

National Standards Commission



Certificate of Approval

No 6/9C/209A

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 EDS 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 6/9C/209.

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 6/9C/209A and only by persons authorised by the submitter.

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 EDS self-indicating weighing instrument of 3000 kg maximum capacity.

Variant: approved 22/9/93

1. With an alternative load cell mounting.

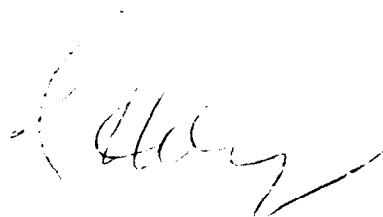
Technical Schedule No 6/9C/209A describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/9C/209A dated 31/1/94
Technical Schedule No 6/9C/209A dated 31/1/94 (incl. Test Procedure)
Figures 1 to 4 dated 31/1/94

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.

A handwritten signature in black ink, appearing to be 'J. H. H.', is written over a faint circular stamp.



National Standards Commission

TECHNICAL SCHEDULE No 6/9C/209A

Pattern: Queensland Weighing Machines Model EDS Weighing Instrument.

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

1. Description of Pattern

A Queensland Weighing Machines model EDS self-indicating weighing instrument of 3000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

1.1 Basework

The model EDS basework (Figure 1) has a load cell at each corner of a base frame. The load receptor and its support frame are supported by the load cells by means of ball-and-cup assemblies (Figure 2).

The basework may be permanently fixed above ground, with or without loading ramps, or let into a pit with the platform level with the ground; in such cases no level indicator is required.

If the basework is not permanently fixed then it is fitted with levelling feet and a level indicator.

The basework has a maximum nominal size of 1200 X 1200 mm.

1.2 Load Cells

Four Kelba model KA-1000-C3 load cells of 1000 kg capacity are used and mounted as shown in Figure 2. The load cells are also described in the documentation of NSC approval No S155A.

1.3 Indicator

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

1.4 Sealing Provision

Provision is made for the calibration adjustments in the indicator to be sealed.

1.5 Verification/Certification Provision

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

1.6 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 6/9C/209A - 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.

2. Description of Variant 1

With a modified model EDS basework which does not have a baseframe and where the self-aligning supporting feet are fitted directly to the load cells (Figures 3 and 4).

TEST PROCEDURE

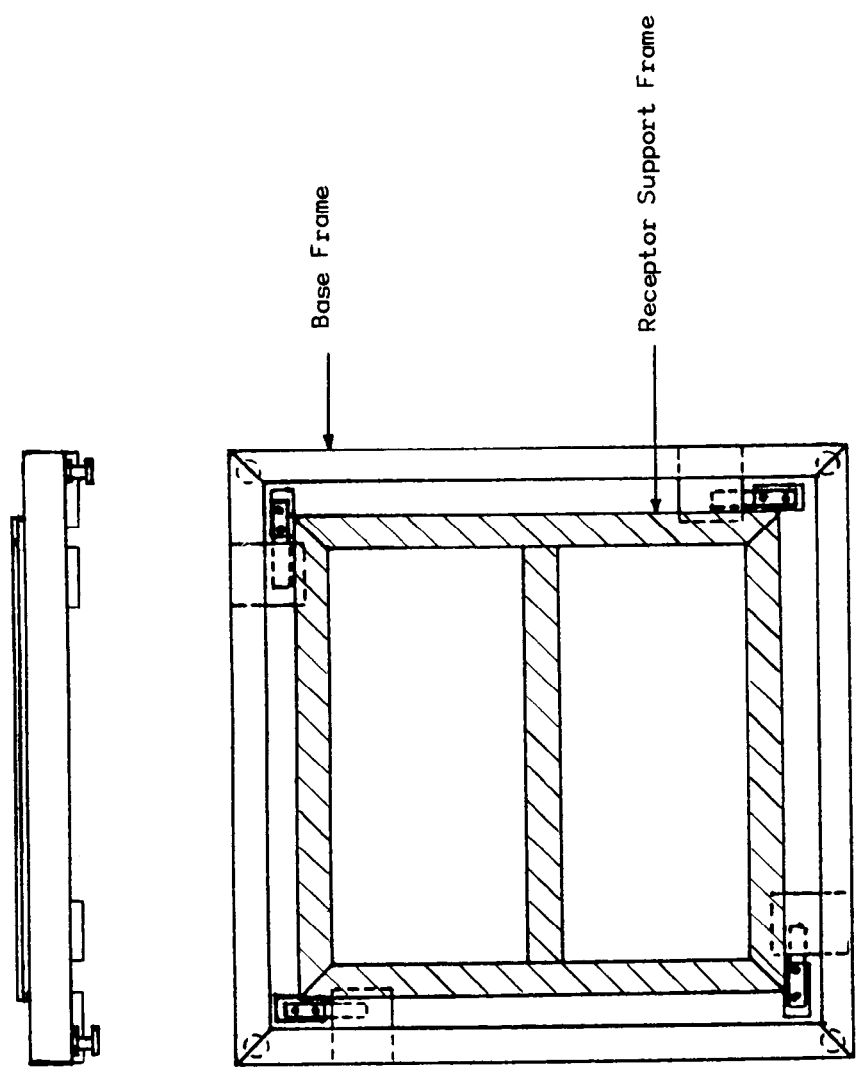
Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

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:

