



Australian Government
Department of Industry,
Innovation and Science

National Measurement Institute

Cancellation Certificate of Approval NMI 6/4D/316

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 MP100 Weighing Instrument

submitted by Avery Berkel (a Division of ITW Limited)
Foundry Lane
Smethwick
West Midlands B66 2LP
UK

has been cancelled in respect of new instruments as from 1 March 2016.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 6 provisionally approved – interim certificate issued	30/10/03
1	Pattern & variants 1 to 6 approved – interim certificate issued	17/08/04
2	Pattern & variants 1 to 6 approved – certificate issued	27/09/04
3	Pattern & variants 1 & 2 amended (tare) – notification of change issued	27/01/05
4	Pattern & variants 1 to 6 cancelled – cancellation certificate issued	12/02/16

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

A handwritten signature in black ink, appearing to read 'Dr A Rawlinson'.

Dr A Rawlinson



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

No 6/4D/316

Issued by the Chief Metrologist 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 MP100 Weighing Instrument

submitted by Avery Berkel (a Division of ITW Limited)
(formerly Avery Weigh-Tronix)
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.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 November 2013, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4D/316' and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) 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 document NMI P 106.

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

Special Condition of Approval:

Certain aspects of this instrument (in particular label and ticket formats) are able to be configured by the user. Whilst NMI believes that acceptable label and ticket formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 30 October 2003
approved 17 August 2004

- An Avery Berkel model MP100 class $\text{\textcircled{III}}$ non-automatic single interval self-indicating price-computing weighing instrument of 6 kg maximum capacity.

Variants: approved 17 August 2004

1. As single interval instruments of certain other capacities.
2. As multi-interval instruments of certain capacities.
3. Model MP101 without a customer display.
4. Model MP200 with column-mounted customer display.
5. Model MP202 with column-mounted displays.
6. Model MP300 with column-mounted self-service display.

Technical Schedule No 6/4D/316 describes the pattern and variants 1 to 6.

Variant: approved 9 February 2010

7. With an alternative LCD monitor.

Technical Schedule No 6/4D/316 Variation No 1 describes variant 7.

FILING ADVICE

Certificate of Approval No 6/4D/316 dated 27 September 2004, is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4D/316 dated 11 February 2010
Technical Schedule No 6/4D/316 dated 27 September 2004 (incl. Test Procedure)
Technical Schedule No 6/4D/316 Variation No 1 dated 11 February 2010 (incl. Notification of Change)
Notification of Change No 1 dated 27 January 2005
Figures 1 to 5 dated 27 September 2004
Figure 6 dated 11 February 2010

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



TECHNICAL SCHEDULE No 6/4D/316

Pattern: Avery Berkel Model MP100 Weighing Instrument

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

1. Description of Pattern

An Avery Berkel model MP100 self-indicating single interval price-computing weighing instrument (Figure 1) of 6 kg maximum capacity with a verification scale interval of 0.001 kg.

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 (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

Instruments have a touch screen PC-based display and an integral printer. Instruments can print tickets or labels.

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 of the pattern 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 3 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.

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 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 (Figure 2).

1.8 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Avery Berkel Ltd
Indication of accuracy class	Ⓜ
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Maximum subtractive tare	T = - kg
Serial number of the instrument
Pattern approval mark for the indicator	NSC 6/4D/316
Pattern approval mark for other components

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

2. Description of Variants

2.1 Variant 1

As single interval instruments of certain capacities as listed below:

- of 15 kg maximum capacity with a verification scale interval of 0.005 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 capacities as listed below:

- with a verification scale interval (e_1) of 0.001 kg up to 3 kg and with a verification scale interval (e_2) of 0.002 kg from 3 kg up to the maximum capacity of 6 kg. The maximum tare capacity is 1 kg;
- with a verification scale interval (e_1) of 0.002 kg up to 6 kg and with a verification scale interval (e_2) 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_1) of 0.005 kg up to 15 kg and with a verification scale interval (e_2) of 0.01 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 MP 101 which is similar to the MP 100 (the pattern) but which does not have a customers' display and is arranged as a self-service instrument.

