



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval No 6/9C/96B

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 3750 Weighing Instrument

submitted by Avery Weigh-Tronix
 Foundry Lane
 Smethwick
 West Midlands B662LP UNITED KINGDOM

has been cancelled in respect of new instruments as from 1 May 2014.

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 'A Rawlinson', with a horizontal line underneath.

Dr A Rawlinson



National Standards Commission

Certificate of Approval

No 6/9C/96B

Issued under Regulation 63
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 3750 Weighing Instrument



submitted by **Avery Berkel International**
12-38 Talavera Road
North Ryde NSW 2113.

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.

CONDITIONS OF APPROVAL



This approval becomes subject to review on 1 February 2004, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/96B 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 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.

The pattern as approved herein or with substitute load cells and/or indicator, and in other capacities, or with different platform sizes, shall comply with General Certificate No 6B/0.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

DESCRIPTIVE ADVICE

Pattern: approved 13 January 1999



- An Avery Berkel model 3750 weighing instrument of 300 kg maximum capacity. May also be known as a model H400.

Variants: approved 13 January 1999

1. Model 4750 or H500 or J300 of 3000 kg maximum capacity.
2. In certain other capacities.
3. Hopper instruments in certain other capacities.

Technical Schedule No 6/9C/96B describes the pattern and variants 1 to 3.

Variants: approved 17 February 2000

4. With up to 4000 verification scale intervals.

Technical Schedule No 6/9C/96B Variation No 1 describes variant 4.

FILING ADVICE

Certificate of Approval No 6/9C/96B dated 11 May 1999 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/9C/96B dated 6 March 2000
Technical Schedule No 6/9C/96B dated 11 May 1999 (incl. Test
Procedure)

Technical Schedule No 6/9C/96B Variation No 1 dated 6 March 2000
Figures 1 to 3 dated 11 May 1999



Signed and sealed by a person authorised under Regulation 63 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, consisting of a large initial 'J' followed by a cursive name and a long horizontal flourish.

TECHNICAL SCHEDULE No 6/9C/96B


Pattern: Avery Berkel Model 3750 Weighing Instrument.



Submitter: Avery Berkel International
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Pattern



An Avery Berkel model 3750 self-indicating platform weighing instrument (Figure 1) of 300 kg maximum capacity and approved for use with up to 3000 verification scale intervals. May also be known as a model H400. 

1.1 Basework

The model 3750 basework (Figure 1) has the four load cells directly bolted to the load receptor (Figure 2).

The load receptor is 1200 x 1200 mm.

If approach ramps are provided, care shall be taken to ensure that these do not interfere with the platform.

1.2 Load Cells



Four Avery Berkel model 8713 load cells of 250 kg capacity are used.

The load cells are also described in the approval documentation of NSC approval No S203A.

1.3 Indicator



An Avery Berkel model L225 digital indicator is used.

The indicator is also described in the approval documentation of NSC approval No S311.

1.4 Levelling

Where instruments are liable to be tilted (i.e. they are not installed in a permanently fixed location) they are provided with adjustable feet and a level indicator. Adjacent to the level indicator is a notice stating INSTRUMENT MUST BE LEVEL WHEN IN USE, or similar wording.

1.5 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

1.6 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed as described in the approval documentation for the indicator used.

1.7 Markings

Instruments are marked with the following, in the form shown at right:

Manufacturer's mark, or name written in full	Avery Berkel
Indication of accuracy class	Ⓜ
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Serial number of the instrument
Serial number of the load cells #
Pattern approval mark for the instrument	NSC No 6/9C/96B
Pattern approval mark for the indicator	NSC No S....
Pattern approval mark for the load cells	NSC No S....

* These markings shall also be repeated adjacent to each reading face, if they are not already located there.

Alternatively, these may be marked adjacent to the verification mark.

2. Description of Variants

2.1 Variant 1

Model 4750 or H500 or J300 of 3000 kg maximum capacity.

