

# NATIONAL STANDARDS COMMISSION

# WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

## REGULATION 9

## CERTIFICATE OF APPROVAL No 6/18/13

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

AWA Type 2KA70708 Overhead-track Weighing Instrument

submitted by Amalgamated Wireless (Australasia) Ltd
Data Systems Division
422 Lane Cove Road
North Ryde, New South Wales, 2113

is suitable for use for trade.

The approval of the pattern is subject to review on or after 1/9/87.

All instruments purporting to comply with this approval shall be marked NSC No 6/18/13.

Relevant drawings and specifications are lodged with the Commission.

# Condition of Approval

The pattern is approved for use with 900 scale intervals.

Signed

Executive Director

## Descriptive Advice

Pattern:

approved 23/8/82.

AWA type 2KA70708 self-indicating overhead-track weighing instrument of capacity 90 kg by 0.10 kg, with a Transducers Inc. model B5102-200-10PI 91 kg load cell.

Technical Schedule 6/18/13 dated 16/9/82 describes the pattern.

# Filing Advice

The documentation for this approval consists of:

Certificate of Approval No 6/18/13 dated 16/9/82 Technical Schedule No 6/18/13 dated 16/9/82 Test Procedure No 6/18/13 dated 16/9/82 Figures 1 to 3 dated 16/9/82.



# NATIONAL STANDARDS COMMISSION

# TECHNICAL SCHEDULE No 6/18/13

Pattern:

AWA Type 2KA70708 Overhead-Track Weighing Instrument

Submittor:

Amalgamated Wireless (Australasia) Ltd

Data Systems Division 422 Lane Cove Road

North Ryde, New South Wales, 2113.

# 1. Description of Pattern

AWA type 2KA70708 self-indicating overhead-track weighing instrument (Figures 1, 2 and 3) of 90 kg maximum capacity with 0.10 kg scale intervals, mounted in a permanantly fixed position.

It consists of a mass indicator connected to a weigh rail up to 350 mm in length in which is mounted a Transducers Inc. model B5102-200-10PI 91 kg load cell. The system is for use with 900 scale intervals.

# 1.1 Zero Setting

By a tool-operated zero adjustment marked ZERO ADJUST. A light marked CENTRE OF ZERO is illuminated whenever zero is balanced to within 0.25e.

### 1.2 Tare

- (a) A semi—automatic subtractive taring device operated by a key marked TURN TO ACQUIRE TARE.
- (b) A tare indicator marked TARED indicates that a tare has been entered and remains illuminated throughout the weighing operation.

#### 1.3 Display Check

When power is applied, the indicator displays all  $8^{\circ}$ s, then HELLO, before resetting to zero.

## 1.4 Marking

The instrument should be marked with the following data, together in a clearly visible location:

Manufacturer's name or mark Serial number of instrument NSC approval number Accuracy class Maximum capacity Minimum capacity Verification scale interval Maximum subtractive tare

NSC No 6/18/13 (III) Max 90 kg\* Min 5 kg\* e = d = 0.10 kg\* T = - 90 kg

#### 1.5 Sealing

A lead and wire seal with the wire passing through holes in the top cover and case of the digitising-electronics preventing access to the adjustments. The load cell serial number is on a metal plate sealed in the same manner (Figure 2).

A lead stamping plug is provided on the front cover.

<sup>\*</sup> Repeated in the vicinity of every reading face.

#### TEST PROCEDURE No 6/18/13

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

Accuracy Requirements:

The maximum permissible errors are:

- ± 0.5e for loads between 0 and 500e; ± 1e for loads between 501e and 900e
- 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; it should not be possible to obtain zero balance by means of the zero adjustment.
- (b) Reduce the load to, say, 1.5% of maximum capacity; it should now be possible to obtain zero.

### 2. Zero Balance

Check using Document 104, that when the CENTRE OF ZERO light is illuminated, zero is set within 0.25e.

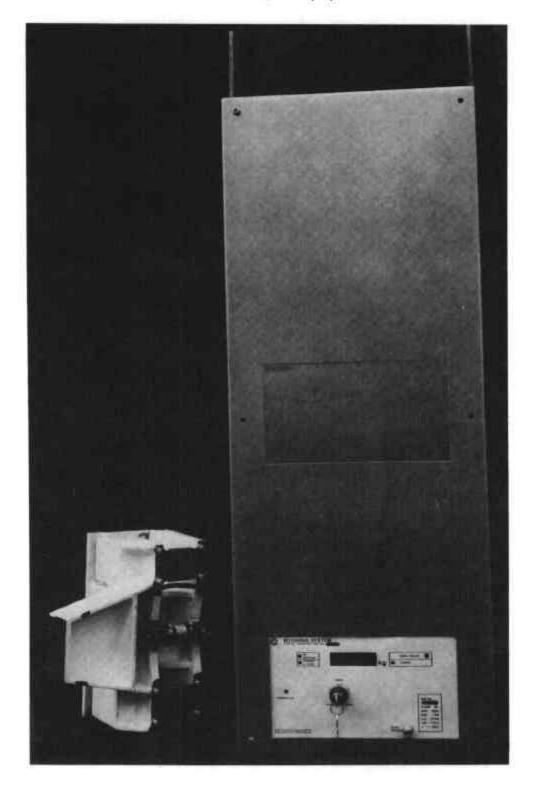
### 3. Range of Indication

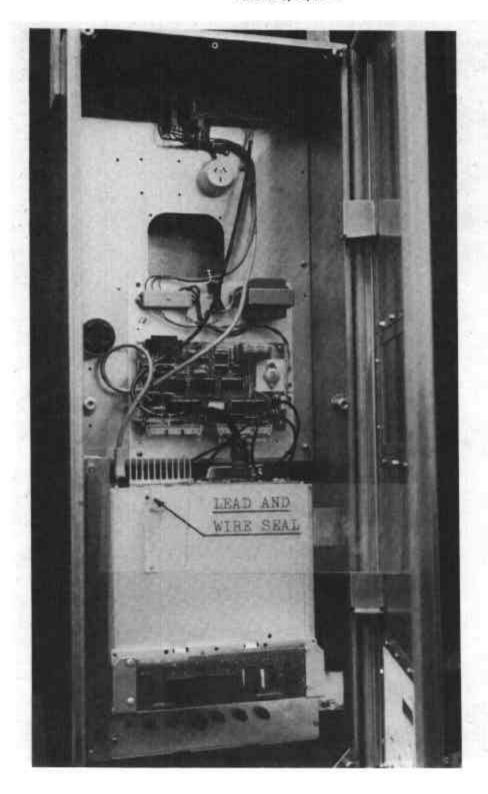
- (a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this, the indicator should blank.
- (b) The minimum mass indicated should be zero; below this the indicator should display the mass prefixed by a minus sign.

### 4. Test Loads

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

The instrument should display these loads within the applicable tolerance as listed above.





Schematic Of Weighhead

16/9/82