

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

# Notification of Change Certificate of Approval No 6/4D/294 Change No 1

Issued by the Chief Metrologist under Regulation 60 of the National Measurement Regulations 1999

The following changes are made to the approval documentation for the

Avery Berkel Model M100 Weighing Instrument

Avery Berkel International		
UK		
ι		

A. In Certificate of Approval No 6/4D/294 dated 28 February 2003, the FILING ADVICE should be amended by adding the following before "Figures ...":

"Notification of Change No 1 dated 7 August 2014"

B. In Technical Schedule No 6/4D/294 dated 28 February 2003;

# (i) Clause 1.2 Tare should be amended as follows: "A semi-automatic subtractive tare device of up to the maximum capacity of the instrument may be fitted.

A non-automatic keyboard-entered pre-set subtractive tare device of up to 9.995 kg maximum capacity may be fitted.

Pre-set tare values may also be associated with PLU keys."

- (ii) Clause **1.8 Markings** should be amended by adding the following: "Maximum subtractive tare  $T = - \dots + kg \#$ 
  - # This marking is required if *T* is not equal to *Max*."
- (iii) Clause **2.1 Variant 1** should be replaced amended as follows:

"Certain other capacities as listed below:

 of 6 kg maximum capacity with a verification scale interval of 0.001 kg. A semi-automatic subtractive tare device of up to the maximum capacity of the instrument may be fitted.

A non-automatic keyboard-entered pre-set subtractive tare device of up to 6 kg maximum capacity may be fitted; and

#### Notification of Change No 1 to 6/4D/294

• of 30 kg maximum capacity with a verification scale interval of 0.005 kg. A semi-automatic subtractive tare device of up to the maximum capacity of the instrument may be fitted.

A non-automatic keyboard-entered pre-set subtractive tare device of up to 9.995 kg maximum capacity may be fitted."

(iv) Clause 2.2 Variant 2 should be amended as follows:

"As multi-interval instruments of certain other capacities as listed below:

• with a verification scale interval (e,) of 0.002 kg up to 6 kg and with a verification scale interval (e<sub>2</sub>) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg. A semi-automatic subtractive tare device of up to the maximum capacity of the instrument may be fitted.

A non-automatic keyboard-entered pre-set subtractive tare device of up to the maximum capacity of the low range may be fitted. and

• with a verification scale interval (e,) of 0.005 kg up to 15 kg and with a verification scale interval (e<sub>2</sub>) of 0.010 kg from 15 kg up to the maximum capacity of 30 kg. A semi-automatic subtractive tare device of up to the maximum capacity of the instrument may be fitted.

A non-automatic keyboard-entered pre-set subtractive tare device of up to the maximum capacity of the low range may be fitted."

NOTE: Approval 6/4D/294 was cancelled in respect of NEW instruments on 1 September 2007. No NEW instruments conforming to the pattern or variants may be submitted for verification, however instruments manufactured before the cancellation date may continue in use.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999.* 

Dr A Rawlinson

6/4D/294 21 June 2007



**Australian Government** 

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

# Cancellation Certificate of Approval No 6/4D/294

#### Issued by the Chief Metrologist under Regulation 60 of the National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in respect of the

Avery Berkel Model M100 Weighing Instrument

submitted by Avery Berkel International Foundry Lane Smethwick West Midlands B66 2LP UK

has been cancelled in respect of new instruments as from 1 September 2007, with the exception of the instruments listed below which may be verified/certified after the cancellation date.

Model M100 – serial numbers 04190501, 04130181, 04130185, 04130188, & 04130189;

Model M400 - serial numbers 05410443, 05410444 & 05410445;

Model M420 - serial number 05400739;

Model M601 - serial number 05170746; and

Model M603 – serial numbers 20491121 & 30020603.

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

aft





# **National Standards Commission**

12 Lyonpark Road, North Ryde NSW

# **Certificate of Approval**

# No 6/4D/294

#### Issued under Regulation 60 of the National Measurement Regulations 1999

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

Avery Berkel Model M100 Weighing Instrument

submitted by Avery Berkel International Foundry Lane Smethwick West Midlands B66 2LP UK.

**NOTE:** This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

Certificate of Approval No 6/4D/294

Page 2

#### CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 April 2006, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/294 and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document NSC P 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

#### DESCRIPTIVE ADVICE

Pattern: approved 9 March 2001

• An Avery Berkel model M100 single interval self-indicating price-computing weighing instrument of 15 kg maximum capacity.

Variants: approved 9 March 2001

- 1. With maximum capacities of 6 and 30 kg.
- 2. As multi-interval instruments of certain capacities.
- 3. Model M200 with column-mounted customer display.
- 4. Model M202 with column-mounted displays.

Technical Schedule No 6/4D/294 describes the pattern and variants 1 to 4.

Variants: approved 31 October 2002

- 5. Model M601.
- 6. Model M603.

Technical Schedule No 6/4D/294 Variation No 1 describes variants 5 and 6.

Certificate of Approval No 6/4D/294

Page 3

#### FILING ADVICE

Certificate of Approval No 6/4D/294 dated 24 May 2001 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/294 dated 28 February 2003 Technical Schedule No 6/4D/294 dated 24 May 2001 (incl. Test Procedure) Technical Schedule No 6/4D/294 Variation No 1 dated 28 February 2003 Figures 1 to 3 dated 24 May 2001 Figures 4 to 6 dated 28 February 2003

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

Our,

#### TECHNICAL SCHEDULE No 6/4D/294

Pattern: Avery Berkel Model M100 Weighing Instrument.

Submittor:	Avery Berkel International		
	Foundry Lane		
	Smethwick		
	West Midlands	B66 2LP	
	UK.		

