CANCELLED

6/4C/44
18/2/85

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4C/44

This is to certify that an approval has been granted that the pattern and variant of the

Teraoka Seiko DC Series Weighing Instrument

submitted by J W Wedderburn & Sons Pty Ltd
90 Parramatta Road
Summer Hill, New South Wales, 2130

are suitable for use for trade.

This approval is subject to review on or after 1/6/89.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/44.

This approval may be withdrawn if instruments are constructed and used other than in accordance with the drawings and specifications lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 31/5/84

. A self-indicating weighing instrument of 25 kg capacity.

Variant: approved 31/5/84

1. In other capacities as listed in Table 1.

Technical Schedule No 6/4C/44 describes the pattern and variant.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No 6/4C/44 dated 18/2/85
Technical Schedule No 6/4C/44 dated 18/2/85
Test Procedure No 6/4C/44 dated 18/2/85
Figures 1 and 2 dated 18/2/85

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/44

Pattern: Teraoka Seiko DC Series Weighing Instrument

Submittor: J W Wedderburn & Sons Pty Ltd
90 Parramatta Road
Summer Hill NSW 2130

1. Description of Pattern

The pattern is a self-indicating weighing instrument of 25 kg capacity comprising an SA series basework and a DC 3000 series digital indicator.

NOTE: The number of scale intervals applicable to the weighing instrument shall be no greater than the number of verification scale intervals approved for the basework, or the load cell, or the indicator, whichever is the smallest.

1.1 Basework

The SA series basework (Figure 1 and Table 1) uses a load cell to support the load receptor.

Four adjustable feet are provided and adjacent to the level indicator is a notice advising that the INSTRUMENT MUST BE LEVEL WHEN IN USE.

1.2 Indicator

The digital indicator (Figure 2) is approved for use with up to 5000 scale intervals. The indicator may be in any one of the following configurations:

- DC 3000 - with a semi-automatic taring device.
- DC 3100 - with semi-automatic tare and with a keyboard digital tare.
- DC 3200 - with a facility allowing two baseworks to use the same indicator. The weighing and taring functions are independant and must not interact.

  See also paragraph 1.6.

  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.

1.3 Zero

(a) The instrument may be zeroed to within 0.25e, indicated by the zero light, by operating the zero button.

(b) An automatic zero tracking device may be fitted which resets zero to within 0.25e whenever the indicator returns to within 0.5e of zero.

1.4 Tare

(a) 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.

(b) A digital taring device allows a tare value of up to maximum capacity to be entered to within 0.5e.

Acquiring tare by either method overrides any existing tare.

...../2

1.5 Display Check

Applying power initiates a display check.

1.6 Counting Facility

The instrument has a peripheral function which counts articles placed on the weighing platform. When used with the model DC 3200 indicator, the counting functions of the two platforms may interact.

1.7 Marking

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

Manufacturer's name or mark	
Serial number of instrument	
NSC approval number	NSC No 6/4C/44
Accuracy class	(III)
Maximum capacity in the form	Max .....*
Minimum capacity in the form	Min .....*
Verification scale interval in the form	e = d = ...*
Maximum subtractive tare in the form	T = - .....

For the model DC 3200 instrument, dual markings of:

Max .... *
Min .... *
e = d = ... *
T = - ....

shall be given under the headings SCALE 1 and SCALE 2.

The indicator is also marked NOT FOR RETAIL COUNTER USE and INSTRUMENT MUST BE LEVEL WHEN IN USE.

1.8 Verification Mark

Provision is made for a verification mark to be applied.

2. Description of Variant 1

In various capacities as listed in Table 1.

* Repeated in the vicinity of each reading face.

TABLE 1(a) - WITH ZERO TRACKING

Maximum Capacity	0.5 kg	1.25 kg	2.5 kg	5 kg	12.5 kg	25 kg
Minimum Capacity	0.005 kg	0.01 kg	0.01 kg	0.04 kg	0.1 kg	0.1 kg
Verification Scale Interval	0.0005 kg	0.001 kg	0.001 kg	0.002 kg	0.005 kg	0.005 kg
Maximum Subtractive Tare	-0.5 kg	-1.25 kg	-2.5 kg	-5 kg	-12.5 kg	-25 kg

TABLE 1(b) - WITHOUT ZERO TRACKING

Maximum Capacity	0.5 kg	1.25 kg	2.5 kg	5 kg	12.5 kg	25 kg
Minimum Capacity	0.04 kg	0.04 kg	0.01 kg	0.1 kg	0.2 kg	0.4 kg
Verification Scale Interval	0.002 kg	0.002 kg	0.001 kg	0.005 kg	0.01 kg	0.02 kg
Maximum Subtractive Tare	-0.5 kg	-1.25 kg	-2.5 kg	-5 kg	-12.5 kg	-25 kg

SA Series Baseworks - Approved Capacities

TEST PROCEDURE No 6/4C/44

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

The maximum range of the zero setting device should not exceed 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) As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5 scale interval of 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 or show non-numerical symbols.

(b) The minimum mass indicated should be zero; below this the indication should be blank or show the mass preceded by a minus sign.

4. Taring

(a) Attempt to tare a mass greater than the marked tare capacity; this should not be possible.

(b) The semi-automatic tare function should be able to 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.

