



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 6/10B/75
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

Brimin Model BWB-80 Weighing Instrument

submitted by Brimin Engineering Pty Ltd
 RSD 2563 Dugay's Bridge Road
 Rutherglen VIC 3685.

- A. In Certificate of Approval 6/10B/75 dated 3 March 2004;
1. The Condition of Approval referring to the review of the approval should be amended to read:

 "This approval becomes subject to review on 1 December **2014**,
 and then every 5 years thereafter."
 2. The FILING ADVICE should be amended by adding the following:

 "Notification of Change No 1 dated 5 August 2009"
- B. In Certificate of Approval No 6/10B/75 and its Technical Schedule both dated 3 March 2004, all references to the address of the submittor should be amended to read:

 "**1140** Dugay's Bridge Road
 Brimin VIC 3685."

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 flourishes, positioned at the bottom right of the page.



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 2113 Australia

Certificate of Approval

No 6/10B/75

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

Brimin Model BWB-80 Weighing Instrument

submitted by Brimin Engineering Pty Ltd
RSD 2563 Dugay's Bridge Road
Rutherglen VIC 3685.



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.

6/10B/75
3 March 2004

Certificate of Approval No 6/10B/75

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CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 December 2008, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No 6/10B/75 and only by persons authorised by the submitter.

Instruments purporting to comply with this approval and currently marked NSC No P6/10B/75 may be re-marked NSC No 6/10B/75 but 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.

The pattern as approved herein or with substitute Commission-approved load cells and/or indicators and in other capacities, or with different platform sizes, shall comply with General Certificate No 6B/0.

Note: New instruments manufactured under this approval shall only use load cells and/or indicators with current NSC supplementary certificates.

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.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 21 November 2003
approved 28 January 2004

- A Brimin model BWB-80 self-indicating weighing instrument of 80 000 kg maximum capacity.

Variants: provisionally approved 21 November 2003
approved 28 January 2004

1. In capacities from 15 000 to 200 000 kg.
2. Brimin model BWB-80 hopper or silo weighing instruments.

Technical Schedule No 6/10B/75 describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/75 dated 3 March 2004

Technical Schedule No 6/10B/75 dated 3 March 2004 (incl. Test Procedure)

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 6/10B/75

Pattern: Brimin Model BWB-80 Weighing Instrument

Submittor: Brimin Engineering Pty Ltd
RSD 2563 Dugay's Bridge Road
Rutherglen VIC 3685



1. Description of Pattern

A Brimin model BWB-80 self-indicating weighing instrument approved for use with a verification scale interval of 50 kg and a maximum capacity of 80 000 kg.

1.1 Basework

The model BWB-80 basework has the platform fully supported by 8 load cells.

1.2 Load Cells

Eight Precision Transducers model HPC-30 load cells of 30 000 kg capacity are used. The load cells are also described in the approval documentation of NSC approval No S412.

1.3 Indicator

A Gedge Systems model GS1650Mk3/v2 digital indicator is used.

The indicator is also described in the approval documentation of NSC approval No S193B.

1.4 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed as described in the approval documentation for the indicator used.

1.5 Markings

Instruments carry the following markings:

| | |
|--|----------------------------|
| Manufacturer's mark, or name written in full | Brimin Engineering Pty Ltd |
| Indication of accuracy class | Ⓜ |
| Pattern approval mark for the instrument | NSC No 6/10B/75 |
| Pattern approval mark for the indicator | NSC No S... |
| Pattern approval mark for the load cells | NSC No S... |
| Maximum capacity | Max kg * |
| Minimum capacity | Min kg * |
| Verification scale interval | e = kg * |
| Serial number of the instrument | |

* These markings shall also be shown near the display of the result if they are not already located there.

1.6 Verification/Certification Provision

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

2. Description of Variants

2.1 Variant 1

Brimin model BWB-** (#) instruments in capacities from 15 000 to 200 000 kg, with no less than 4 and with up to 10 Commission-approved load cells. Instruments are approved for use with up to 4000 verification scale intervals (subject to the approval parameters of the load cells and indicator).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause 4. **Wind Effects** of General Certificate of Approval No 6B/0.

2.2 Variant 2

Brimin model BWB-** (#) instruments with the load receptor in the form of a hopper or silo in capacities from 15 000 to 200 000 kg.

Instruments are either:

- (a) fitted with 3, 4 or 5 Commission-approved load cells (arranged symmetrically to ensure even loading of each cell) where the hopper is a vertical cylindrical or tank-type load receptor directly supported by the load cells; or
- (b) fitted with 4 Commission-approved load cells where the hopper is a non-vertical cylindrical, or other hopper-type load receptor.

Note: Instruments with more than 4 load cells may be acceptable if prior written agreement from the Commission is obtained.

Suitable provision must be made for the application of suitable verified masses to the instrument as required for verification and certification purposes. It may be necessary for such masses to be incorporated within the design of the instrument.

(#) Where ** represents the capacity in tonnes.

TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

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:

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