



CANCELLED 0/3
31-12-90

NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S127

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

Wedderburn Model UMC 2000 Digital Indicator

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

are suitable for use for trade, when used to replace the indicator in a 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 S127 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 UMC 2000 indicator shall have a maximum number of 1500 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 4/6/82.

- . Wedderburn model UMC 2000 digital indicator.

Variant: approved 4/6/82

1. Pattern without automatic zero tracking.

Technical Schedule No S127 dated 5/7/82 describes the pattern and variant 1.

Filing Advice

The documentation for this approval consists of:

Certificate of Approval No S127 dated 5/7/82
Technical Schedule No S127 dated 5/7/82
Test Procedure No S127 dated 5/7/82.

5/7/82



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S127

Pattern: Wedderburn Model UMC 2000 Digital Indicator

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

1. Description of Pattern

Wedderburn model UMC 2000 digital mass indicator (Figure 1) displaying up to 1500 scale intervals.

1.1 Markings

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

Manufacturer's name or mark	Indicator NSC No S127
NSC approval numbers	Headwork NSC No.....¶
	Basework NSC No.....
	Load cell(s) NSC No.....
Accuracy class	III
Maximum capacity	Max*
Minimum capacity	Min*
Maximum subtractive tare	T = -*
Verification scale interval	e = d =*
Indicator serial number	
Load cell serial number(s) - refer para. 1.6(c)	

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

1.2 Zero

Zero within 0.25e, indicated by the CENTRE 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.

1.3 Net/Gross Button

Use of this button allows either the gross or net mass to be displayed, indicated by the appropriate light illuminating.

1.4 Tare

Use of the subtractive tare push button marked AUTO TARE, allows a mass on the receptor of up to maximum capacity to be tared to within 0.25e, and is indicated by the NET light illuminating.

¶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 Display Check

When this button is pressed, all "8's" should be displayed, except the left-hand digit which shows a "1".

1.6 Sealing

- (a) A lead and wire seal, with the wire passing through one of the retaining screws on the front panel and the housing (Figure 1).
- (b) Output socket(s), where fitted, should be sealed (Figure 2).
- (c) The load cell serial number(s) may be on metal tags sealed to the indicator housing, or marked on the nameplate.

2. Description of Variant

2.1 Variant 1

The pattern without automatic zero tracking.

TEST PROCEDURE No S127

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 ($\pm 2\%$ 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 ZERO control; the instrument should not rezero.
- (b) Reduce the load to say 1.5%, and again adjust the ZERO control; the instrument should indicate zero balance.

2. Zero Test

- (a) Check by means of Document 104, that when the CENTRE ZERO light is lit, zero is set within 0.25e.
- (b) As the automatic zero tracking device, when fitted, 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.

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.

FIGURE S127 - 1



Wedderburn UMC 2000 - Including Sealing

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FIGURE S127 - 2



Wedderburn UMC 2000 - Sealing Of Output Sockets

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