CANCELLED

NATIONAL STANDARDS COMMISSION

WEIGHTS AND MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S156

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

AWA Model AN5315 Digital Indicator

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

are suitable for use for trade, when used to replace the indicator in a Commission-approved weighing instrument.

The approval is subject to review on or after 1/7/88.

Instruments purporting to comply with this approval shall be marked NSC No S156 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 fitted with a model AN5315 indicator shall have a maximum number of 3000 scale intervals.

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

Signed

Executive Director

Descriptive Advice

Pattern: approved 16/6/83

. AWA model AN5315 digital indicator.

Variant: approved 16/6/83

1. With an output socket for the connection of auxiliary or peripheral equipment.

Technical Schedule No S156 dated 8/7/83 describes the pattern and variant.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No S156 dated 8/7/83
Technical Schedule No S156 dated 8/7/83
Test Procedure No S156 dated 8/7/83
Figure 1 dated 8/7/83.

8/7/83

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S156

Pattern: AWA Model AN5315 Digital Indicator

Submittor: Amalgamated Wireless (Australasia) Ltd
422 Lane Cove Road
North Ryde, New South Wales, 2113.

1. Description of Pattern

A digital mass indicator (Figure 1) displaying up to 3000 scale intervals and approved for use with up to four 350 Ω load cells.

1.1 Zero

Zero within 0.25e, indicated by the CENTRE OF ZERO light being illuminated, may be obtained either semi-automatically by using the tool-operated ZERO control, or automatically by means of the automatic zero tracking device whenever the instrument comes to rest within 0.5e of zero.

1.2 Display Check

Pressing the CHECK button causes the indicator to blank and all segments and indicating lights are illuminated when the button is released.

1.3 Tare

Use of the subtractive tare push button marked TARE, allows a mass on the receptor of up to maximum capacity to be tared to within 0.25e, and is indicated by the TARE light illuminating. When the mass is removed, the tare value prefixed by a minus sign is displayed.

1.4 Markings

The instrument is marked with the following data, together in one location:

Manufacturer's name or mark	
Model number	
NSC approval numbers	NSC No S156 H/W NSC No .....¶ L/C NSC No .....
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 = - .....
Indicator serial number	.....

Load cell serial number(s) - alternatively these may be marked on metal tags sealed to the indicator.

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

* These markings are repeated in the vicinity of all reading faces, if not already there.

1.5 Sealing and Verification Provision

No sealing is required, however, provision is to be made for a verification mark to be applied.

2. Description of Variant 1

With an output socket for the connection of auxiliary or peripheral equipment.

TEST PROCEDURE No S156

The following tests should be carried out in conjunction with any test procedures in the Technical Schedule of 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;
± 1e 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). Satisfactory setting may be checked by the following method:

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 CENTRE OF ZERO light is lit, zero is set within 0.25e.

(b) As the automatic zero tracking 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.

(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.

5. 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.

6. 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.

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S156

CHANGE No 1

The following changes are made to the description of the AWA Model AN5315 Digital Indicator.

1. In Supplementary Certificate of Approval No S156 dated 8/7/83,

   (a) Delete, "Relevant drawings ..... Commission."

   (b) Insert, "The approval may be withdrawn if used other than as described in the drawings and specifications lodged with the Commission."

2. In Technical Schedule No S156 dated 8/7/83,

   from Description of Pattern, delete the following from the first paragraph:

   "... and approved for use with up to four 350 Ω load cells."

Signed

Executive Director

30/9/83

FIGURE S156 - 1

AWA Model AN5315 Indicator

8/7/83