In this self-service arrangement, stored tare values may be associated with product look up (PLU) keys. However the use of stored tare values associated with PLU keys shall be at the discretion of the applicable trade measurement authority, who may require various operational instructions and notes regarding the appropriate container for each product.

Other tare facilities and operator keys shall be disabled, other than the 'PRINT' key.

2.4 Variant 4

The model MP200 which is similar to the MP100 but which has the customers' display mounted on a column (Figure 3).

2.5 Variant 5

The model MP202 which is similar to the MP200 but which has both the customers' and vendors' displays mounted on a column, and which has provision for additional keyboard keys (Figure 4).

2.6 Variant 6

The model MP300 which is similar to the MP 101 (variant 3) but which has the self-service touch screen display mounted on a column (Figure 5).

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 $0 \leq m \leq 500$;
- $\pm 1.0 e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5 e$ for loads $2\,000 < m \leq 10\,000$.

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

TECHNICAL SCHEDULE No 6/4D/316

VARIATION No 1

Pattern: Avery Berkel Model MP100 Weighing Instrument

Submittor: Avery Berkel (a Division of ITW Limited)
Foundry Lane
Smethwick
West Midlands B66 2LP UK

1. Description of Variant 7

The pattern or variants using an alternative liquid crystal display (LCD) monitor as the customer display; an example is shown in Figure 6. The presentation of information shall be as for the pattern and variants, however additional information (e.g. marketing information) may be provided.

The display may be located separately from the main instrument housing (i.e. need not be column-mounted), but shall be clearly visible to the customer and adjacent to the instrument platter (such that no confusion can arise regarding which instrument the display relates to).

Note: A similar LCD monitor may also be provided in addition to the customer display described elsewhere (i.e. as an auxiliary or peripheral device as described for the pattern).

NOTIFICATION OF CHANGE

In Technical Schedule No 6/4D/316 dated 27 September 2004, the reference to the name of the submitter should be amended to read:

“Avery Berkel (a Division of ITW Limited)”

NOTE: The date at which this approval becomes due for review has been amended following completion of a review.



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Notification of Change
Certificate of Approval No 6/4D/316
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 MP100 Weighing Instrument

submitted by Avery Weigh-Tronix
(formerly Avery Berkel Ltd
Foundry Lane
Smethwick
West Midlands B66 2LP UK.

1. In Certificate of Approval No 6/4D/316 dated 27 September 2004 and its Technical Schedule, all references to the submitter should be amended to read:
"Avery Weigh-Tronix"
2. In Technical Schedule No 6/4D/316 dated 27 September 2004:
 - (i) Clause **1.2 Tare** should be amended by removing '**3 kg**';
 - (ii) Clause **2.1 Variant 1**, the two bullet points should be amended by deleting the sentences referring to the tare capacity; and
 - (iii) Clause **2.2 Variant 2**, the three bullet points should be amended by changing the tare capacities to read '**2.999 kg**', '**5.998 kg**', and '**14.995 kg**', respectively.

