



6/4D/234
8/7/83

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4D/234

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

Brecknell Model 130 Weighing Instrument

submitted by Brecknell Australia
3 Birmingham Avenue
Villawood NSW 2163.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/3/89.
This approval expires in respect of new instruments on 1/3/90.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/234.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates Nos S1/0 and/or S2/0, as appropriate.

Signed

Executive Director

Descriptive Advice

Pattern: approved 9/8/85

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

Variants: approved 9/8/85

1. With an inbuilt label printer.
2. With the price-computing facility inhibited when connected to a price-computing auxiliary device.
3. With a Brecknell model 8636 Packscan printer.

Technical Schedule No 6/4D/234 describes the pattern and variants 1 to 3.

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Variant: approved 13/5/88

4. With an Avery model T103 load cell.

Technical Schedule No 6/4D/234 Variation No 1 describes variant 4.

Filing Advice

Certificate of Approval No 6/4D/234 dated 28/10/85 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/234 dated 8/7/88
Technical Schedule No 6/4D/234 dated 28/10/85
Technical Schedule No 6/4D/234 Variation No 1 dated 8/7/88
Test Procedure No 6/4D/234 dated 28/10/85
Figures 1 to 3 dated 28/10/85



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/234

Pattern: Brecknell Model 130 Weighing Instrument

Submittor: Brecknell Australia
3-5 Birmingham Avenue
Villawood NSW 2163

1. Description of Pattern

A self-indicating price-computing weighing instrument (Figure 1) of 15 kg capacity with 0.005 kg scale intervals, unit price to \$999.99/kg and price to \$9999.99.

The instrument may be fitted with output sockets for the connection of auxiliary and/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 30e of zero.

1.3 Unit Price

When a unit price is entered, if a delay of greater than 2 seconds occurs between the entering of digits, the last digit entered will clear the price already set and become the first digit of the new price.

Price can also be cancelled by pressing the PRICE CANCEL button.

1.4 Tare

A semi-automatic taring device of up to 7,5 kg capacity may be fitted. The entered tare will automatically cancel after a weighing when the load receptor is empty unless the TARE HOLD button is pressed.

1.5 Marking

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

Manufacturer's name or mark
NSC approval number
Accuracy class
Maximum capacity
Minimum capacity
Verification scale interval
Maximum subtractive tare in the form

NSC No 6/4D/234

(III)

Max = 15 kg *
Min = 0,100 kg *
e = d = 0,005 kg *
T = - kg

* These to be repeated adjacent to each reading face.

Note:

- . The serial number is located on a separate nameplate on the base of the instrument
- . The instrument may display mass below zero in which case the instrument must also be marked NOT FOR RETAIL COUNTER USE.

1.6 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.

1.7 Verification

Provision is made for the application of a verification mark.

2. Description of Variants

2.1 Variant 1

With an inbuilt label printer mounted between the main housing and the load receptor (Figure 2).

2.2 Variant 2

With the price-computing facility inhibited i.e. displaying mass only, when connected to an auxiliary device which has price-computing capability.

2.3 Variant 3

With a Brecknell model 8636 Packscan printer which has facilities for storing product information, unit price and tare-look-up tables.

When in use the printer inhibits the price-computing facility of the weighing instrument and can communicate tare information to the weighing instrument, with the mass display modified accordingly.

This instrument is not for retail counter use and must be so marked.

TEST PROCEDURE No 6/40/234

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 or show non-numerical characters or the instrument must be marked NOT FOR RETAIL COUNTER USE.

5. Taring

The tare function should be able to reset the mass indicator to zero within 0.25e at any load within its capacity. This may be checked as described for Zero Test. A tare should not be able to be acquired above the marked tare capacity.



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TECHNICAL SCHEDULE No 6/4D/234

VARIATION No 1

Pattern: Brecknell Model 130 Weighing Instrument.

Submittor: Brecknell Australia
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 4

With the Avery model 8707 15 kg load cell used in the pattern and variants replaced by the Avery model T103 15 kg load cell.



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4D/234

CHANGE No 1

The following changes are made to the approval documentation for the
Brecknell Model 130 Weighing Instrument

submitted by Brecknell Australia
3-5 Birmingham Avenue
Villawood NSW 2163.

1. In Technical Schedule No 6/4D/234 dated 28/10/85, add the following to clause 2.3 Variant 3:

"As the taring device of the printer operates digitally (resetting zero to within $\pm 0.5e$) the instrument must display mass preceded by a minus sign when a tared mass is removed from the load receptor."

2. In Test Procedure No 6/4D/234 dated 28/10/85, amend test 5. Taring as follows:

- a) Amend the existing paragraph to read, in part;

"The semi-automatic tare function"

- b) Add a new paragraph, viz;

"The digital tare function of the printer, where fitted, shall reset the mass indicator to zero within $\pm 0.5e$ at any load within its capacity".

Signed

Executive Director

FIGURE 6/40/234 - 1



Brecknell 130 Weighing Instrument

FIGURE 6/40/234 - 2



With Inbuilt Printer

FIGURE 6/4D/234 - 3



With Packscan Printer