

6/3/9
18/3/85



NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/3/9

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

Thornton Model TN500 Weighing Instrument

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

are suitable for use for trade.

This approval is subject to review on or after 1/2/90.

Instruments purporting to comply with this approval shall be marked NSC No 6/3/9.

This approval may be withdrawn if instruments are constructed and used other than in accordance with the drawings and specifications lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 17/1/85

- . An even-arm balance counter scale of 15 kg capacity with 0.010 kg verification scale intervals.

Variant: approved 17/1/85

- 1. Other models and capacities as listed in Table 1.

Technical Schedule No 6/3/9 describes the pattern and variant.

Filing Advice

The documentation for this approval comprises:

- Certificate of Approval No 6/3/9 dated 18/3/85
- Technical Schedule No 6/3/9 dated 18/3/85 (including Table 1)
- Test Procedure No 6/3/9 dated 18/3/85
- Figure 1 dated 18/3/85



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/3/9

Pattern: Thornton Model TN500 Weighing Instrument

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

1. Description of Pattern

An even-arm balance counter scale of 15 kg capacity with 0.010 kg verification scale interval (Figure 1 and Table 1).

1.1 Zero Setting

The instrument is provided with a balance indicator consisting of a horizontal and offset index. A balancing chamber is located beneath the load receptor.

1.2 Markings

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

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/3/9
Accuracy class	(II)
Maximum capacity	Max kg
Minimum capacity	Min kg
Verification scale interval	e = kg

1.3 Verification Provision

Provision is made for a verification mark to be applied.

2. Description of Variant 1

Of models and capacities as listed in Table 1.

2.1 Zero Setting

The balance indicator on the model TN44 consists of a centrally located vertical index.

TABLE 1

Model	Maximum Capacity	Minimum Capacity	Verification Scale Interval (e)
TN44	1 kg	0.020 kg	0.001 kg
TN44	2 kg	0.020 kg	0.001 kg
TN500	10 kg	0.100 kg	0.005 kg
TN500	15 kg	0.200 kg	0.010 kg

TEST PROCEDURE No 6/3/9

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:

- $\pm 0.5e$ for loads between 0 and 500e; and
- $\pm 1.0e$ for loads between 501e and 2000e.

1. Zero Test

With no load on either receptor of the instrument, it should be readily discernable that the instrument is at zero, by the alignment of the indexes.

2. Load Test

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 in not less than 5 approximately equal steps to zero load.

3. Sensitivity

A mass equal to the absolute value of the maximum permissible error, at the load considered, placed on the instrument at equilibrium (either loaded or unloaded) shall cause a permanent displacement of the index of at least 2 mm.

6/3/9
17/4/86



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/3/9

CHANGE No 1

The following change is made to the approval documentation for the

Thornton Model TN500 Weighing Instrument

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

In Test Procedure No 6/3/9 dated 18/3/85, amend test 3. Sensitivity to read:

3. Sensitivity Test at Initial Verification

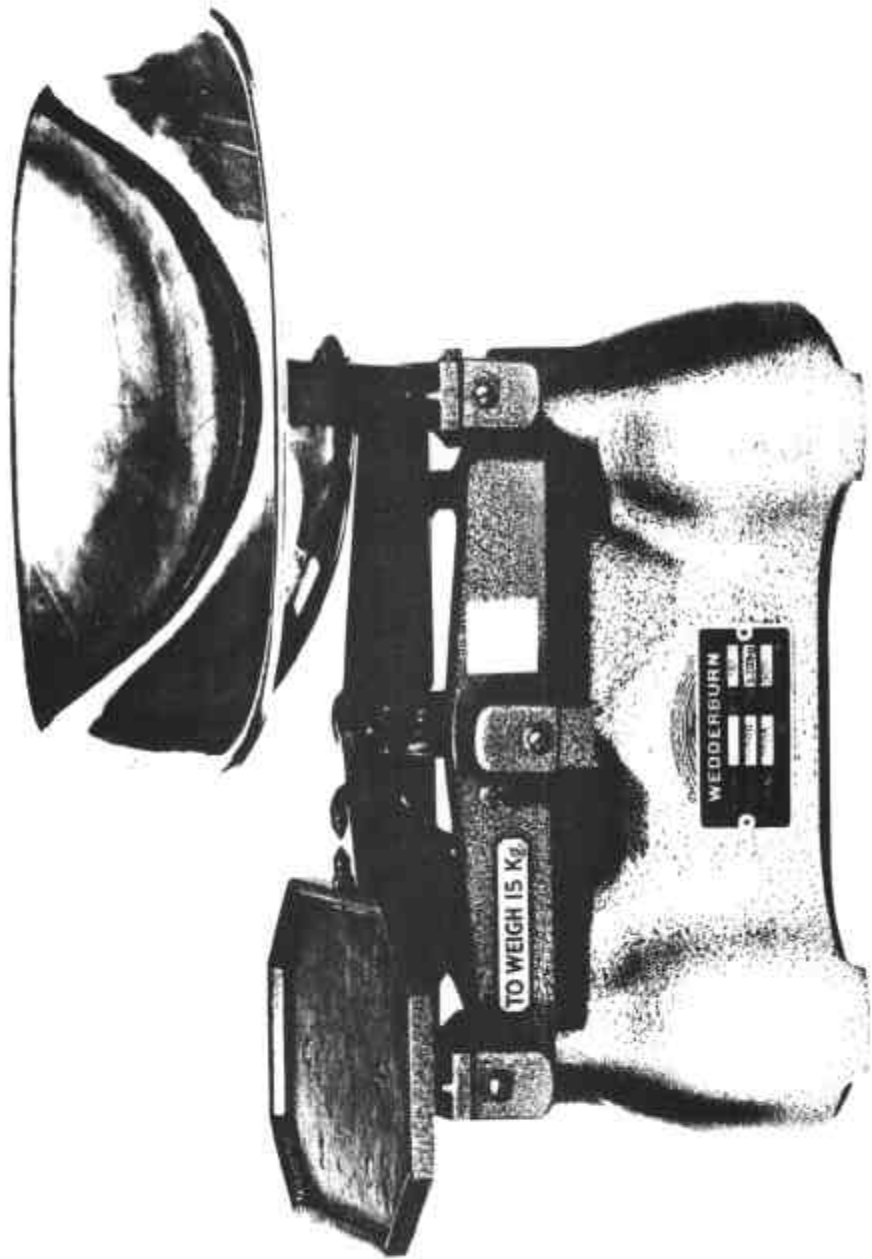
A mass equal to the verification scale interval placed on or subtracted from the instrument at equilibrium, loaded or unloaded, shall cause the indicating element to move to, but not necessarily remain at the limit of its movement.

Signed

Acting Executive Director

6/3/9
18/3/85

FIGURE 6/3/9 - 1



Thornton Model TN500