



ORIGINAL

# NATIONAL STANDARDS COMMISSION

## WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

### REGULATION 9

#### SUPPLEMENTARY CERTIFICATE OF APPROVAL No S128

This is to certify that an approval has been granted by the Commission that the pattern and variants of the

Mercury Model 1300 Digital Indicator

submitted by Mercury Scale Company Pty Ltd,  
32 Dew Street,  
Thebarton, South Australia, 5031,

are suitable for use for trade when replacing the indicator in any Commission-approved weighing instrument.

The approval of the pattern and variants is subject to review on or after 1/7/87.

All instruments purporting to comply with this approval shall be marked NSC No S128 in addition to the approval number of the pattern to which they are connected.

Relevant drawings and specifications are lodged with the Commission.

#### Conditions of Approval

1. An instrument when fitted with a Mercury model 1300 digital indicator shall have a maximum number of 3000 scale intervals.
2. The number of scale intervals applicable to the weighing instrument in which this indicator is used will be no greater than the number of verification scale intervals approved for the basework, or the load cell(s), or the indicator, whichever is the smallest.

Signed

Executive Director

#### Descriptive Advice

Pattern: approved 11/6/82

- . Mercury model 1300 digital indicator.

Variant: approved 11/6/82

1. In various enclosures.

Technical Schedule No S128 dated 5/7/82 describes the pattern and variant 1.

#### Filing Advice

The documentation for this approval consists of:

Certificate of Approval No S128 dated 5/7/82  
Technical Schedule No S128 dated 5/7/82  
Test Procedure No S128 dated 5/7/82.

5/7/82



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No S128

Pattern: Mercury Model 1300 Digital Indicator

Submitter: Mercury Scale Company Pty Ltd,  
32 Dew Street,  
Thebarton, South Australia, 5031.

### 1. Description of Pattern

A digital mass indicator (Figure 1) approved for up to 3000 scale intervals.

#### 1.1 Zero

Zero to within 0.25e, indicated by the CENTRE ZERO light illuminating, may be obtained using the tool-operated zero.

#### 1.2 Display Check

A three position self-cancelling switch, located at the rear of the indicator, (Figure 2) is used to test the displays as follows:

centre position:	normal indication
up position:	all segments illuminated
down position:	all segments blank

#### 1.3 Markings

Instruments which incorporate this indicator are to be marked with the following data, together in a clearly visible location;

Manufacturer's name or mark	
Serial number	
Accuracy class in the form:	III
Maximum capacity in the form:	Max .....*
Minimum capacity in the form:	Min .....*
Verification scale interval in the form:	e = d = .....*
NSC approval numbers in the form:	Indicator NSC No S128
	Headwork NSC No .....¶
	Basework NSC No .....
	Load cell(s) NSC No..
Load cell serial numbers (refer 1.4(b))	

In addition, the indicator is marked NOT FOR RETAIL COUNTER USE.

#### 1.4 Sealing

- (a) A lead and wire seal passes through two retaining screws on both sides of the indicator (Figure 3).
- (b) The load cell input plug is sealed as per Figures 2 and 3, or the load cell serial numbers are marked either on the nameplate, or on metal tags sealed to the indicator.

### 2. Description of Variant

In various enclosures depending on application.

#### 2.1 Sealing

The enclosure is sealed to prevent access to the calibration adjustments.

\* These markings must be repeated in the vicinity of the reading face if not already there.

¶ This approval number should be included where the headwork is retained as part of the modified instrument.

## TEST PROCEDURE No S128

The following tests should be carried out in conjunction with the test procedures in the Technical Schedule of the instrument to which the pattern or variants are 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;
- ± 1e for loads between 501e and 2000e; and
- ± 1.5e for loads above 2000e.

### 1. Zero Range

The maximum range of operation of the zero device should not exceed 4% of the capacity of the instrument (± 2% approximately). Satisfactory setting may be checked by the following method:

- (a) With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and adjust the tool-operated zero; the instrument should not re-zero.
- (b) Reduce the load to, say, 1.5% of maximum capacity and again adjust zero; the instrument should indicate zero balance.

### 2. Zero Test

Check by means of Document 104 that when the Centre Zero light is lit, zero is set within 0.25e.

### 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 indicated mass is prefixed by a minus sign.

### 4. 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.

### 5. Multiple Indicators

Where the existing headwork is retained and used in conjunction with the pattern, 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.



25/3/88

## NATIONAL STANDARDS COMMISSION

### NOTIFICATION OF CHANGE

### VARIOUS CERTIFICATES OF APPROVAL

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

submitted by     Mercury Weighing and Control Systems Pty Ltd  
                    32 Dew Street  
                    Thebarton SA 5031.

