



Australian Government

National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Notification of Change

Certificate of Approval No 6/10B/50B

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

Queensland Weighing Machines Model ERW Weighing Instrument

submitted by Queensland Weighing Machines Pty Ltd
now of Unit 3, 27 Kingtel Place
Geebung QLD 4034.

- A. In Certificate of Approval No 6/10B/50B dated 14 September 1999;
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 September **2014**, and then every 5 years thereafter."

Note: The review date was previously amended by Notification of Change No 1 dated 20 October 2004.
 2. The FILING ADVICE should be amended by adding the following:
"Notification of Change No 1 dated 20 October 2004
Notification of Change No 2 dated 1 April 2009"
- B. In Certificate of Approval No 6/10B/50B and its Technical Schedule both dated 14 September 1999, all references to the address of the submittor should be amended to read:
"Unit 3, 27 Kingtel Place
Geebung QLD 4034"
- C. In Technical Schedule No 6/10B/50B dated 14 September 1999:
1. Clause **1.2 Load Cells** should be amended to read, in part:
"... model HPC-30 load cells ... approval No S412."
 2. Clause **1.3 Indicator** should be amended to read, in part:
"A Ranger model 5000 ... approval No S363."

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

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National Standards Commission



Certificate of Approval

No 6/10B/50B

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

Queensland Weighing Machines Model ERW Weighing Instrument

submitted by Queensland Weighing Machines Pty Ltd

45 Wentworth Place
Banyo QLD 4014.

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/50A.

CONDITIONS OF APPROVAL

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

Instruments purporting to comply with this approval shall be marked NSC No 6/10B/50B and only by persons authorised by the submittor.

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

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

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

DESCRIPTIVE ADVICE

Pattern: approved 31 August 1999

- A Queensland Weighing Machines model ERW self-indicating weighing instrument of 60 000 kg maximum capacity.

Variants: approved 31 August 1999

1. In capacities from 15 000 to 200 000 kg and with up to 12 load cells.
2. With the model EHS hopper or tank-type load receptors.

Technical Schedule No 6/10B/50B describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/50B dated 14 September 1999
Technical Schedule No 6/10B/50B dated 14 September 1999 (incl.
Test Procedure)




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. Smith', located at the bottom right of the page.

TECHNICAL SCHEDULE No 6/10B/50B

Pattern: Queensland Weighing Machines Model ERW Weighing Instrument.

 **Submittor:** Queensland Weighing Machines Pty Ltd
45 Wentworth Place
Banyo QLD 4014.


1. Description of Pattern

A Queensland Weighing Machines model ERW self-indicating weighing instrument of 60 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals (VSI).


1.1 Basework

The model ERW basework has the platform fully supported by 6 load cells.

1.2 Load Cells

 Precision Transducers model HPC load cells of 30 000 kg maximum capacity are used. The load cells are also described in the documentation of NSC approval No S318.

1.3 Indicator

 An A & D Mercury model AD-4323 digital indicator is used. The indicator is also described in the approval documentation of NSC approval No S251A.

1.4 Markings

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

Manufacturer's mark, or name written in full
Indication of accuracy class	Ⓜ
Maximum capacity	Max kg or t *
Minimum capacity	Min kg or t *
Verification scale interval	e = kg or t *
Maximum subtractive tare	T = - kg or t
Serial number of the instrument
Pattern approval mark for the instrument	NSC No 6/10B/50B
Pattern approval mark for the load cells	NSC No S....
Pattern approval mark for the indicator	NSC No S....

* These markings shall also be shown near each reading face if they are not already located there.

1.5 Verification/Certification Provision

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

1.6 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed by means of the method described in the approval documentation for the indicator.

2. Description of Variants

2.1 Variant 1

In capacities from 15 000 to 200 000 kg, with no less than 4 and with up to 12 Commission-approved load cells, and approved for use with up to 3000 verification scale intervals (VSI).

2.2 Variant 2

Model EHS instruments with hopper or tank-type load receptors in capacities from 15 000 to 200 000 kg, and approved for use with up to 3000 verification scale intervals (VSI).

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.

In addition 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.

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 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 $2\,000 < m \leq 10\,000$.



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Notification of Change
Certificate of Approval No 6/10B/50B
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

Queensland Weighing Machines Model ERW Weighing Instrument

submitted by Queensland Weighing Machines Pty Ltd
45 Wentworth Place
Banyo QLD 4014.

- A. In Certificate of Approval No 6/10B/50B dated 14 September 1999;
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 September 2009, and then every 5 years thereafter.”
 2. The Condition of Approval referring to complying with General Certificate No 6B/0 should be amended by adding the following note:
“Note: New instruments manufactured under this approval shall only use load cells and/or indicators with current supplementary certificates.”

B. In Technical Schedule No 6/10B/50B dated 14 September 1999;

1. **Clause 1.2 Load Cells** should be amended to read:

“Precision Transducers model HPC-45 load cells of 45 000 kg maximum capacity are used. The load cells are also described in the documentation of approval NSC S412.”

2. **Clause 1.3 Indicator** should be amended to read:

“A Rinstrum model 5000 digital indicator is used. The indicator is also described in the documentation of approval NSC S363.”

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 stylized 'J' followed by a horizontal line and a small loop.