

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S200

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

Salter Electroscale Model CWM Digital Indicator

submitted by Geo Salter Pty Ltd 16 Grosvenor Street Abbotsford VIC 3067.

Conditions of Approval

This approval is subject to review on or after 1/8/90.

Instruments purporting to comply with this approval shall be marked NSC No S200 in addition to the approval number of the pattern to which they are connected.

This approval may be withdrawn if instruments are constructed and used other than as described in the drawings and specifications lodged with the Commission.

The number of scale intervals applicable to the weighing instrument in which this indicator is used shall be no greater than the number of verification scale intervals approved for the basework, or the load cell(s) or the indicator (10000e) whichever is the smallest.

Signed

Acting Executive Director

Descriptive Advice

Pattern:

approved 18/7/85

Salter Electroscale model CWM digital indicator.

Variants:

approved 18/7/85

- 1. Without the tare facility.
- 2. Without the automatic zero tracking device.
- In alternative housings.

Technical Schedule No S200 describes the pattern and variants.

Filing Advice

The documentation for this approval comprises:

Supplementary Certificate of Approval No S200 dated 20/1/86 Technical Schedule No S200 dated 20/1/86 Test Procedure No S200 dated 20/1/86 Figure 1 dated 20/1/86



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S200

Pattern:

Salter Electroscale Model CWM Digital Indicator

Submittor:

Geo Salter Pty Ltd 16 Grosvenor Street Abbotsford VIC 3067

Description of Pattern

A digital mass indicator (Figure 1) approved for use with up to 10000 scale intervals. The indicator may be provided with output sockets for the connection of auxiliary and/or peripheral devices.

1.1 Zero

- a) The instrument may be zeroed to within 0.25e, indicated by the zero light illuminating steadily, by operating the zero button.
- An automatic zero tracking device resets zero to within 0.25e whenever the indication is zero.

1.2 Tare

A semi-automatic subtractive taring device allows a mass on the load receptor of up to maximum capacity to be tared to within 0.25e.

1.3 Net/Gross Button

When this button is pressed the indicator will display the net or gross mass with the appropriate lamp illuminating.

1.4 Display Check

Pressing the TEST button initiates a display check.

1.5 Marking

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

Manufacturer's name or mark
Accuracy class
Serial number of instrument ¶¶
Maximum capacity in the form:
Minimum capacity in the form:
Verification scale interval in the form:
Maximum subtractive tare in the form:
NSC approval number - Indicator
- Other components
Load cell serial number(s)



Max *
Min *
e = d = .. *
T = - ...
NSC No S200

 $[\]P\P$ The serial number may be located adjacent to the verification mark.

^{*} These markings are repeated in the vicinity of each reading face.

1.6 Verification Mark

Provision is made for a verification mark to be applied.

Description of Variants

2.1 Variant 1

Without the semi-automatic tare facility.

2.2 Variant 2

Without the automatic zero tracking device.

2.3 Variant 3

In alternative housings.

TEST PROCEDURE No S200

The following tests should be carried out in conjunction with any test procedures in the approval documentation for the instrument to which this indicator is connected.

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

- ± 0.5e for loads between 0 and 500e;
- ± 1.0e for loads between 501e and 2000e; and
- ± 1.5e for loads above 2000e.

1. Zero Range

Check that the range of the zero adjustment is not more than 4% of the maximum capacity (± 2% approximately). With zero balance indicated, apply a load of, say, 2.5% of maximum capacity to the instrument, and adjust the zero control; the instrument should not rezero.

2. Zero Test

- (a) Check by means of Document 104, that when the zero light is lit, zero is set within 0.25e.
- (b) Automatic zero tracking is in operation if the instrument still indicates zero after the successive (and gradual) addition of 5 loads of 0.2e each.
- (c) As the automatic zero tracking device where fitted, resets zero whenever the indication is zero, zero should be checked with a load equal to, say, 10 scale intervals on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will then be 10e and 11e respectively.

3. Range of Indication

- (a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this indicated mass the indicator should be blank.
- (b) Below zero the indication may blank or the mass will be indicated, prefixed by a minus sign.

4. Taring

- (a) Attempt to tare a mass above maximum capacity as determined in 3(a). On removal of the mass no tare should have been entered, and the indicator should display all zeroes.
- (b) The tare function should reset the mass indicator to zero within 0.25e at any load within its tare capacity. This may be checked as described under 2(a) - Zero Test.

Test Loads

Test loads are to be applied to the complete weighing instrument increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

Multiple Indicators

Where more than one indicating system is used the variation between indications or printings for the same load shall not be greater than the absolute value of the maximum permissible error for that load on the device with the largest verification scale interval.



National Standards Commission

NOTIFICATION OF CHANGE VARIOUS CERTIFICATES OF APPROVAL

The following changes are made to the approval documentation for the approvals listed below

submitted by Geo

Geo Salter Pty Ltd 16 Grosvenor Street Abbotsford VIC 3067.

1) The submittor's name and address should be changed to read:

Salter Weightronix Pty Ltd 1 Apollo Court Blackburn VIC 3130.

2) Any Salter instrument or component of an instrument approved in the documentation, may now also be known as "Salter Weightronix" or "Weightronix" or similar.

APPROVAL	<u>PATTERN</u>
6/5/12A	Salter Model 610T (freely-suspended) Weighing Instrument
6/9C/203	Saiter Model LC2424 (platform) Weighing Instrument
6/9C/211	A & D Model FV 150 (platform) Weighing Instrument
S194	Salter Electroscale Model WML Digital Indicator
S200	Salter Electroscale Model CWM Digital Indicator

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

J. Birl



FIGURE SZDO - 1