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

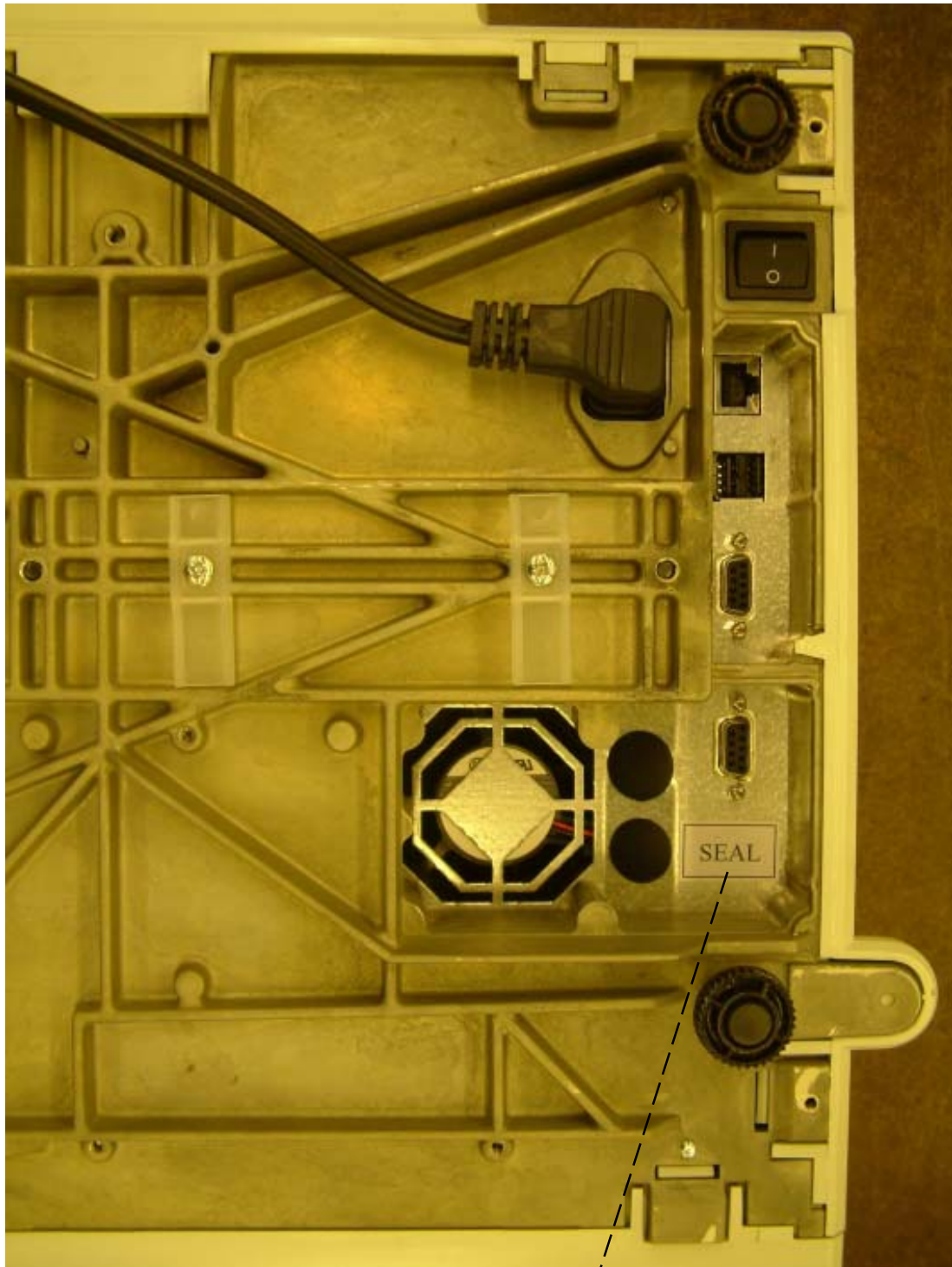
A handwritten signature in black ink, appearing to be 'J. H. T.', is located in the bottom right corner of the page.

FIGURE 6/4D/316 – 1



Avery Berkel Model MP100 Weighing Instrument

FIGURE 6/4D/316 – 2



Typical Sealing Label

Typical Sealing (for the pattern and variants 1 to 6)

FIGURE 6/4D/316 – 3



Avery Berkel Model MP200 Weighing Instrument

6/4D/316
27 September 2004

FIGURE 6/4D/316 – 4



Avery Berkel Model MP202 Weighing Instrument

FIGURE 6/4D/316 – 5



Avery Berkel Model MP300 Weighing Instrument

FIGURE 6/4D/316 – 6



Typical Alternative Customer Display – Variant 7