



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval
No 6/9C/260

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 HL 120 Weighing Instrument

submitted by Avery Weigh-Tronix
Foundry Lane
Smethwick
West Midlands B66 2LP UK

has been cancelled in respect of new instruments as from 1 October 2011.

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, consisting of a series of loops and a long horizontal stroke at the bottom.



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

Certificate of Approval

No 6/9C/260

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 HL 120 Weighing Instrument

submitted by Avery **Berkel International**
now of 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.

CONDITIONS OF APPROVAL

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

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/260 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 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.

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

DESCRIPTIVE ADVICE

Pattern: approved 30 March 1999

- An Avery Berkel model HL 120 weighing instrument of 300 kg maximum capacity.

Variants: approved 12 April 1999

1. Certain other capacities.

Technical Schedule No 6/9C/260 describes the pattern and variant 1.

Variants: approved 17 February 2003

2. An Avery Berkel model HL122 weighing instrument.

Technical Schedule No 6/9C/260 Variation No 1 describes variant 2.

FILING ADVICE

Certificate of Approval No 6/9C/260 dated 7 June 1999 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:


Certificate of Approval No 6/9C/260 dated 26 September 2003
Technical Schedule No 6/9C/260 dated 7 June 1999 (incl. Test Procedure)
Technical Schedule No 6/9C/260 Variation No 1 dated 26 September 2003
(incl. Notification of Change)
Figures 1 to 3 dated 7 June 1999
Figures 4 and 5 dated 26 September 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.



TECHNICAL SCHEDULE No 6/9C/260

Pattern: Avery Berkel Model HL 120 Weighing Instrument.

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

1. Description of Pattern

An Avery Berkel model HL 120 self-indicating platform weighing instrument (Figure 1) of 300 kg maximum capacity with a verification scale interval of 0.1 kg.

1.1 Basework

The model HL 120 basework (Figure 1) has the load receptor directly supported by a single load cell. The load receptor has maximum nominal dimensions of 460 x 600 mm.

1.2 Load Cell

A Minebea (or Excell) model CB14-300K or C2L1-300K load cell is used (Figures 2 and 3).

1.3 Indicator

An Avery Berkel model HL 120 digital indicator is used.

1.3.1 Zero

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

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

1.3.2 Tare

A semi-automatic and/or a preset subtractive taring device, each having a capacity of up to the maximum capacity of the instrument, may be fitted.

1.3.3 Display Check

A display check is initiated whenever power is applied.

1.4 Verification/Certification Provision

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

1.5 Sealing Provision

Provision is made for the calibration adjustments to be sealed by placing destructible labels over the join between the front and rear casings at the top and bottom of the indicator.

1.6 Levelling

Instruments 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.

1.7 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
Pattern approval mark for the instrument	NSC No 6/9C/260

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

2. Description of Variant 1

Other capacities as listed below:

- (i) Of 60 kg maximum capacity with a verification scale interval of 0.02 kg.
A Minebea (or Excell) model CB14-100K or C2L1-100K load cell is used.
The load receptor has maximum nominal dimensions of 370 x 520 mm.
- (ii) Of 150 kg maximum capacity with a verification scale interval of 0.05 kg.
A Minebea (or Excell) model CB14-150K or C2L1-150K load cell is used.
The load receptor has maximum nominal dimensions of 460 x 600 mm.

Figure 1 shows instruments with both the small (370 x 520 mm) and the large (460 x 600 mm) baseworks.

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/260

VARIATION No 1

Pattern: Avery Berkel Model HL 120 Weighing Instrument

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



1. Description of Variant 2

The Avery Berkel model HL122 instrument which uses the same baseworks as described in the pattern and variant 1, however it uses the model HL122 indicator.

The model HL122 indicator (Figure 4) has similar features to the HL120, but has an output socket for the connection of auxiliary or peripheral equipment, and a facility for set-point relays.

1.1 Software

Instruments with a verification scale interval of 0.02, 0.2 etc. or 0.05, 0.5 etc. must have software version 041. The software version used can be confirmed by the following:

- Switch the instrument off.
- Hold the TARE key down.
- Switch the instrument on.
- Hold the TARE key down during the display check sequence and until a three digit number appears. This number represents the software version.
- At this point the TARE key may be released and the instrument switched off and on again.

1.2 Sealing

Access to the calibration adjustment is prevented by setting a switch (located below a small access cover on the right side of the indicator) to the locked position. This is sealed by placing a destructible adhesive label over the access cover, and also over an access screw in the battery compartment of the indicator (Figure 5).