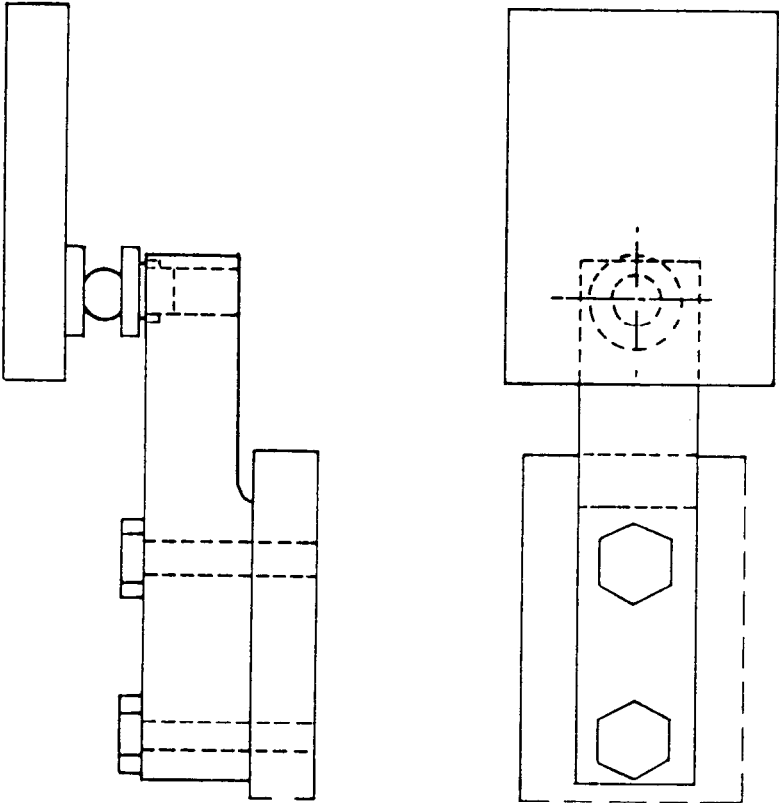
- $\pm 0.5e$ for loads from 0 to $500e$;
- $\pm 1.0e$ for loads over $500e$ up to $2000e$; and
- $\pm 1.5e$ for loads over $2000e$.

FIGURE 6/9C/209A - 1



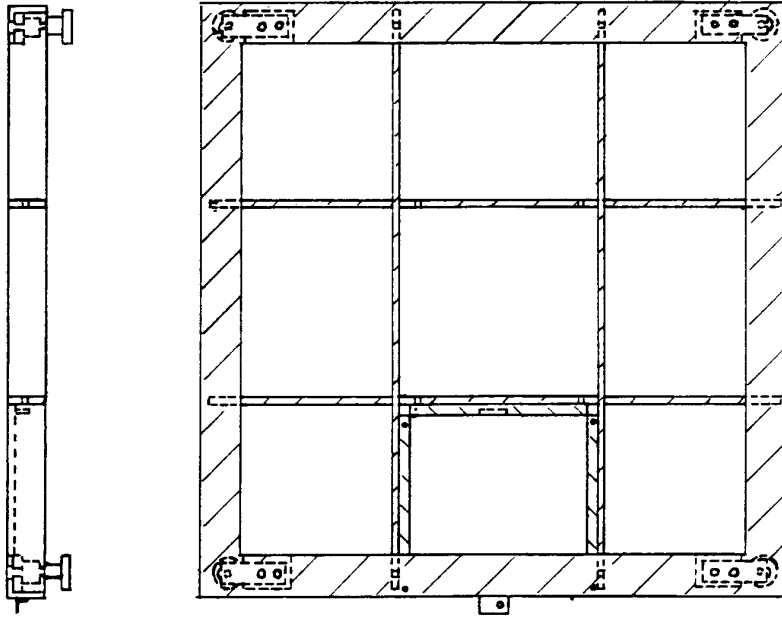
Model EDS Basework With Load Receptor Removed

FIGURE 6/9C/209A - 2



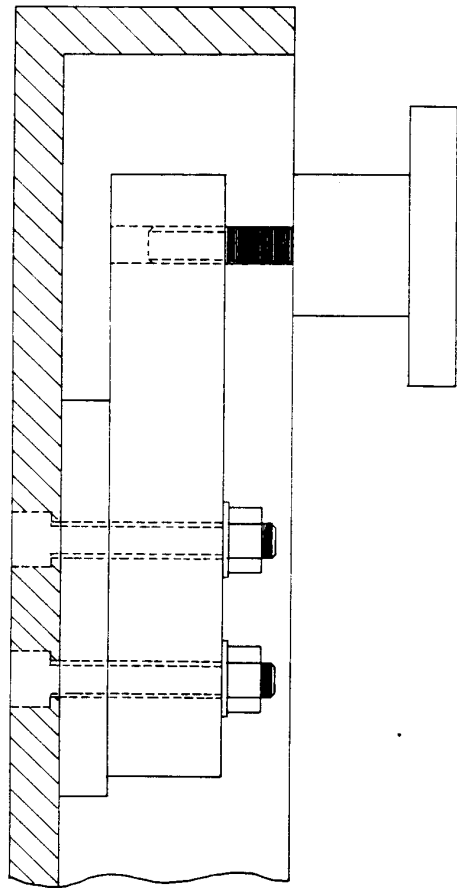
Showing Load Cell Mounting

FIGURE 6/9C/209A - 3



Modified EDS Basework With Load Receptor Removed

FIGURE 6/9C/209A - 4



Alternative Load Cell Mounting