2.2 Variant 2

The pattern and variant 1 in other capacities as listed below:

- in capacities from 100 to 1499 kg; and
- in capacities from 1500 to 14 999 kg.

2.3 Variant 3

Hopper weighing instruments in capacities from 1500 to 14 999 kg. Figure 3 shows typical hopper load cell mounting.

Instruments are either:

- (a) fitted with 3, 4 or 5 Commission-approved load cells (arranged symmetrically to ensure even loading of each cell) where the hopper is a vertical cylindrical or tank-type load receptor directly supported by the load cells; or

- (b) fitted with 4 Commission-approved load cells where the hopper is a non-vertical cylindrical, or other hopper-type load receptor.

Note: Instruments with more than 4 load cells may be acceptable if prior written agreement from the Commission is obtained.

In addition suitable provision must be made for the application of suitable verified masses to the instrument as required for verification and certification purposes. It may be necessary for such masses to be incorporated within the design of the instrument.

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.


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:

- $\pm 0.5e$ for loads $0 \leq m \leq 500$;
- $\pm 1.0e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5e$ for loads $2\,000 < m \leq 10\,000$.

TECHNICAL SCHEDULE No 6/9C/96B
VARIATION No 1

Pattern: Avery Berkel Model 3750 Weighing Instrument.

 **Submittor:** Avery Berkel International
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Variant 4

The pattern or variants approved for use with up to 4000 verification scale intervals (VSI), where suitable Commission-approved load cells and indicator are used in accordance with NSC General Certificate of Approval No 6B/0.

Instruments used with more than 3000 VSI shall be provided with wind protection in accordance with clause **4. Wind Effects** of General Certificate No 6B/0.



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Notification of Change
Certificate of Approval No 6/9C/96B
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 3750 Weighing Instrument

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

1. In Certificate of Approval No 6/9C/96B dated 6 March 2000, the Condition of Approval referring to the review of the approval should be amended to read:
"This approval becomes subject to review on 1 February 2009, and then every 5 years thereafter."
2. In Certificate of Approval No 6/9C/96B dated 6 March 2000 and its Technical Schedule Variation No 1, and in Technical Schedule 6/9C/96B dated 11 May 1999, all references to the submitter should be amended to read:

"Avery Weigh-Tronix
Foundry Lane, Smethwick
West Midlands B66 2LP UK."

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. G. T.', located at the bottom right of the page.



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 6/9C/96B
Change No 2

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 3750 Weighing Instrument

submitted by Avery Weigh-Tronix
Foundry Lane
Smethwick
West Midlands B662LP UNITED KINGDOM.

- A. In Certificate of Approval No 6/9C/96B dated 6 March 2000:
1. The Condition of Approval referring to the review of the approval should be amended to read:

“This approval becomes subject to review on 1 February **2014**, and then every 5 years thereafter.”

Note: The review date was previously amended by Notification of Change No 1 dated 17 November 2004.
 2. The description of the pattern given in the DESCRIPTIVE ADVICE should be amended as follows:
 - (i) amended to read, in part;

“... of **600** kg maximum capacity ...”
 - (ii) by adding the following:

“May also be known as ‘Avery Weigh-Tronix’ instruments of the same models.”
 3. The FILING ADVICE should be amended by adding the following:

“Notification of Change No 2 dated 28 July 2010”

- B. In Technical Schedule dated 11 May 1999:
1. Clause **1. Description of Pattern** should be amended as follows:
 - (i) amended to read, in part;
“... of **600** kg maximum capacity ...”
 - (ii) by adding the following:
“May also be known as ‘Avery Weigh-Tronix’ instruments of the same models.”
 2. Clause **1.2 Load cells** should be amended to read:
“Four Avery Berkel model **T204** load cells of **750** kg capacity are used.
The load cells are also described in the approval documentation of approval **NSC S364.**”
 3. Clause **1.3 Indicator** should be amended to read:
“An Avery **Weigh-Tronix** model **E1010** digital indicator is used.
The indicator is also described in the approval documentation of approval **NMI S457.**”

