



CANCELLED

NATIONAL STANDARDS COMMISSION

6/4C/42
23/3/88

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4C/42

This is to certify that an approval for use for trade has been granted in respect of the pattern and variants of the

Avery Model 1791 Weighing Instrument

submitted by Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/2/89.
This approval expires in respect of new instruments on 1/2/90.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/42.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 12/1/84

- A self-indicating weighing instrument of 15 kg capacity with a verification scale interval of 0.005 kg.

Technical Schedule No 6/4C/42 describes the pattern.

Variant: approved 15/10/84

1. With semi-automatic subtractive tare of up to 15 kg capacity.

Technical Schedule No 6/4C/42 Variation No 1 describes variant 1.

Variant: approved 21/1/88

2. With the model 8707 load cell of the pattern replaced by the model T103 load cell.

Technical Schedule No 6/4C/42 Variation No 2 describes variant 2.

Filing Advice

Certificate of Approval No 6/4C/42 dated 10/12/84 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4C/42 dated 23/3/88
Technical Schedule No 6/4C/42 dated 6/2/84
Technical Schedule No 6/4C/42 Variation No 1 dated 10/12/84
Technical Schedule No 6/4C/42 Variation No 2 dated 23/3/88
Test Procedure No 6/4C/42 dated 6/2/84
Figure 1 dated 6/2/84.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/42

Pattern: Avery Model 1791 Weighing Instrument

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood, New South Wales, 2163.

1. Description of Pattern

The pattern is a self-indicating weighing instrument (Figure 1) of 15 kg capacity with 0.005 kg scale intervals. The instrument may be fitted with an output socket for the connection of auxiliary or peripheral devices.

1.1 Zero

Zero is automatically corrected to within 0.25e whenever the instrument comes to rest within 0.5e of zero. If the instrument comes to rest outside that range but within the zero reset range, zero may be reset by pressing the zero button. The zero light illuminates whenever zero is correct within 0.25e.

1.2 Display Check

When power is applied to the instrument, there is a small time delay before the displays will show all 8's, and then blank. The instrument will then automatically rezero, if the instrument is within approximately 30e of zero.

Pressing the DISPLAY CHECK button causes the displays to illuminate, then blank, and then return to their original state.

1.3 Marking

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

Manufacturer's name or mark	
NSC approval number	NSC No 6/4C/42
Accuracy class	III
Maximum capacity	Max = 15 kg*
Minimum capacity	Min = 0.100 kg*
Verification scale interval	e = d = 0.005 kg*

Note: The serial number is located adjacent to the verification mark.

1.4 Levelling

The instrument is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use.

1.5 Verification

Provision is made for a verification mark to be applied.

*These markings should be repeated in the vicinity of each reading face.

TEST PROCEDURE No 6/4C/42

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;
- ± 1.0e for loads between 501 and 2000e; and
- ± 1.5e for loads above 2000e.

1. Zero Test

As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5e of zero, zero should be checked as described in Document 104, with a load equal to, say, 10e 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.

2. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity (± 2% approximately). With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and press the zero button; the instrument should not rezero.

3. Load Test

Test loads are to be applied to the 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.

4. Range of Indication

- (a) The maximum mass indicated should not exceed the marked maximum capacity (Max) by more than 10e; above this indicated mass the indication should be blank or show non-numerical characters.
- (b) The minimum mass indicated should be zero; below this the indication should be blank.



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TECHNICAL SCHEDULE No 6/4C/42

VARIATION No 1

Pattern: Avery Model 1791 Weighing Instrument

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood, New South Wales, 2163.

1. Description of Variant 1

With a semi-automatic subtractive taring device. Use of the TARE button allows a mass on the load receptor of up to 15 kg to be tared to within 0.25e as indicated by the TARE light being lit. Removal of the tared mass results in either the indicator blanking or the tare being automatically cancelled depending on which option is selected internally.

Markings shall now include:

T = -15 kg

TEST PROCEDURE

Carry out a suitable tare test as set out in the Inspectors' Handbook.



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TECHNICAL SCHEDULE No 6/4C/42

VARIATION No 2

Pattern: Avery Model 1791 Weighing Instrument.

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 2

With the Avery model 8707 load cell of the pattern replaced by the Avery model T103 load cell.

FIGURE 6/4C/42 - 1



Model 1791 Weighing Instrument

6/2/84