

National Standards Commission



Supplementary Certificate of Approval

No S220A

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

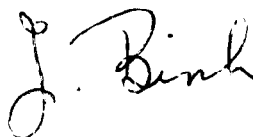
This is to certify that an approval for use for trade has been granted in respect of the

Teraoka Seiko Model DS-410 Digital Indicator

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

This Certificate is issued upon completion of a review of NSC approval No S220.

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.



CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/1/97.

This approval expires in respect of new instruments on 1/1/98.

Instruments purporting to comply with this approval shall be marked NSC No S220A and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S220A 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 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 16/12/91

. A Teraoka Seiko model DS-410 digital mass indicator.

Technical Schedule No S220A describes the pattern.

FILING ADVICE

The documentation for this approval comprises.

Supplementary Certificate of Approval No S220A dated 10/2/92
Technical Schedule No S220A dated 10/2/92 (incl. Table 1 and Test
Procedure)
Figure 1 dated 10/2/92



National Standards Commission

TECHNICAL SCHEDULE No S220A

Pattern: Teraoka Seiko Model DS-410 Digital Indicator

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

1. Description of Pattern

A Teraoka Seiko model DS-410 single or dual-interval digital mass indicator approved for use with up to 3000 verification scale intervals and which may be fitted with output sockets for the connection of auxiliary and/or peripheral devices. (refer Figure 1 and Table 1)

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 power is applied and the ON/OFF button is pressed.

1.3 Tare

A semi-automatic subtractive taring device of up to maximum capacity may be fitted.

1.4 Partial Weighing Ranges

When used as a dual-interval instrument, the limits of the partial weighing ranges are:

- (i) A maximum of 3000 verification scale intervals per range.
- (ii)
$$\frac{\text{Maximum capacity of the low range}}{\text{Verification scale interval of the high range}} \geq 500$$
- (iii) With a minimum value of verification scale interval (e) such that the minimum sensitivity is not less than that specified in Table 1.

1.5 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

1.6 Markings

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

Manufacturer's name or mark

Serial number

NSC approval number

Accuracy class

Maximum capacity

Minimum capacity

Maximum subtractive tare

High range: (similarly for low range)

Maximum capacity

Verification scale interval

NSC No S220A

(III)

Max kg *

Min kg *

T = - kg

Max kg *

e = d = kg *

* Repeated in the vicinity of each reading face.

Where the maximum capacity is 30 kg or less, instruments shall be marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

TABLE 1

Type: Teraoka Seiko	DS-410
Maximum number of verification scale intervals	3000
Minimum sensitivity	2.7×10^{-3} mV/scale interval
Excitation voltage	12 V DC
Minimum load impedance	75 ohms
Maximum excitation current	160 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.

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Notification of Change **Supplementary Certificate of Approval No S220A** **Change No 1**

The following change is made to the approval documentation for the

Teraoka Seiko Model DS-410 Digital Indicator

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

In Supplementary Certificate of Approval No S220A dated 10 February 1992, 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 January 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.



National Standards Commission
Notification of Change
Supplementary Certificate of Approval No S204A
Change No 2

The following change is made to the approval documentation for the

GEC Avery Model 8701 Load Cell

submitted by Avery Berkel International
12-38 Talavera Road
North Ryde NSW 2113.

In Supplementary Certificate of Approval No S204A dated 17 November 1992, the Condition of Approval referring to the review of the approval should be amended to read:

“This approval becomes subject to review on or after 1 October 2002.”

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.

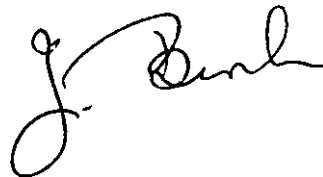


FIGURE S220A - 1



Teraoka Seiko Model DS-410 Digital Indicator