In the Certificates and Technical Schedules listed, the following changes should be made:

- 1) The submittor should be changed to read;  
  
    A & D Mercury Pty Ltd  
  
    (the address remains unchanged)
  
- 2) Any Mercury instrument or component of an instrument approved in the documentation, may now also be known as "AND Mercury" or similar.

Signed

Executive Director

APPROVAL      PATTERN**TYPE:** weighing instruments counter scales

6/3/007      Model 92  
6/3/008      Model 131

**TYPE:** counter machines semi-self-indicating

6/4A/012      Model 304A

**TYPE:** counter machines freely-suspended < 30 kg (spring scales)

6/5/011      Model 211 DA

**TYPE:** weighing instruments non-self-indicating

6/9A/001      Models 692 and 682  
6/9A/004      Model 522D  
6/9A/007      Model 211  
6/9A/008      Model 600

**TYPE:** weighing instruments self-indicating

6/9C/005      Model 211D  
6/9C/013      Up to 2500 lb or 1200 kg  
6/9C/066      Model 522 AL  
6/9C/067      Model SM100/479/522D  
6/9C/081      Model SB-LP 1200  
6/9C/088      Model 522D LT-10K

**TYPE:** weighbridges self-indicating

6/10B/040      Model WB-LT  
6/10B/045A      Model RVB-H20

**TYPE:** automatic weighing instruments (except belt conveyors)

6/14B/012      Model HSD automatic hopper

**TYPE:** overhead weighing instrument (suspended load or receptor)

6/18/005      With 211DA headwork  
6/18/017      Model OHT 500

**TYPE:** digital indicators

S114      Model 579  
S128      Model 1300  
S132      Model 900  
S161      Model AD4316  
S199      Model AD-4321

**TYPE:** load cells

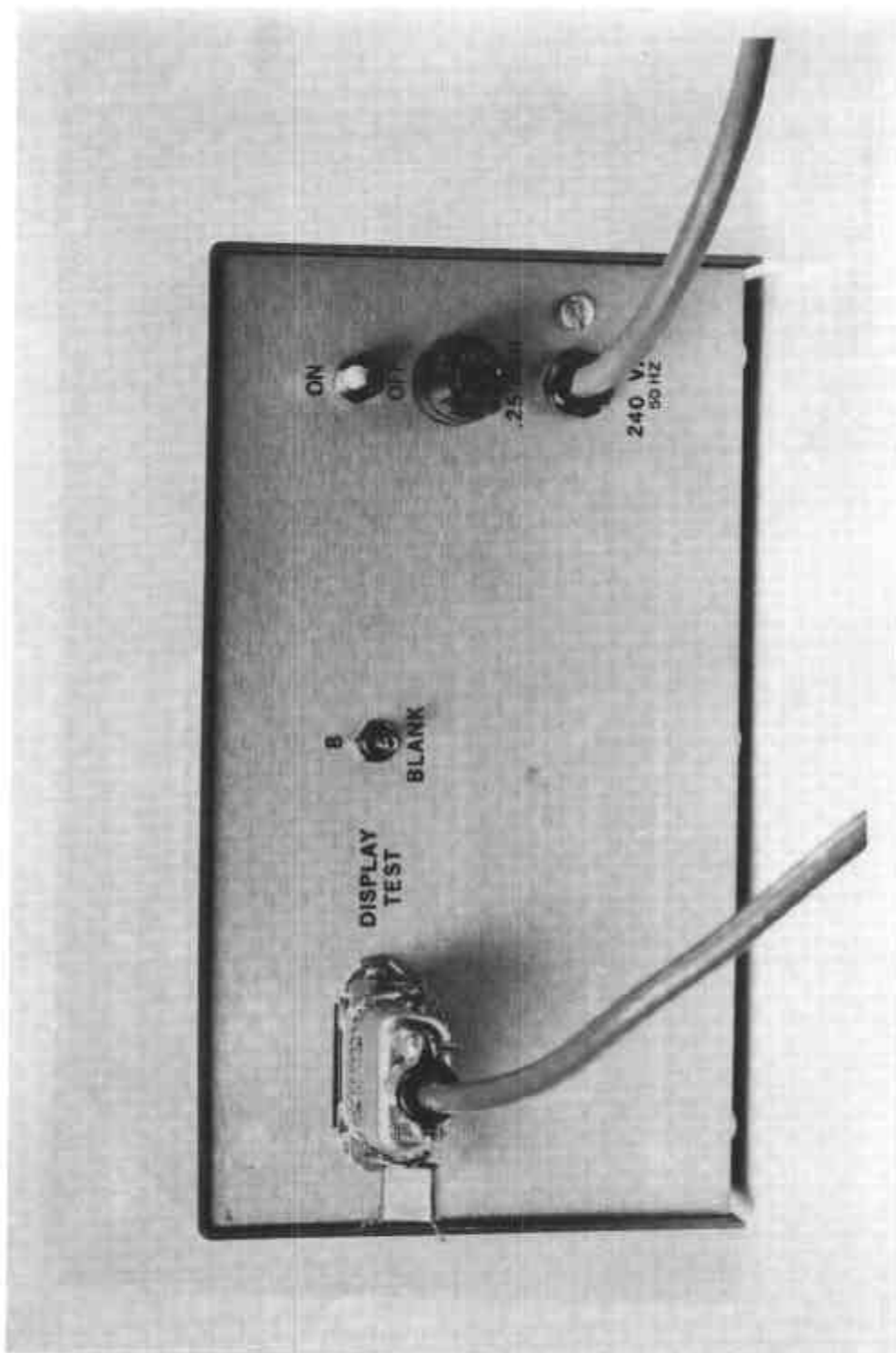
S117      Interface model SM25-12 kg  
S163      Transducers model B5112.1K  
S221      HBM model TRT-50 (Mercury model TRT3K-50)