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

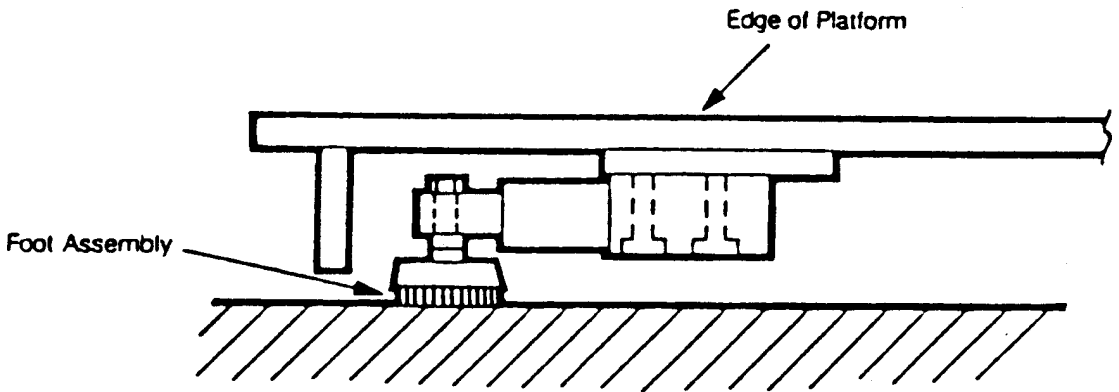


FIGURE 6/9C/96B - 1



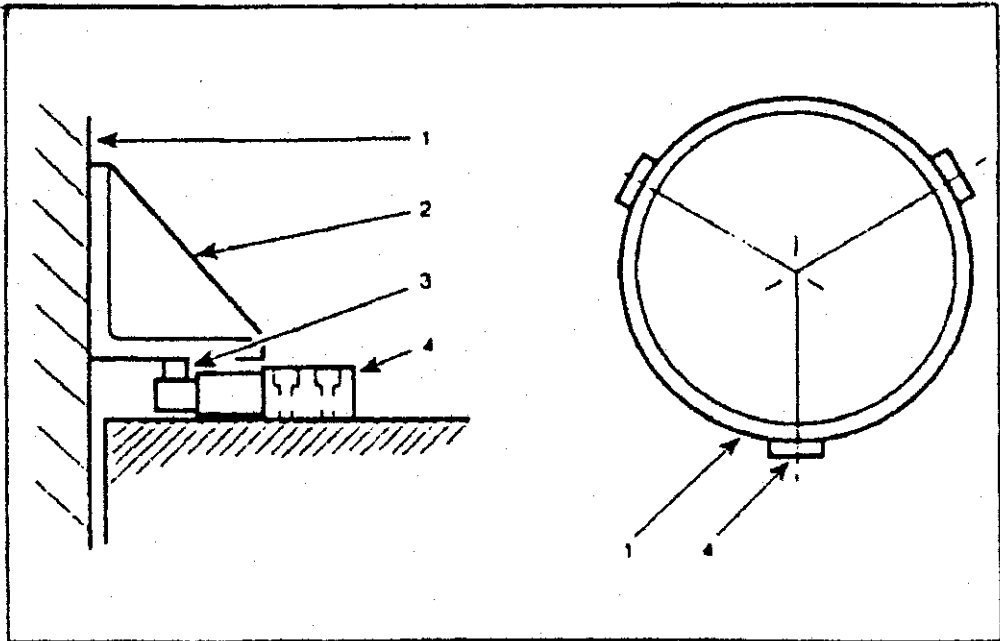
Avery Berkel Model 3750 Basework

FIGURE 6/9C/96B - 2



Showing Load Cell Mounting - Model 3750

FIGURE 6/9C/96B - 3



1. Tank or hopper
2. Tank support bracket
3. Load button insert
4. Load cell

Typical Load Cell Mounting - Variant 3