It is important to ensure that the switch is in the locked position. This may be checked (without removing the sealing) by the following procedure:

- Turn the instrument off and then on using the switch on the left side of the indicator.
- Whilst the power on test sequence is displayed, press and hold the ZERO key until the display shows "02001".

- Release the ZERO key.
- "F0" is displayed – press the enter (↵) key.
- If the calibration switch is in the locked position the display will show "02001". Switch the instrument off and then on to return to normal operating mode.
- If the calibration is not in the locked position the display will show "Zero" (the instrument is not correctly sealed). Switch the instrument off and then on to return to normal operating mode.

NOTIFICATION OF CHANGE

In Technical Schedule No 6/4C/97 dated 7 June 1999, the address of the submittor should be amended to read:

Foundry Lane
Smethwick
West Midlands B66 2LP UK



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Notification of Change
Certificate of Approval No 6/9C/260
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 HL 120 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/260 dated 26 September 2003, the Condition of Approval referring to the review of the approval should be amended to read:
"This approval becomes subject to review on 1 April 2009, and then every 5 years thereafter."
2. In Certificate of Approval No 6/9C/260 dated 26 September 2003 and its Technical Schedule Variation No 1, and in Technical Schedule 6/9C/260 dated 7 June 1999, all references to the submitter should be amended to read:

"Avery Weigh-Tronix"

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

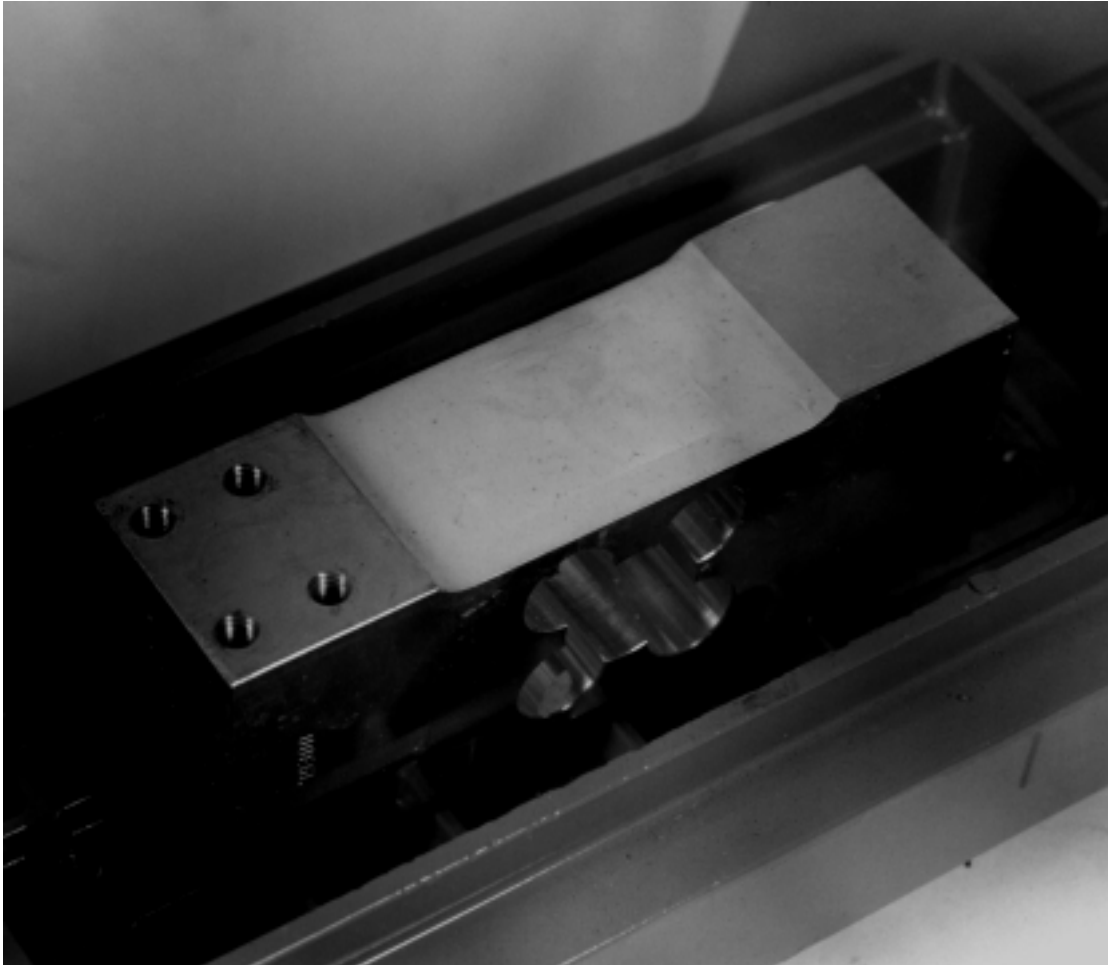
A handwritten signature in black ink, appearing to be 'J. H. T.', located at the bottom right of the page.