FIGURE S128 - 1



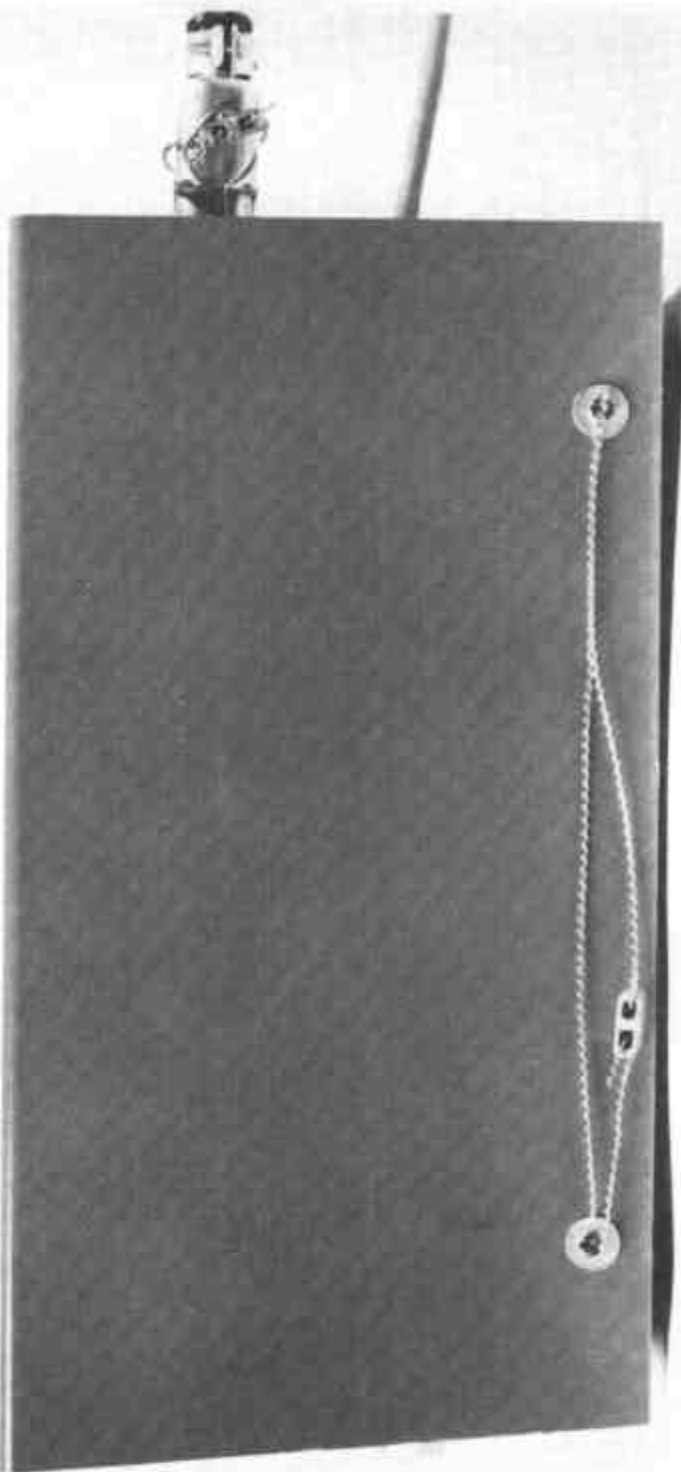
Model 1300 Indicator

FIGURE S128 - 2



Rear Of Model 1300

FIGURE S128 - 3



Sealing Of Model 1300

5/7/82