pattern: Teraoka Seiko Model DS-480 Digital Indicator

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

1. Description of Pattern

A Teraoka Seiko model DS-480 digital mass indicator approved for use with up to 3 000 verification scale intervals and which may be fitted with output sockets for the connection of auxiliary and/or peripheral devices.

The instrument may be as shown in Figure 1 or without the integral printer.

1.1 Zero

Zero is automatically set to within $\pm 0.25e$ whenever the instrument comes to rest within $\pm 0.5e$. If the instrument comes to rest outside that range but within the zero setting range, zero may be set by pressing the zero button.

1.2 Display Check

A display check is initiated whenever the ON/OFF button is pressed.

1.3 Tare

The instrument may be fitted with a semi-automatic subtractive taring device and/or a non-automatic taring device, each of up to maximum capacity.

1.4 Counting Facility

The instrument is fitted with a counting facility for determining the number of items, of nominally equal mass, from the mass of a quantity of the items. The unit mass of an item must be entered either by weighing a sample of items or by entering a value directly via the instrument keyboard.

1.5 Optional Mass Unit

The instrument may be configured to display in "lb". The instrument shall be marked "lb, not for trade use" or "lb, for export use only". The scale interval, verification scale interval, maximum capacity and minimum capacity when used with this unit shall be marked in the vicinity of the reading face. The markings of the primary units shall be given in "kg" or "g".

1.6 Dual Basework Facility

Up to two remote baseworks may be fitted, with the basework to be used selected using the 1/2 button. The counting facilities of the two baseworks may interact, but the weighing and taring functions are independent and shall not interact.

1.7 Markings

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

Manufacturer's name or mark	
Serial number	
Accuracy class	Ⓜ
Maximum capacity	Max..... *
Minimum capacity	Min *
Verification scale interval	e = d = *
Maximum subtractive tare	T = -
NSC approval numbers - indicator	NSC No S273
- other components #

* Repeated in the vicinity of each reading face.

May be located separately from the other markings.

Instruments shall be marked "not for retail counter use", or similar.

The lower display shall be marked "this display not for trade use", or similar.

In addition, if the instrument is weighing in "lb", the mass display shall be denominated "lb" and the instrument shall be marked "not for trade use" or "for export use only". Refer also to cl. 1.5 **Optional Mass Unit**.

1.8 Verification Provision

Provision is made for a verification mark to be applied.

TABLE 1

Type: Teraoka Seiko	DS-480
Maximum number of verification scale intervals	3 000
Minimum sensitivity	0.6×10^{-3} mV/scale interval
Excitation voltage	12 V DC
Minimum load impedance	70 ohms
Maximum excitation current	170 mA

TEST PROCEDURE

Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instrument to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

The maximum permissible errors applicable are those applicable to the system to which the instrument approved herein is fitted, as stated in the approval documentation for the system.

National Standards Commission



Notification of Change Supplementary Certificate of Approval No S273 Change No 1

The following change is made to the approval documentation for the
Teraoka Seiko Model DS-480 Digital Indicator

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

In Supplementary Certificate of Approval No S273 dated 22 March 1991, the Condition of Approval referring to the expiry of the approval should be amended to read:

“This approval expires in respect of new instruments on 1 March 1998.”

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.

FIGURE S273 - 1



Teraoka Seiko Model DS-480 Indicator