National Standards Commission

Certificate of Approval

No 6/9C/201

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

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

Avery Model 5802 Weighing Instrument

submitted by Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

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

..../2

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/10/91.
This approval expires in respect of new instruments on 1/10/92.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/201 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 drawings and specifications 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.

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 load cells shall be subject to regular certification by the Commission.

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

DESCRIPTIVE ADVICE

Pattern: approved 16/9/86

- An Avery model 5802 self-indicating hopper weighing instrument of up to 40 t maximum capacity.

Variants: approved 16/9/86

1. In other capacities up to 250 t.
2. With the hopper replaced by a tank.
3. With horizontal stays.

Technical Schedule No 6/9C/201 describes the pattern and variants 1 to 3.

Variant: approved 27/11/89

4. With alternative load cells and mountings.

Technical Schedule No 6/9C/201 Variation No 1 describes variant 4.

FILING ADVICE

Certificate of Approval No 6/9C/201 dated 17/3/87 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/9C/201 dated 16/3/90
Technical Schedule No 6/9C/201 dated 17/3/87
Technical Schedule No 6/9C/201 Variation No 1 dated 16/3/90
Test Procedure No 6/9C/201 dated 17/3/87
Figures 1 and 2 dated 17/3/87

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/201

Pattern: Avery Model 5802 Weighing Instrument

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163

1. Description of Pattern

A self-indicating hopper weighing system (Figure 1) of up to 40 tonne maximum capacity using four Yamato model CC2-20T-C3 load cells of 20 tonnes maximum capacity and an Avery model 8652 digital indicator. The instrument is approved for use with up to 4000 verification scale intervals.

1.1 Indicator

The Avery model 8652 digital indicator is described in the documentation of NSC Approval No S106 and may be marked as specified in that approval or alternatively as specified in 1.3.1 below.

1.2 Load Cell

The Yamato model CC2-20T-C3 load cells are described in the documentation of NSC approval No S157 and may be marked as specified in that approval or alternatively as specified in 1.3.2 below.

1.3. Markings

1.3.1 Instruments are marked with the following data, in one clearly visible location:

Manufacturer's name or mark	
Serial number of instrument	
NSC approval number	NSC No 6/9C/201
Accuracy class	(III)
Maximum capacity	Max.....*
Minimum capacity	Min .....*
Verification scale interval	e = d = ...*
Maximum subtractive tare	T = - .....
Load cell NSC approval number)	
Headwork NSC approval number)	where appropriate
Basework NSC approval number)	

Load cell serial numbers may be marked on a nameplate attached to the indicator or marked on metal tags attached to the indicator via a lead and wire seal.

* These must be repeated in the vicinity of each reading face.

1.3.2 The following is the minimum data required to be marked on the load cells.

Manufacturer's name or mark
Model number
Serial number
Maximum capacity

...../2

2. Description of Variants

2.1 Variant 1

In other capacities up to 250 t using Commission-approved load cells.

2.2 Variant 2

With the hopper replaced by a tank.

2.3 Variant 3

The pattern or variants fitted with horizontal stays to restrict the lateral movement of the load receptor.

NATIONAL STANDARDS COMMISSION

TEST PROCEDURE No 6/9C/201

Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used.

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

± 0.5e for loads between 0 and 500e;
± 1.0e for loads between 501e and 2000e; and
± 1.5e for loads above 2000e.

1. Test Loads

Test loads are to be applied to the instrument in not less than 5 approximately equal steps increasing to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps.

2. Eccentricity Tests

Apply a load equal to 1/10 of maximum capacity over each load cell in turn.

The instrument should display these loads within the applicable maximum permissible error as listed above.

National Standards Commission

TECHNICAL SCHEDULE No 6/9C/201

VARIATION No 1

Pattern: Avery Model 5802 Weighing Instrument.

