

# National Standards Commission



## Certificate of Approval

**No 6/10B/50A**

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  
268 Stafford Road  
Stafford QLD 4053.

**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/50.

### CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/10/98.  
This approval expires in respect of new instruments on 1/10/99.

Instruments purporting to comply with this approval shall be marked NSC No 6/10B/50A 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.

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 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 22/9/93

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

**Variant:** approved 22/9/93

1. With a model EHS hopper or tank-type load receptor of 30 000 kg maximum capacity.

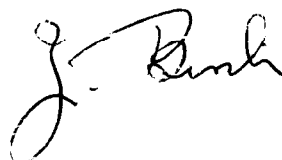
Technical Schedule No 6/10B/50A describes the pattern and variant 1.

#### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/50A dated 14/3/94  
Technical Schedule No 6/10B/50A dated 14/3/94 (incl. Test Procedure)  
Figure 1 dated 14/3/94

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/50A

**Pattern:** Queensland Weighing Machines Model ERW Weighing Instrument.

**Submittor:** Queensland Weighing Machines Pty Ltd  
268 Stafford Road  
Stafford QLD 4053.

### 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.

#### 1.1 Basework

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

#### 1.2 Load Cells

Molen model CSP-M-25-A load cells of 25 000 kg capacity are used and mounted as shown in Figure 1. The load cells are also described in the documentation of NSC approval No S133A.

#### 1.3 Indicator

An AND Mercury model AD-4316 digital indicator is used. The indicator is also described in the documentation of NSC approval No S161A.

#### 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/50A
	- 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 *
Maximum subtractive tare	T = - ..... kg #

\* These are repeated adjacent to each reading face.

# If different to the maximum capacity of the instrument.

### 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 is sealed either as described in the approval documentation for the indicator (if included) or by some other appropriate method.

## 2. Description of Variant 1

With a model EHS hopper or tank-type load receptor of 30 000 kg maximum capacity using three or more load cells mounted as shown in Figure 1 and approved for use with up to 3000 verification scale intervals.

### TEST PROCEDURE

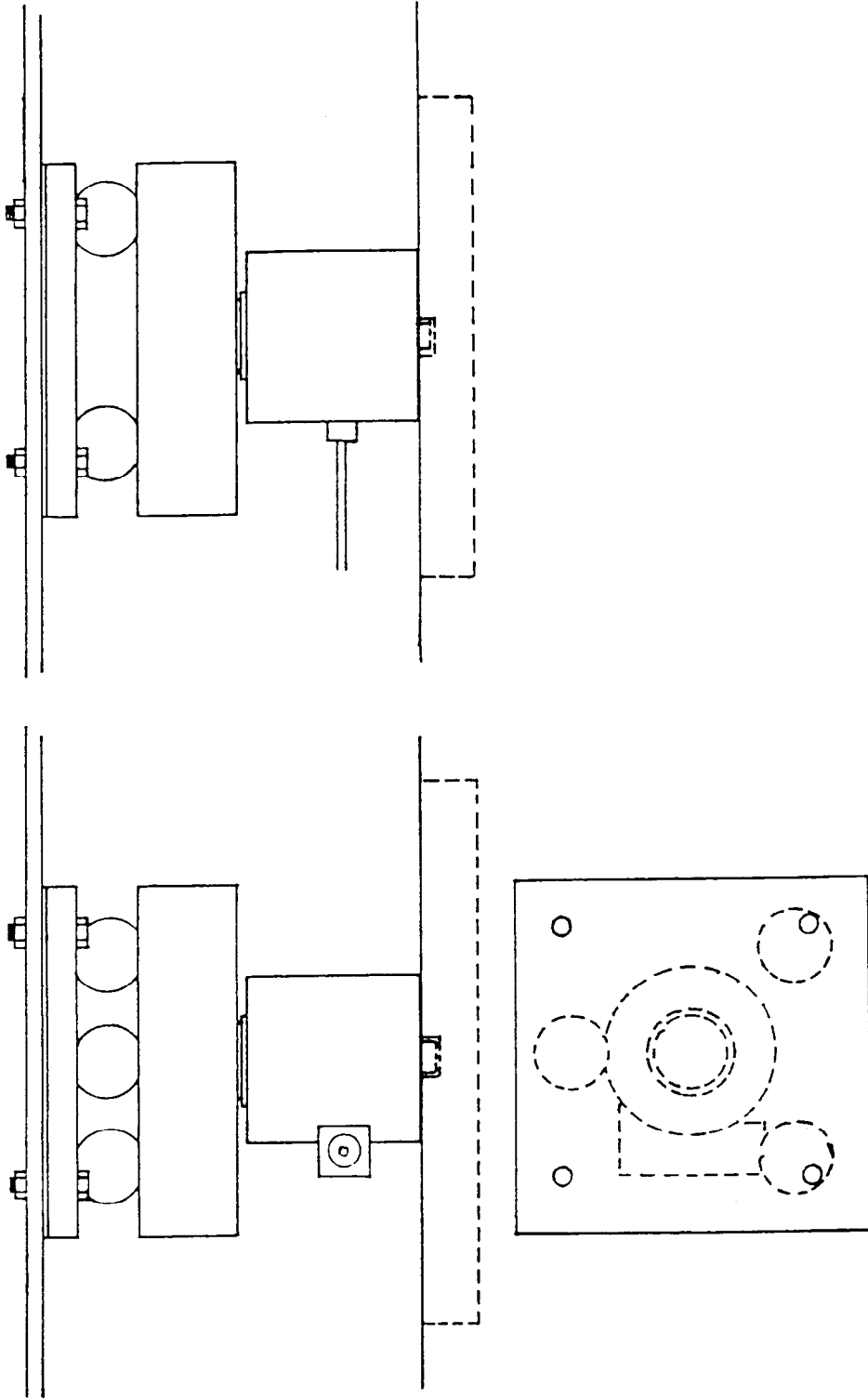
Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

#### 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  $2000e$ .

FIGURE 6/10B/50A - 1



Typical Molen model CSP-M-25-A Load Cell Mounting