



# NATIONAL STANDARDS COMMISSION

S237  
5/8/88

## NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

### REGULATION 9

#### SUPPLEMENTARY CERTIFICATE OF APPROVAL No S237

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

Teraoka Seiko Model DC-80 Digital Indicator

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

#### CONDITIONS OF APPROVAL

##### General:

This approval is subject to review on or after 1/7/93.  
This approval expires in respect of new instruments on 1/7/94.

Instruments purporting to comply with this approval shall be marked NSC No S237.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.

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 this indicator shall be within the limits specified in this approval or in any approval documentation for the other components.

##### Special:

Instruments are approved for use with exactly 3000 verification scale intervals (v.s.i.) and only with a single load cell Commission-approved for use with at least 3000 v.s.i. and having an output rating of 1 mV/V.

Instruments are not approved with a digital tare facility.

Signed

Executive Director

#### Descriptive Advice

Pattern: approved 28/6/88

- A Teraoka Seiko model DC-80 digital mass indicator.

Technical Schedule No S237 describes the pattern.

Filing Advice

The documentation for this approval comprises:

Supplementary Certificate of Approval No S237 dated 5/8/88  
Technical Schedule No S237 dated 5/8/88  
Test Procedure No S237 dated 5/8/88  
Figure 1 dated 5/8/88



# NATIONAL STANDARDS COMMISSION

S237  
5/8/88

## TECHNICAL SCHEDULE No S237

Pattern: Teraoka Seiko Model DC-80 Digital Indicator.

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

### 1. Description of Pattern

A digital mass indicator (Figure 1) approved for use with exactly 3000 verification scale intervals (v.s.i.) and only with a single load cell Commission-approved for use with at least 3000 v.s.i. and having an output rating of 1 mV/V.

The indicator may be fitted with output sockets for the connection of peripheral and/or auxiliary devices. The instrument shown in Figure 1 has a non-functioning integral basework.

#### 1.1 Zero

Zero is automatically corrected to within  $\pm 0.25e$  whenever the instrument comes to rest within  $0.5e$  of zero. If the instrument comes to rest outside that range but within the zero reset range, zero may be reset by pressing the zero button. The zero light illuminates whenever zero is within  $\pm 0.25e$ .

#### 1.2 Display Check

A display check is initiated whenever power is applied.

#### 1.3 Tare

A semi-automatic subtractive taring device of up to 50% of maximum capacity may be fitted.

#### 1.4 Counting Facility

The instrument may be 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 number of the items or by entering a value directly via the instrument keyboard.

#### 1.5 Set Point

A set point facility may be fitted to produce an audible tone when either a mass or quantity set point is reached.

#### 1.6 Memory

This facility allows the quantities of a number of weighings to be totalised.

#### 1.7 Verification Provision

Provision is made for a verification mark to be applied.

1.8 Markings

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

Manufacturer's name or mark	
Serial number	
Accuracy class	(III)
Maximum capacity	Max ..... kg *
Minimum capacity	Min ..... kg *
Verification scale interval	e = d = ..... kg *
Maximum subtractive tare	T = - ..... kg
NSC approval numbers - Indicator	NSC No S237
	- Other components (as applicable)
Load cell serial numbers	

\* These markings are repeated close to each reading face.

In addition instruments are marked NOT FOR TRADING DIRECT WITH THE PUBLIC, or NOT FOR RETAIL COUNTER USE, or similar wording.



# NATIONAL STANDARDS COMMISSION

S237  
5/8/88

## TEST PROCEDURE No S237

Instruments should be tested in conjunction with any tests specified in the approval documentation for the weighing instrument to which this indicator is connected, and in accordance with any relevant tests specified in the Inspector's Handbook.

The results shall not exceed the maximum permissible errors specified in Document 118, 2nd Edition, October 1986.

### 1. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity. The device shall be capable of both negative and positive adjustments of at least one-quarter of the zero adjustment range. With zero balance indicated apply a load of, say, 3.5% of maximum capacity, turn the power off and then back on, and then press the zero button; the instrument should not rezero.

### 2. Taring

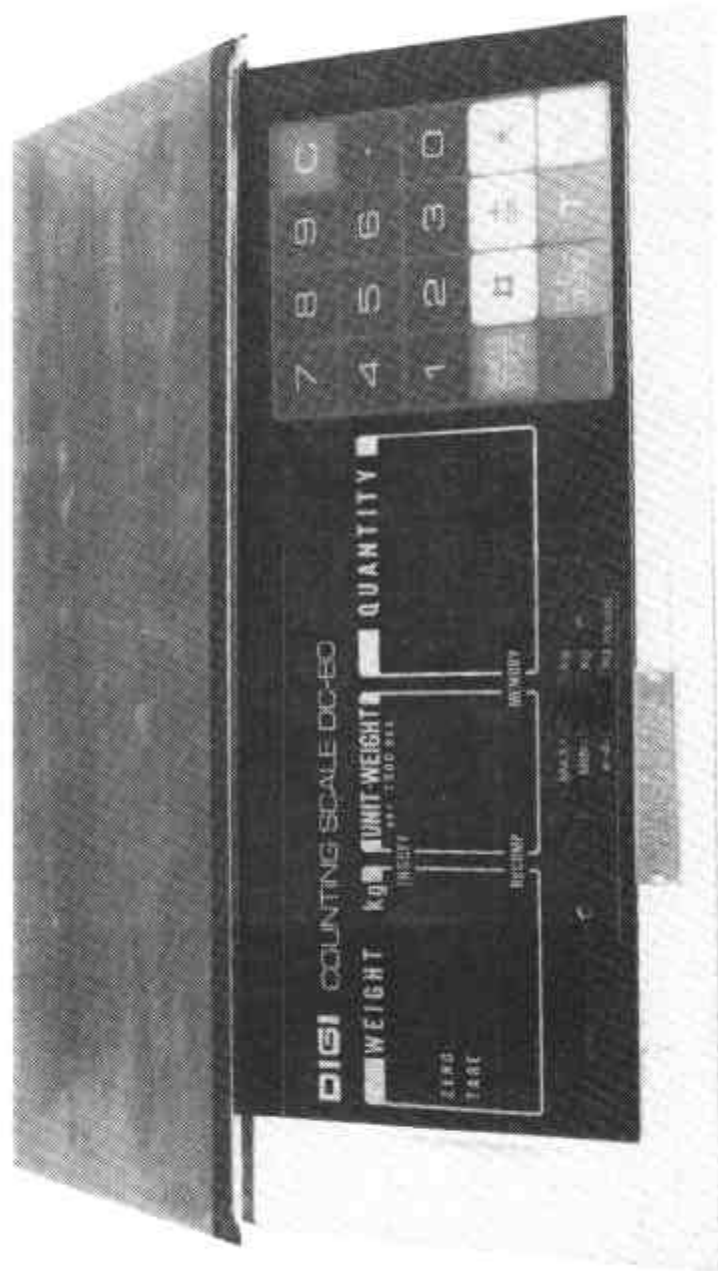
The tare function should be able to reset the mass indicator to zero within  $\pm 0.25e$  at any load within its capacity. A tare should not be able to be acquired above the marked tare capacity

It shall not be possible to enter a digital tare. This may be checked by pressing the tare button with the load receptor empty then entering a number on the keypad and pressing the tare button again; the number entered shall not have been accepted as a tare.

### 3. Counting

A test may be carried out for accuracy of count for a unit mass equal to or greater than the verification scale interval. The number counted shall be correct to one count. All tests shall be carried out using standard masses.

FIGURE S237 - 1



Teraoka Seiko DC-80 Indicator