#### 1. Description of Pattern

An Avery Berkel model M100 self-indicating single interval price-computing weighing instrument of 15 kg maximum capacity with a verification scale interval of 0.005 kg (Figure 1).

Instruments have unit price to \$9999.99/kg, price to \$9999.99, a price-look-up (PLU) facility, and may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

Instruments have an alphanumeric display, and an integral printer. Instruments can print tickets or (in pre-pack mode) labels to be attached to pre-packaged articles.

#### 1.1 Zero

Zero is automatically corrected to within  $\pm 0.25e$  whenever power is applied and whenever the instrument comes to rest within 0.5e of zero.

The initial zero-setting device has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

The instrument has an automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

#### 1.2 Tare

A semi-automatic and/or non-automatic keyboard-entered pre-set subtractive tare device, each of up to 9.995 kg maximum capacity may be fitted.

Pre-set tare values may also be associated with PLU keys.

#### 1.3 Display Check

A display check is initiated whenever power is applied or the TEST button is pressed.

#### 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.

#### Technical Schedule No 6/4D/294

#### 1.5 Networking

A number of instruments may be connected in a network to share common PLU data, and to accumulate and retrieve management information.

In addition, the network may be interfaced with a computer for the collection of management data, or the downloading of PLU data.

Note: The weighing and price-computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate reverification of any other weighing instrument in the network.

#### **1.6 Verification/Certification Provision**

Provision is made for a verification/certification mark to be applied.

#### 1.7 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructible label placed over the calibration adjustment access hole located on the underside of the instrument.

#### 1.8 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	
Indication of accuracy class	
Pattern approval mark for the instrument	NSC No 6/4D/294
Maximum capacity	<i>Max</i> kg *
Minimum capacity	<i>Min</i> kg *
Verification scale interval	<i>e</i> = kg *
Serial number of the instrument	

\* These markings shall also be shown near the display of the result if they are not already located there.

### 2. Description of Variants

#### 2.1 Variant 1

Certain other capacities as listed below:

- of 6 kg maximum capacity with a verification scale interval of 0.001 kg. The maximum tare capacity is 6 kg; and
- of 30 kg maximum capacity with a verification scale interval of 0.005 kg. The maximum tare capacity is 9.995 kg.

#### 2.2 Variant 2

As multi-interval instruments of certain other capacities as listed below:

- with a verification scale interval (e,) of 0.002 kg up to 6 kg and with a verification scale interval (e<sub>2</sub>) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg. The maximum tare capacity is 2 kg; and
- with a verification scale interval (e,) of 0.005 kg up to 15 kg and with a verification scale interval ( $e_2$ ) of 0.010 kg from 15 kg up to the maximum capacity of 30 kg. The maximum tare capacity is 5 kg.

Instruments are marked with the 'Maximum capacity' and with the 'Verification scale interval' for both interval ranges, in addition to the other data specified in clause **1.8 Markings**.

#### 2.3 Variant 3

The model M200 which is similar to the M100 but which has the customers' display mounted on a column (Figure 2).

#### 2.4 Variant 4

The model M202 which is similar to the M200 but which has both the customers' and vendors' displays mounted on a column, and which has provision for additional keyboard keys (Figure 3).

#### TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

#### Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, m, expressed in verification scale intervals, *e*, are:

 $\pm 0.5$  e for loads  $0 \le m \le 500$ ;  $\pm 1.0$  e for loads  $500 < m \le 2000$ ; and  $\pm 1.5$  e for loads  $2000 < m \le 10000$ .

For multi-interval instruments with verification scale intervals of  $e_1, e_2, ..., apply e_1$  for zero adjustment, and for maximum permissible errors apply  $e_1, e_2, ..., as$  applicable for the load.

#### TECHNICAL SCHEDULE No 6/4D/294

#### VARIATION No 1

Pattern: Avery Berkel Model M100 Weighing Instrument

Submittor: Avery Berkel International Foundry Lane Smethwick West Midlands B66 2LP UK

#### 1. Description of Variants

#### 1.1 Variant 5

An Avery Berkel model M601 self-indicating price-computing weighing instrument which is similar to the model M100 (the pattern and variants 1 and 2) but has the weighing unit separate to the indicator/printer module (Figure 4).

The load receptor has maximum dimensions of 280 mm x 380 mm.

The model M601 may also be incorporated into a model WWS3 wrapping unit (Figure 5).

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless they are fitted with a customer display.

#### 1.2 Variant 6

An Avery Berkel model M603 self-indicating price-computing weighing instrument which is similar to the model M601 (variant 5) but which is incorporated into various wrapping units (Figure 6).

The load receptors of the resulting instruments shall have maximum dimensions of 280 mm x 380 mm.

Instruments shall be non-automatic weighing instruments with labels applied manually, although the wrapping operations may be automatic.

Note that the maximum weight of packages that can be wrapped may be less than the maximum weighing capacity.

6/4D/294 24 May 2001

# FIGURE 6/4D/294 - 1



Avery Berkel Model M100 Weighing Instrument

6/4D/294 24 May 2001

# FIGURE 6/4D/294 - 2



Avery Berkel Model M200 - Customers' Side

6/4D/294 24 May 2001

# FIGURE 6/4D/294 - 3



Avery Berkel Model M202 Weighing Instrument

# FIGURE 6/4D/294 - 4



Avery Berkel Model M601 Weighing Instrument

# FIGURE 6/4D/294 - 5



Avery Berkel Model M601 in a Model WWS3 Wrapping Unit

# FIGURE 6/4D/294 - 6



Typical Avery Berkel Model M603 Weighing Instruments