(c) When digital and semi-automatic tare are fitted together, either;

(i) the selection of one will automatically cancel any previously entered tare, or

(ii) the operation of one will be inhibited while the other has been selected.

5. Test Loads

Test loads are to be applied to the 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.

6/4C/44
24/4/85

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4C/44

CHANGE No 1

The following changes are made to the description of the

Teraoka Seiko DC Series Weighing Instrument

given in Technical Schedule No 6/4C/44 dated 18/2/85.

1) In paragraph 1.2 Indicator, amend the first sentence to read:

"The digital indicator (Figure 2) is approved for use with up to 5000 scale intervals. *"

2) Add the following footnote to page 1:

* "The number of scale intervals applicable to the weighing instrument shall be no greater than the number of verification scale intervals approved for the basework, or the load cell, or the indicator, whichever is the smallest."

Signed

Executive Director

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4C/44

CHANGE No 2

The following changes are made to the approval documentation for the

Teraoka Seiko DC Series Weighing Instrument.

1. In Certificate of Approval No 6/4C/44 dated 18/2/85, amend the Filing Advice to read:

Filing Advice

The Technical Schedule pages 1 and 2 dated 18/2/85 (including Table 1) were replaced by those attached to Notification Change No 2 dated 25/6/85.

The documentation for this approval now comprises:

Certificate of Approval No 6/4C/44 dated 18/2/85
Technical Schedule No 6/4C/44 (including Table 1) dated 25/6/85
Test Procedure No 6/4C/44 dated 18/2/85
Figures 1 and 2 dated 18/2/85

2. Technical Schedule No 6/4C/44 pages 1 and 2 dated 18/2/85 (including Table 1), are all replaced by the attached Technical Schedule pages 1 to 3.

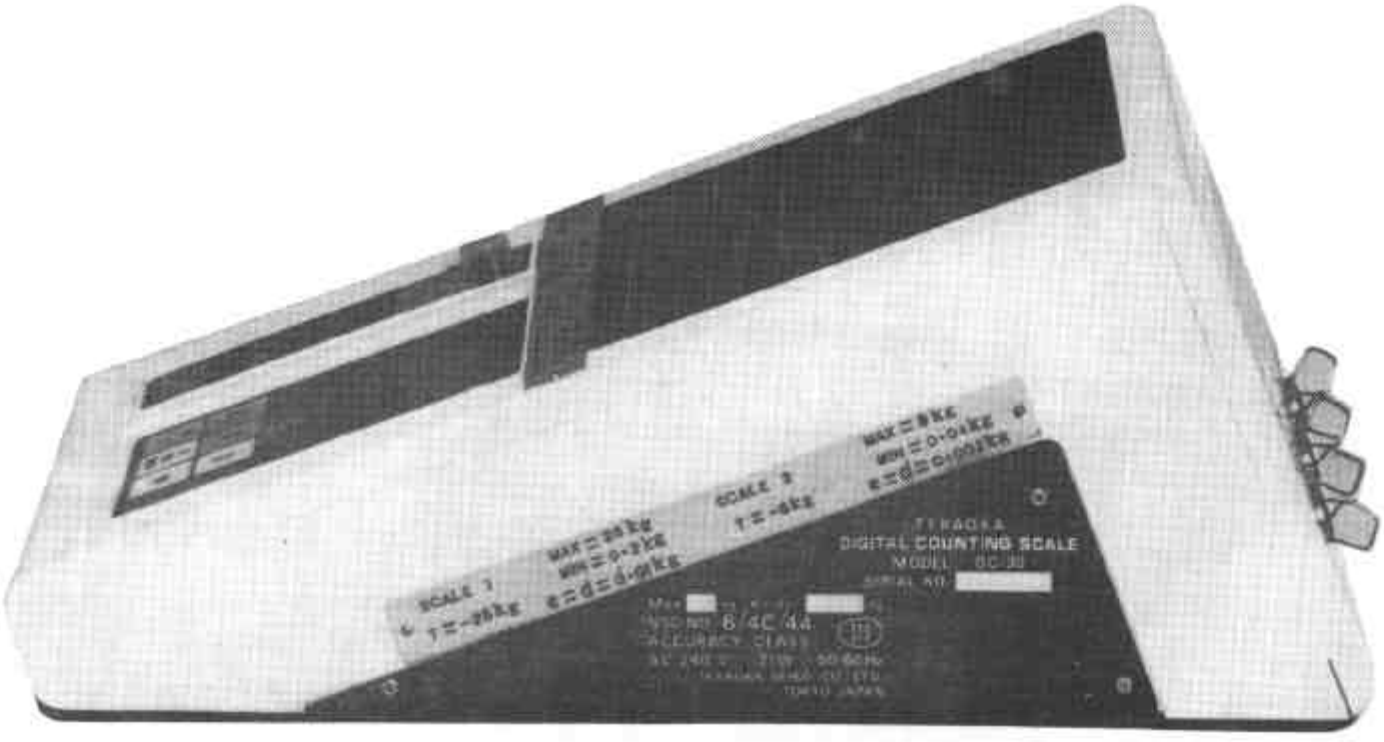
Signed

Executive Director

FIGURE 6/4C/44 - 1

Typical Teraoka Seiko SA Series Basework

FIGURE 6/4C/44 - 2



Terooko Seiko DC-3200 Indicator