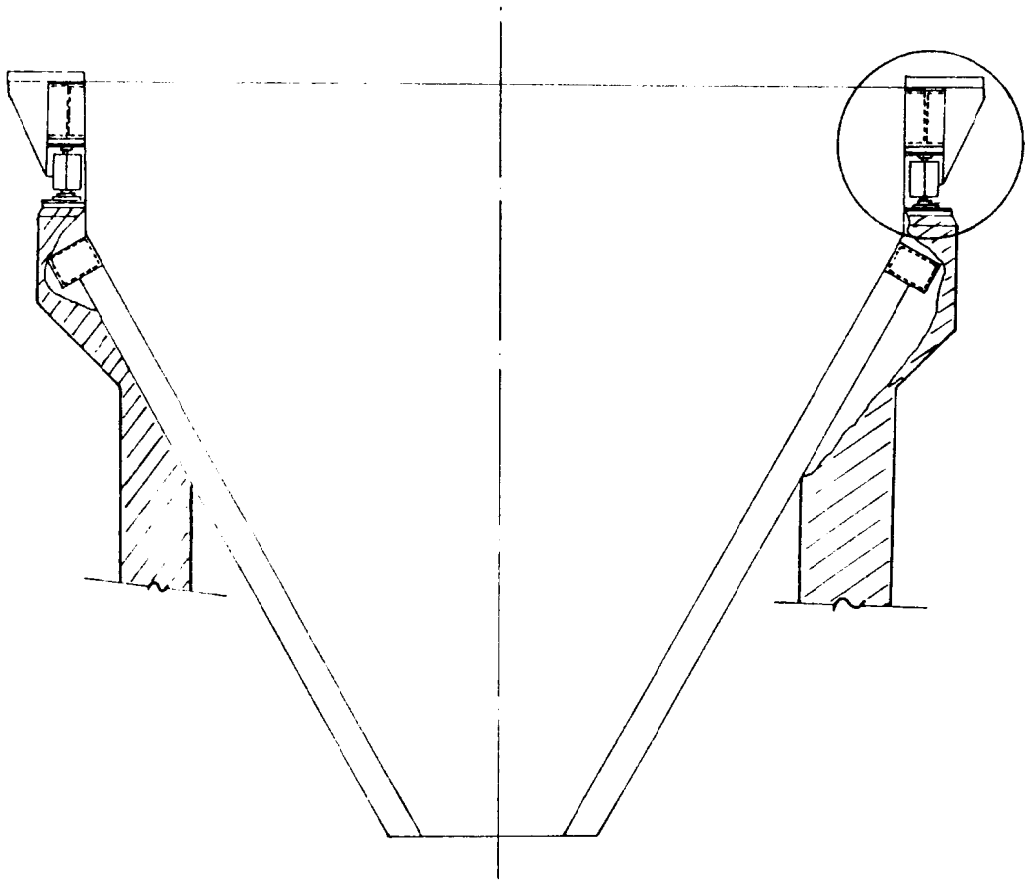
Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 4

With Avery model 8708 shear beam type load cells replacing the compression type cells of the pattern, in which case an alternative load cell mounting is used.

The load cells are mounted and used as described in the documentation of NSC approval No S176.

FIGURE 6/9C/201 - 1



Typical Hopper Arrangement

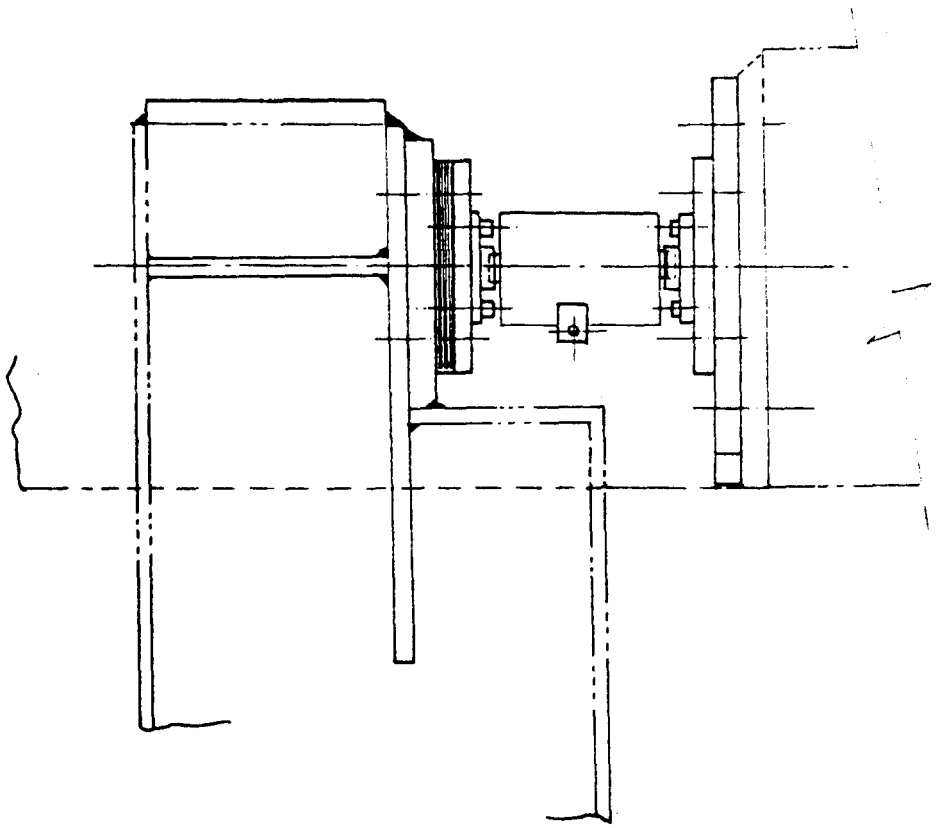


FIGURE 6/9C/201 - 2

Typical Load Cell Mounting