FIGURE 6/9C/260 - 1



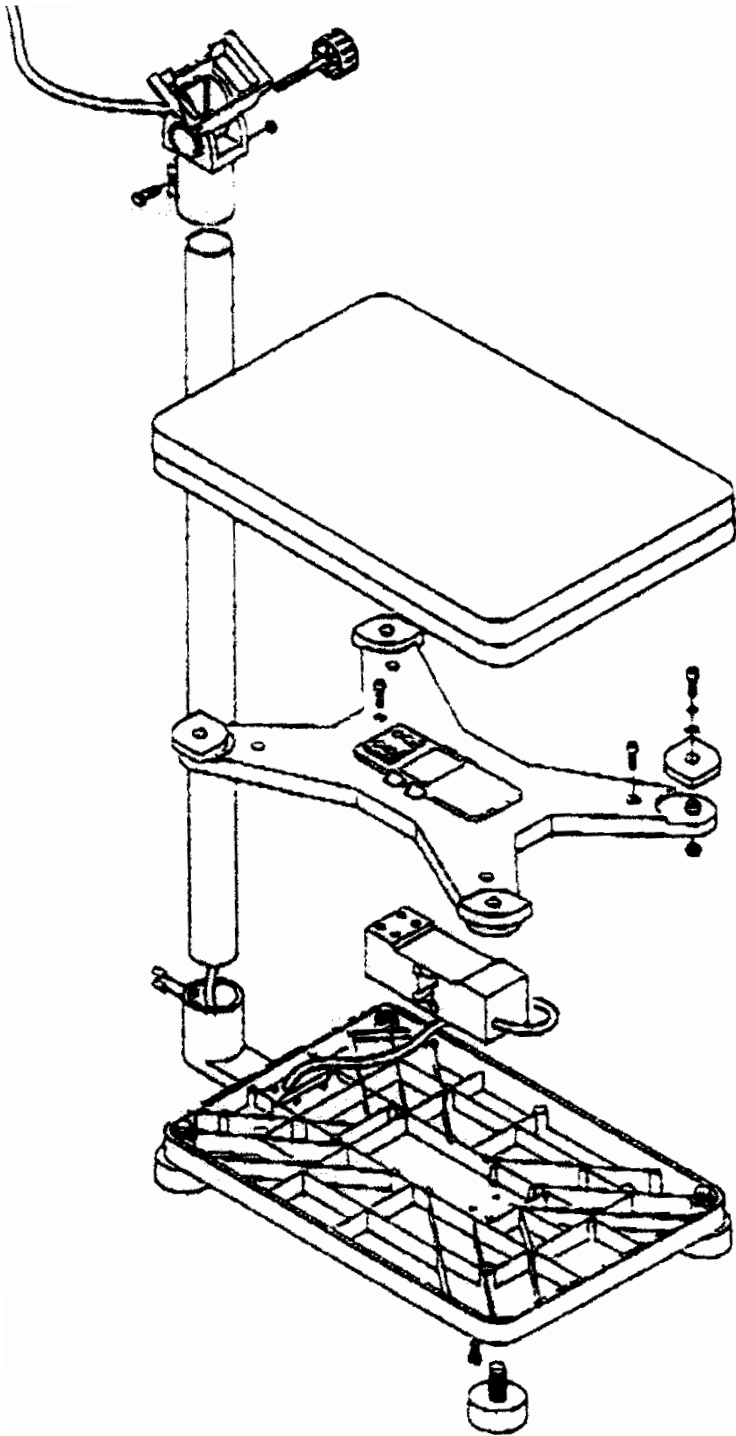
Avery Berkel Model HL 120 Instruments
With Both Basework Sizes Shown

FIGURE 6/9C/260 - 2



Showing Load Cell

FIGURE 6/9C/260 - 3



Showing Basework Assembly and Load Cell Mounting

FIGURE 6/9C/260 – 4



Avery Berkel Model HL122 Indicator

6/9C/260
26 September 2003

FIGURE 6/9C/260 – 5



Sealing of Avery Berkel Model HL122 Indicator