# NATIONAL STANDARDS COMMISSION

6/4D/245
4/10/89

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4D/245

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

Berkel Model 681 Mk II Weighing Instrument

Submitted by Berkel Australia Pty Ltd
19 Evans Street
Burwood VIC 3125.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/4/93.
This approval expires in respect of new instruments on 1/4/94.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/245.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.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

J. Burk.

Executive Director

Descriptive Advice

Pattern: approved 14/3/88

- A Berkel model 681 Mk II self-indicating price-computing weighing instrument of 15 g capacity with verification scale interval of 0.005 kg.

Variants: approved 14/3/88

1. With the Avery model 8707 load cell used in the pattern replaced by an Avery model T103 load cell.

2. With the price-computing facility inhibited.

3. With a Berkel Thermatronic Mk I printer.

Technical Schedule No 6/4D/245 describes the pattern and variants 1 to 3.

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Variant: approved 17/5/89

4. Without the price-computing facility and known as a model 680CW Mk II.

Variant: approved 4/7/89

5. With the weighing unit, indicator and keyboard in separate housings, and known as a model 680CP Mk II.

Technical Schedule No 6/4D/245 Variation No 1 describes variants 4 and 5.

Filing Advice

Certificate of Approval No 6/4D/245 dated 24/5/88 (which included an incorrect review date), is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/245 dated 4/10/89
Technical Schedule No 6/4D/245 dated 24/5/88
Technical Schedule No 6/4D/245 Variation No 1 dated 4/10/89
Test Procedure No 6/4D/245 dated 24/5/88
Figure 1 dated 24/5/88
Figure 2 dated 4/10/89

# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 6/4D/245

Pattern: Berkel Model 681 Mk II Weighing Instrument.

Submittor: Berkel Australia Pty Ltd
19 Evans Street
Burwood Vic 3125.

### 1. Description of Pattern

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

The instrument may be fitted with an output socket for the connection of an auxiliary or peripheral device.

### 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.

Pressing the button marked V also initiates a display check.

### 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 button marked C.

### 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 button marked F is pressed.

### 1.5 Levelling

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

### 1.6 Verification

Provision is made for the application of a verification mark.

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1.7 Marking

Instruments are marked with the following data, together in one location:

| | |
|---|---|
| Manufacturer's name or mark | |
| NSC approval number | NSC No 6/4D/245 |
| Accuracy class | (III) |
| Maximum capacity | Max .... kg * |
| Minimum capacity | Min .... kg * |
| Verification scale interval | e = d = .... kg * |
| Maximum subtractive tare | T = - .... kg |

* Marked adjacent to each reading face.

Note:

- The serial number is located on a separate namplate on the base of the instrument; and

- The instrument may display mass below zero in which case the instrument must also be marked NOT FOR RETAIL COUNTER USE.

2. Description of Variants

2.1 Variant 1

With the Avery model 8707 load cell used in the pattern replaced by an Avery model T103 load cell.

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 Berkel Thermatronic Mk I 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.

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

The printer is not for retail counter use and must be so marked.

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## TEST PROCEDURE No 6/4D/245

Instruments should be tested in accordance with any relevant tests specified in the Inspector's Handbook.

The results shall not exceed the maximum permissible errors specified in Document 118, 2nd Edition, October 1986.

### 1. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity. The device shall be capable of both negative and positive adjustments of at least one-quarter of the zero adjustment range. With zero balance indicated apply a load of, say, 3.5% of maximum capacity, and then press the zero button; the instrument should not rezero.

# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 6/4D/245

## VARIATION No 1

Pattern: Berkel Model 681 Mk II Weighing Instrument.

Submittor: Berkel Australia Pty Ltd
19 Evans Street
Burwood VIC 3125.

### 1. Description of Variants

#### 1.1 Variant 4

Displaying mass-only (i.e. without price-computing) and with integral or remote displays, and known as a model 680CW Mk II.

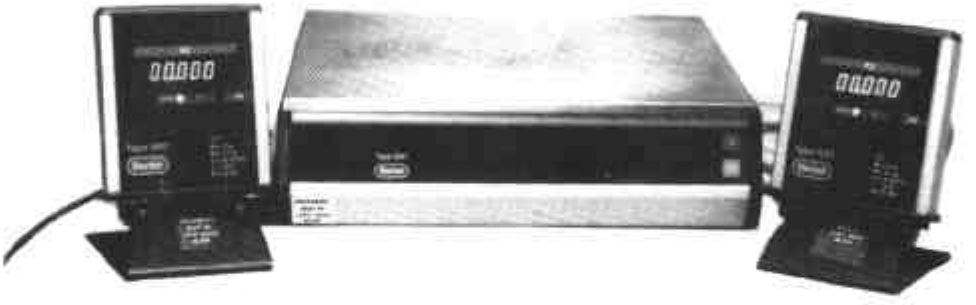
#### 1.2 Variant 5

With the weighing unit, price-computing indicators and keyboard in separate housings, and known as a model 680CP Mk II (Figure 2).

FIGURE 6/4D/245 - 1

Berkel Model 681 Mk II

Figure 6/4D/245 - 2



Berkel Model 680CP Mk II