6/14G/3
13 December 2010

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

# Cancellation

# Certificate of Approval No 6/14G/3

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 B806 Automatic Catchweighing 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 February 2011.

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

# National Standards Commission

## Certificate of Approval

## No 6/14G/3

Issued under Regulation 9
of the
National Measurement (Patterns of Measuring Instruments) Regulations

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

Avery Berkel Model B806 Automatic Catchweighing 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.

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## CONDITIONS OF APPROVAL

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

Instruments purporting to comply with this approval shall be marked NSC No 6/14G/3 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.

## DESCRIPTIVE ADVICE

**Pattern:** approved 15 February 1999

- An Avery Berkel model B806 multi-interval Class Y(a) automatic catchweighing instrument of 8 kg maximum capacity.

**Variant:** approved 15 February 1999

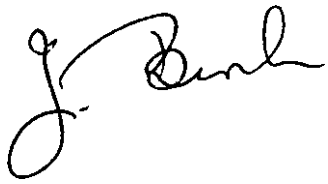
1. Model B901 instrument which is fitted in an alternative conveyor system.

Technical Schedule No 6/14G/3 describes the pattern and variant 1.

## FILING ADVICE

Certificate of Approval No 6/14G/3 dated 24 May 1999
Technical Schedule No 6/14G/3 dated 24 May 1999 (incl. Test Procedure)
Figures 1 to 7 dated 24 May 1999

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.



# TECHNICAL SCHEDULE No 6/14G/3

**Pattern:** Avery Berkel Model B806 Automatic Catchweighing Instrument.

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

## 1. Description of Pattern

An Avery Berkel model B806 catchweigher (Figure 1) which is approved for use to weigh objects statically.

### 1.1 Details

The instrument is a multi-interval Class Y(a) automatic catchweighing instrument, with a verification scale interval ($e_1$) of 0.001 kg up to 3 kg, with a verification scale interval ($e_2$) of 0.002 kg from 3 kg up to 6 kg, and with a verification scale interval ($e_3$) of 0.005 kg from 6 kg up to the maximum capacity of 8 kg. Instruments have a minimum capacity of 0.020 kg. The instrument operates statically with the package stopping on the platform during weighing. The maximum conveyor speed is 0.93 m/s and the minimum conveyor speed is 0.66 m/s.

### 1.2 Operation

A number of different parameters, such as ticket format, conveyor speed and unit price are programmed into the instrument using the terminal and are stored as “Commodity Numbers”. When a commodity number is entered and run, the conveyors start up and the instrument is ready to weigh. An object to be weighed is placed or rolled onto the infeed conveyor and is then pulled along onto the weighing receptor conveyor which stops for the object to be weighed. After weighing, the object is pulled onto the outfeed conveyor where a ticket is printed then applied to the object by a plunger.

### 1.3 Weighing System

Avery Berkel model B806 weighing system has a roller conveyor-type load receptor having maximum nominal dimensions of 370 x 385 mm.

The pattern comprises:

(a) a model 70724-132 terminal/indicator (Figure 2);

(b) a model 70724-134 weighing unit and conveyor system.

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(c) a model 70724-129 printhead (Figure 3) which comprises a thermal printer, a roll of labels and a plunger used to apply the label to the weighed object.

### 1.4 Terminal/indicator

The model 70724-132 terminal/indicator (Figure 2) is used to control the system and store data such as system parameters (e.g. conveyor speed and ticket format). It displays the weight (in kg).

Interfacing the instrument with auxiliary and/or peripheral devices is done via a number of ports located on the underside of the terminal/indicator.

### 1.5 Weighing Unit and Conveyor System

The model 70724-134 weighing unit and conveyor system is used. The weighing unit contains a load cell and electronics which supply and measure voltages to and from the load cell. An HBM model EF5 load cell of 13 kg maximum capacity is used mounted in a parallelogram mechanism as shown in Figure 4.

The conveyor system comprises separate infeed, outfeed and load receptor conveyors and an associated electric motor and drive arrangement for each conveyor. A number of optical sensors are also located along the infeed and weighing receptor conveyors.

### 1.6 Markings

Instruments carry the following markings, in the form shown at right:

| | |
|---|---|
| Manufacturer's mark, or name written in full | Avery Berkel International |
| Model designation | ..... |
| Serial number | ..... |
| Year of manufacture | ..... |
| Accuracy class | Y(a) |
| Pattern approval mark | NSC No 6/14G/3 |
| Maximum capacity | *Max* …. kg |
| Minimum capacity | *Min* …. kg |
| Verification scale interval | *e =* …. kg |
| Maximum conveyor speed | …. m/s |
| Minimum conveyor speed | …. m/s |

### 1.7 Verification/Certification Provision

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

### 1.8 Sealing Provision

Provision is made for the calibration adjustments to be sealed as shown in Figure 5 and by means of a destructible label over the calibration access hole shown in Figure 6.

