National Standards Commission

Certificate of Approval

No 6/10B/30C

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.

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 Certificate is issued upon completion of a review of NSC approval No 6/10B/30B.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1 April 2001.
This approval expires in respect of new instruments on 1 April 2002.

Instruments purporting to comply with this approval shall be marked NSC No 6/10B/30C and only by persons authorised by the submittor.

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

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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 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 29 March 1996

- A GEC Avery model 5451 self-indicating weighing instrument of 60 000 kg maximum capacity.

Variants: approved 29 March 1996

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

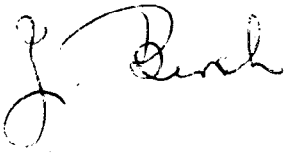
Technical Schedule No 6/10B/30C describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/30C dated 31 May 1996
Technical Schedule No 6/10B/30C dated 31 May 1996 (incl. Test Procedure)
Figure 1 dated 31 May 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.



National Standards Commission

TECHNICAL SCHEDULE No 6/10B/30C

Pattern: GEC Avery Model 5451 Weighing Instrument.

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

1. Description of Pattern

A GEC Avery model 5451 self-indicating weighing instrument of 60 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

1.1 Basework

The model 5451 basework has the platform directly supported by up to ten (10) load cells. The basework may vary depending on the installation requirements and may then be known as a model 5452, 5453, 5454, 5455, or 5456.

1.2 Load Cells

GEC Avery model 8701 load cells of 45 400 kg capacity are used. The load cells are also described in the documentation of NSC approval No S204A and are mounted as shown in Figure S204A - 2.

1.3 Indicator

A GEC Avery model L226 digital indicator is used. The indicator is also described in the documentation of NSC approval No S311.

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/30C
	- load cells	NSC No S.....
	- indicator	NSC No S.....
Accuracy class		(III)
Maximum capacity		Max ..... kg *
Minimum capacity		Min ..... kg *
Verification scale interval		e = ... kg *

* These are repeated adjacent to each reading face.

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1.5 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

1.6 Sealing Provision

Access to the calibration adjustments in the indicator are sealed using the sealing screws provided on the front of the indicator.

2. Description of Variants

2.1 Variant 1

With a hopper or tank-type load receptor (Figure 1).

2.2 Variant 2

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

TEST PROCEDURE

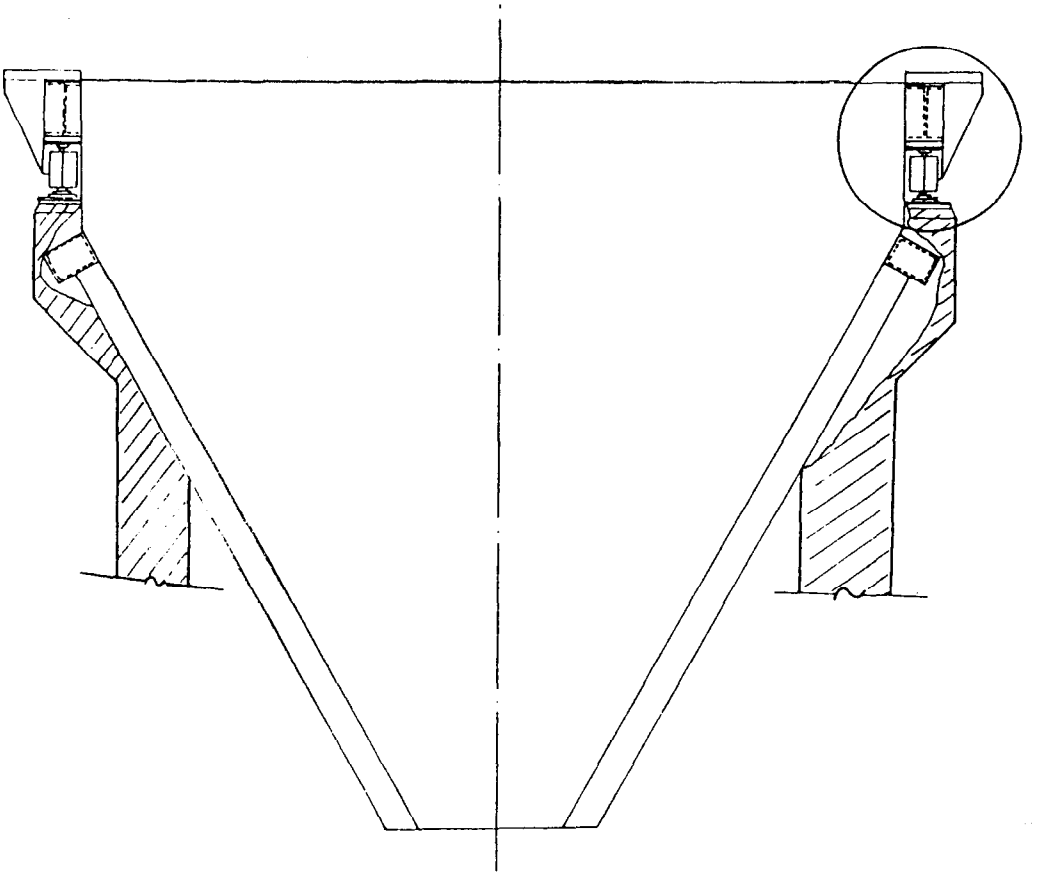
Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

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 ±0.25e at no load, are:

±0.5e for loads from 0 to 500e;
±1.0e for loads over 500e up to 2000e; and
±1.5e for loads over 2000e.

FIGURE 6/10B/30C - 1



Typical Hopper Arrangement - Variant 1