

National Standards Commission



Certificate of Approval

No 6/10B/30B

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

GEC Avery Model 5451 Weighing Instrument

submitted by GEC Avery Australia Ltd
12 Rachael Close
Silverwater NSW 2141.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/9/94.
This approval expires in respect of new instruments on 1/9/95.

Instruments purporting to comply with this approval shall be marked
NSC No 6/10B/30B 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.

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

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.

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

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

DESCRIPTIVE ADVICE

Pattern: approved 31/8/89

A GEC Avery model 5451 self-indicating weighing instrument of 150 000 kg maximum capacity.

Technical Schedule No 6/10B/30B describes the pattern.

Variants: approved 19/10/92

1. With a hopper or tank-type receptor of up to 150 000 kg maximum capacity.
2. With a hopper of 250 000 kg maximum capacity.

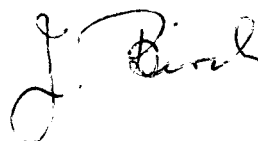
Technical Schedule No 6/10B/30B Variation No 1 describes variants 1 and 2.

FILING ADVICE

Certificate of Approval No 6/10B/30B and the Test Procedure both dated 9/10/89, are superseded by this Certificate and the Test Procedure included herein, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/10B/30B dated 11/12/92
Technical Schedule No 6/10B/30B dated 9/10/89
Technical Schedule No 6/10B/30B Variation No 1 dated 11/12/92 (incl. Test Procedure)
Figure 1 dated 9/10/89
Figure 2 dated 11/12/92

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.





National Standards Commission

TECHNICAL SCHEDULE No 6/10B/30B

Pattern: GEC-Avery Model 5451 Weighing Instrument.

Submittor: Avery Australia Ltd
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Pattern

A GEC-Avery model 5451 self-indicating weighing instrument approved for use with up to 3000 verification scale intervals.

The model number may be in the form 5451/**/##, where ** and ## refer to the load cells and indicator used. The basework may vary depending on the installation requirements and may then be known as a model 5452, -3, -4, -5, or -6.

1.1 Basework

The basework may be of any capacity between 15 000 and 150 000 kg and has up to 10 load cells which fully support the load receptor (Figure 1).

1.2 Load Cells

Avery model 8701 load cells are used as described in the documentation of NSC approval No S204.

1.3 Indicator

An Avery L200 series digital indicator is used as described in the documentation of NSC approval No S209.

1.4 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	
Serial number	
NSC approval numbers - Instrument	NSC No 6/10B/30B
- load cells	NSC No S.....
- Indicator	NSC No S.....
Accuracy class	III
Maximum capacity	Max..... kg *
Minimum capacity	Min..... kg *
Verification scale interval	e = d =..... kg *
Maximum subtractive tare	T = -..... kg

* These are repeated adjacent to each reading face.

1.5 Verification Provision

Provision is made for a verification mark to be applied.



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9/10/89

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TEST PROCEDURE No 6/10B/30B

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. The results should not exceed the maximum permissible errors specified in Document 118, 2nd Edition, October 1986.



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TECHNICAL SCHEDULE No 6/10B/30B

VARIATION No 1

Pattern: GEC Avery Model 5451 Weighing Instrument.

Submittor: GEC Avery Australia Ltd
12 Rachael Close
Silverwater NSW 2141.

1. Description of Variants

1.1 Variant 1

With a hopper or tank-type load receptor (Figure 2) of up to 150 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

1.2 Variant 2

With a hopper of 250 000 kg maximum capacity with a verification scale interval of 100 kg.

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, expressed in terms of verification scale interval (e), with the instrument adjusted to zero within $\pm 0.25e$ at no load, are:

- $\pm 0.5e$ for loads from 0 to $500e$;
- $\pm 1.0e$ for loads over $500e$ up to $2000e$; and
- $\pm 1.5e$ for loads over $2000e$.

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NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/10B/30B

CHANGE No 1

The following change is made to the approval documentation for the

GEC Avery Model 5451 Weighing Instrument

submitted by GEC Avery Australia Limited
12 Rachael Close
Silverwater NSW 2141.