### 1.9 Tare

A semi-automatic subtractive tare device and/or a keyboard-entered pre-set subtractive taring device each of up to 2 kg maximum capacity may be fitted.

## 2. Description of Variant 1

A model B901 multi-interval Class Y(a) automatic catchweighing instrument (Figure 7) which is arranged in a modular construction for integration into a wrapping system.

TEST PROCEDURE

**Non-automatic Operation**

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

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

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.

- With the conveyor switched off, carry out a load test and an eccentricity test.

**Automatic Operation**

The maximum permissible errors for class Y(a) automatic catchweighing instrument for increasing and decreasing loads on initial verification/certification for loads, m, expressed in verification scale intervals, e, are:

±1.5e for loads $0 \leq m \leq 500$;
±2e for loads $500 < m \leq 2\,000$; and
±2.5e for loads $2\,000 < m \leq 10\,000$.

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.

- For multi-interval instruments, prepare four test objects, having test load values as follows:

  (a) test load values close to minimum capacity and to maximum capacity; and

  (b) test load values at two critical points between minimum and maximum capacities, such as just below range changes or just below error limit changes.

  With the conveyors running, apply each mass separately at least ten times. The masses of the test objects shall be measured on a verified, non-automatic weighing instrument with an uncertainty equal to or better than $0.5(e_1, e_2)$ as applicable.

- The tests shall be conducted at the maximum conveyor speed marked on the instrument.
- Vary the position of the test objects across the receptor.

TESTS - Use the following tests to determine compliance with the maximum permissible errors - n is a whole number and e equals $e_1$, $e_2$, ... as applicable for the load.

TEST 1 – Maximum permissible error = ±1.5e

Test load = ne

| | | |
|---|---|---|
| Readings: | A: (n - 2)e | reject |
| | B: (n + 2)e | reject |
| | A < Readings < B | accept |

TEST 2 – Maximum permissible error = ±2e

Test load = (n + 0.5)e

| | | |
|---|---|---|
| Readings: | A: (n - 2)e | reject |
| | B: (n + 3)e | reject |
| | A < Readings < B | accept |

TEST 3 – Maximum permissible error = ±2.5e

Test load = ne

| | | |
|---|---|---|
| Readings: | A: (n - 3)e | reject |
| | B: (n + 3)e | reject |
| | A < Readings < B | accept |

# National Standards Commission

## Notification of Change

## Certificate of Approval No 6/14G/3

## Change No 1

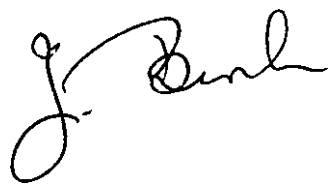
The following change is made to the approval documentation for the

Avery Berkel Model B806 Automatic Catchweighing Instrument

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

In Technical Schedule No 6/14G/3 dated 24 May 1999, pages 3 and 4 are replaced by the attached pages, which include a new clause (**1.9 Tare**) and an amended Test Procedure.

Signed and sealed by a person authorised under Regulation 63 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.



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6/14G/3
21 March 2005

Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

# Notification of Change
# Certificate of Approval No 6/14G/3
# 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 B806 Automatic Catchweighing Instrument

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

1. In Certificate of Approval No 6/14G/3 dated 24 May 1999, the Condition of Approval referring to the review of the approval should be amended to read:

   "This approval becomes subject to review on 1 March 2010, and then every 5 years thereafter."

2. In Certificate of Approval No 6/14G/3 dated 24 May 1999 and its Technical Schedule, all references to the submittor 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.