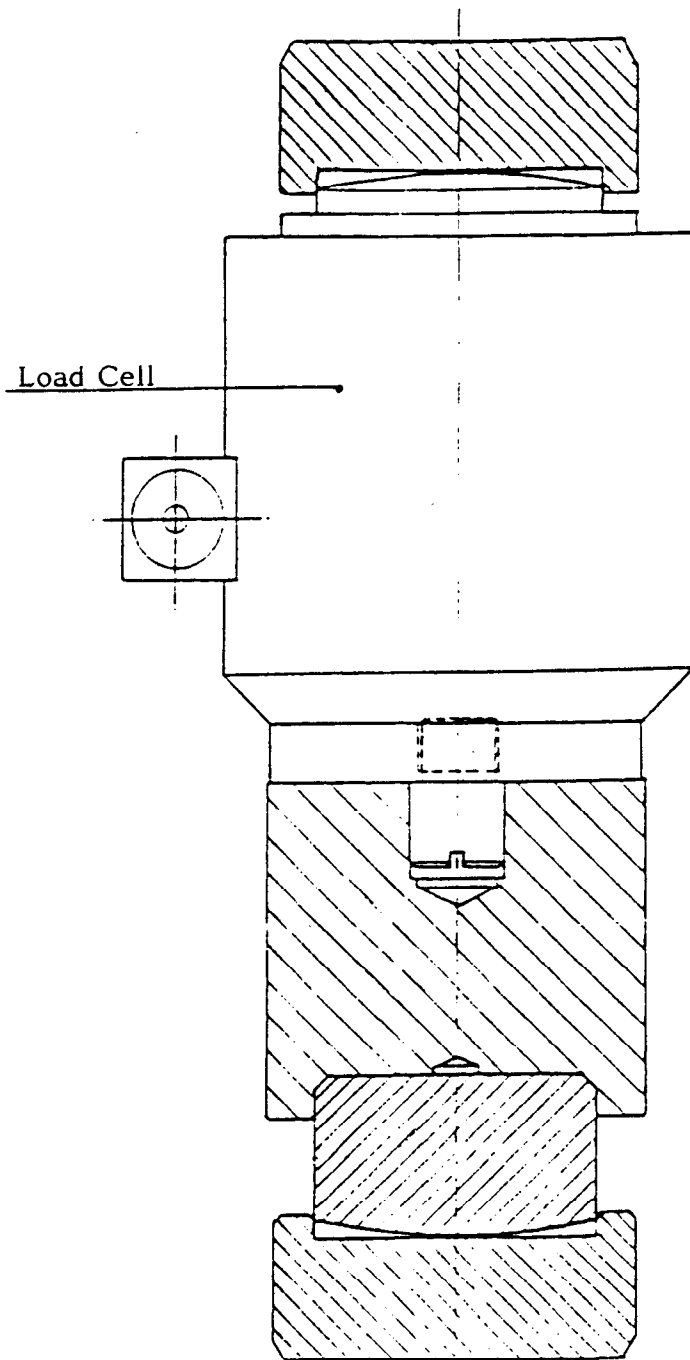
In Certificate of Approval No 6/10B/30B dated 11 December 1992, the Condition of Approval referring to the expiry of the approval should be amended to now read:

'This approval expires in respect of new instruments on 1 March 1996.'

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.

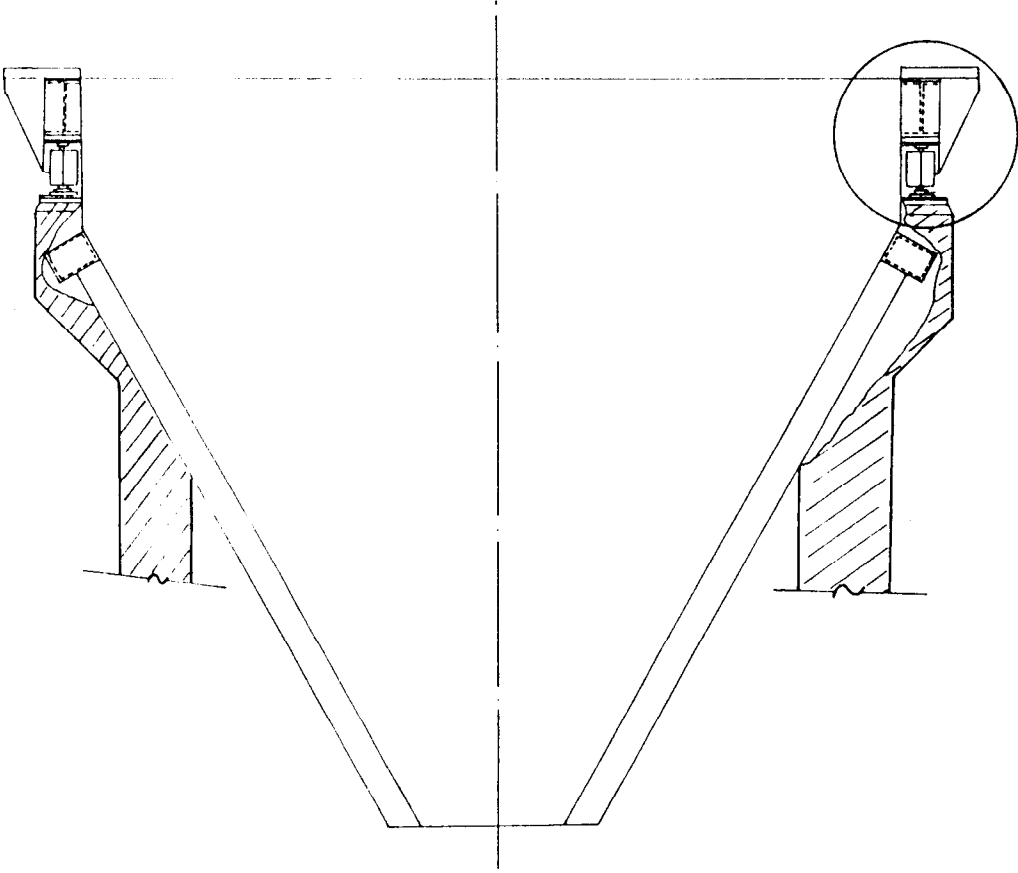
A handwritten signature in black ink, appearing to read 'J. Bunk'.

Figure 6/10B/30B - 1



Method of Mounting

FIGURE 6/10B/30B - 2



Typical Hopper Arrangement