FIGURE 6/14G/3 - 1

Avery Berkel Model B806 Automatic Catchweighing Instrument

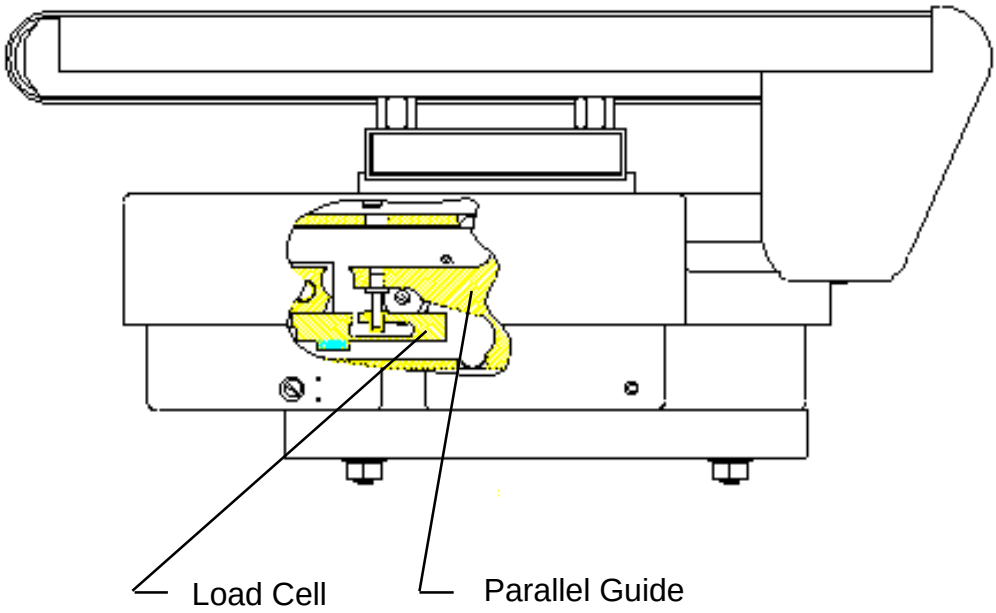
FIGURE 6/14G/3 - 2


Model 70724-132 Terminal/indicator

FIGURE 6/14G/3 - 3

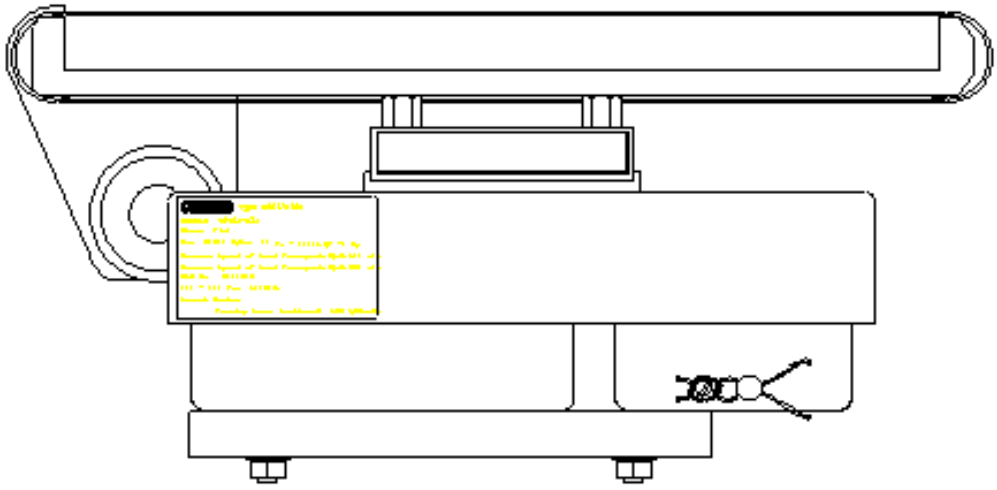
Model 70724-129 Printhead

FIGURE 6/14G/3 - 4



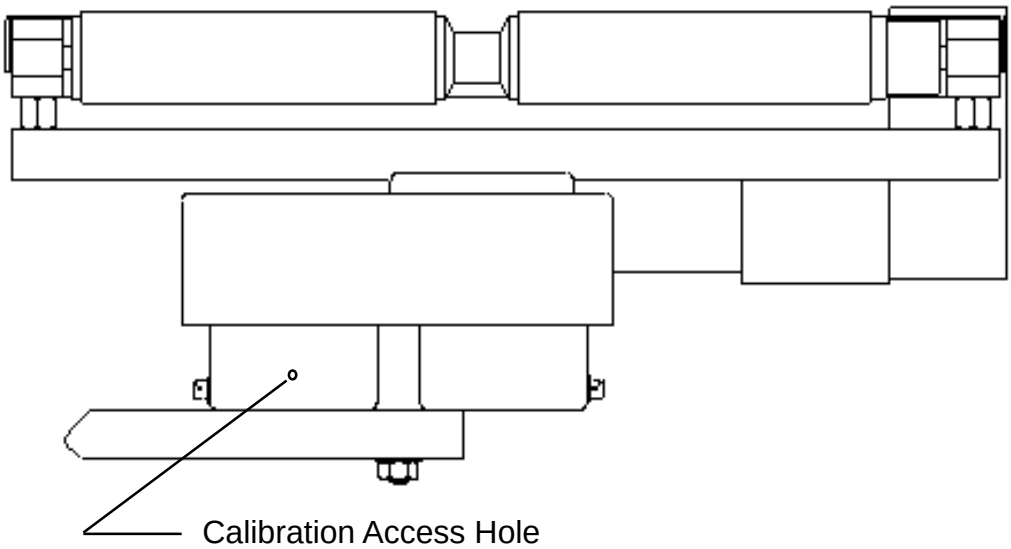

Showing Load Cell Mounting

FIGURE 6/14G/3 - 5



Showing Sealing

FIGURE 6/14G/3 - 6




Showing Calibration Access Hole (to be sealed)

FIGURE 6/14G/3 - 7

Model B901