

National Standards Commission



Certificate of Approval

No 6/9C/220A

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

A & D Mercury Model ELP 3000 Weighing Instrument

submitted by A & D Mercury Pty Ltd
5/49 Derby Street
Silverwater NSW 2141.

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/220.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1 January 2000.
This approval expires in respect of new instruments on 1 January 2001.

Instruments purporting to comply with this approval shall be marked NSC No 6/9C/220A and only by persons authorised by the submitter.

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

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 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 9 December 1994

- An A & D Mercury model ELP 3000 self-indicating weighing instrument of 3000 kg maximum capacity.

Variants: approved 9 December 1994

1. Model ELP 3000DC with a low-profile load receptor.
2. Model ELP 3000-SW with a suspended load receptor.

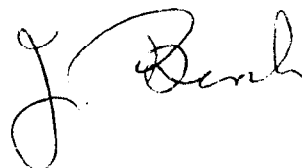
Technical Schedule No 6/9C/220A describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/9C/220A dated 17 February 1994
Technical Schedule No 6/9C/220A dated 17 February 1994 (Incl. Test Procedure)
Figures 1 to 4 dated 17 February 1994

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 6/9C/220A

Pattern: A & D Mercury Model ELP 3000 Weighing Instrument.

Submittor: A & D Mercury Pty Ltd
5/49 Derby Street
Silverwater NSW 2141.

1. Description of Pattern

An A & D Mercury model ELP 3000 self-indicating weighing instrument (Figure 1) of 3000 kg maximum capacity with up to 3000 verification scale intervals.

1.1 Basework

The model ELP 3000 basework (Figure 1) has the platform directly supported by four load cells.

The load receptor is nominally 1200 mm x 1200 mm, and is positioned above or below ground, with or without loading ramps.

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 A & D model 4323 digital indicator is used. This is also described in the documentation of NSC approval No S251A. The indicator may be fitted with input/output sockets for the connection of auxiliary and/or peripheral devices.

1.4 Verification/Certification Provision

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

1.5 Sealing Provision

Provision is made for the calibration adjustments to be sealed.

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/220A
- indicator	NSC No S
Accuracy class	III
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *

* These are repeated adjacent to each reading face.

2. Description of Variants

2.1 Variant 1

Model ELP 3000DC with an alternative low-profile load receptor (Figure 3).

2.2 Variant 2

Model ELP 3000-SW weighing instrument with the load receptor suspended from the weighing frame by fixed links (Figure 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/220A - 1

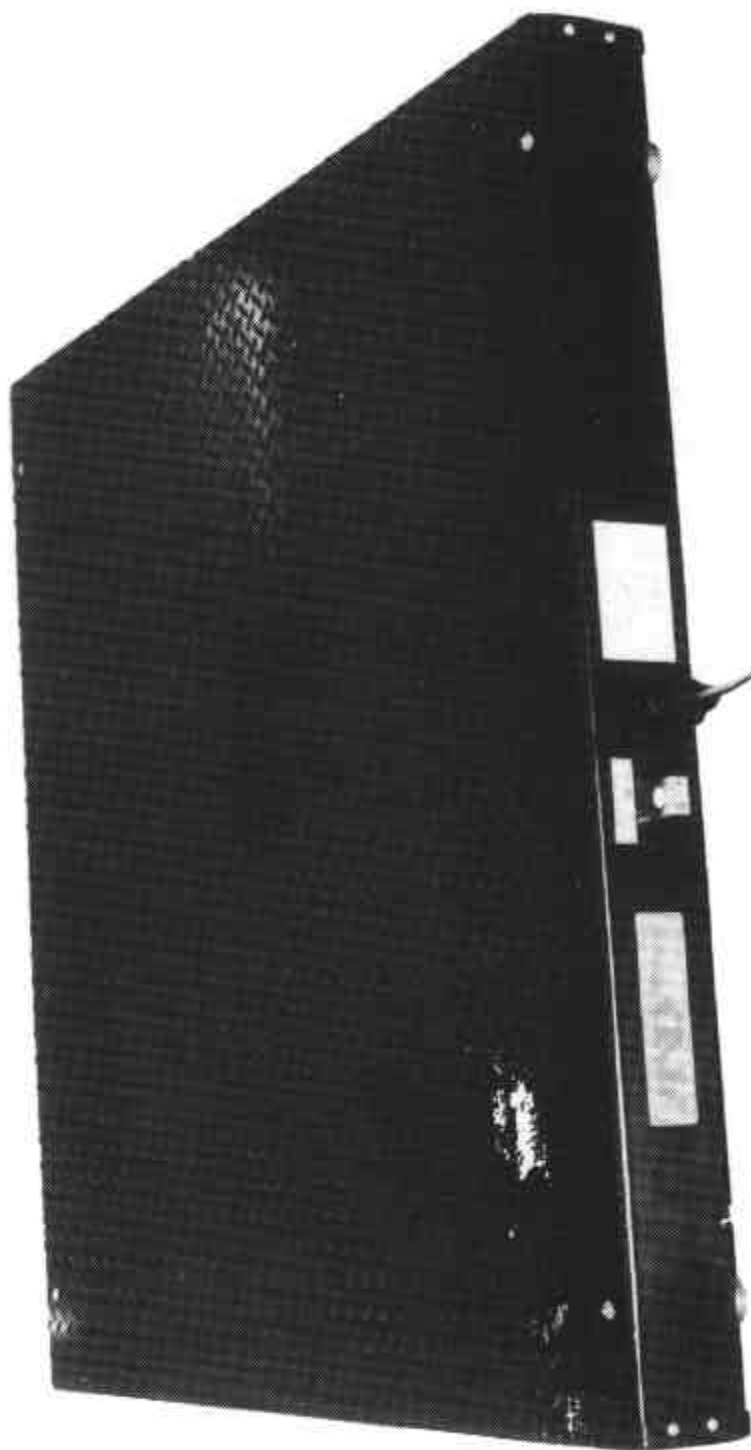
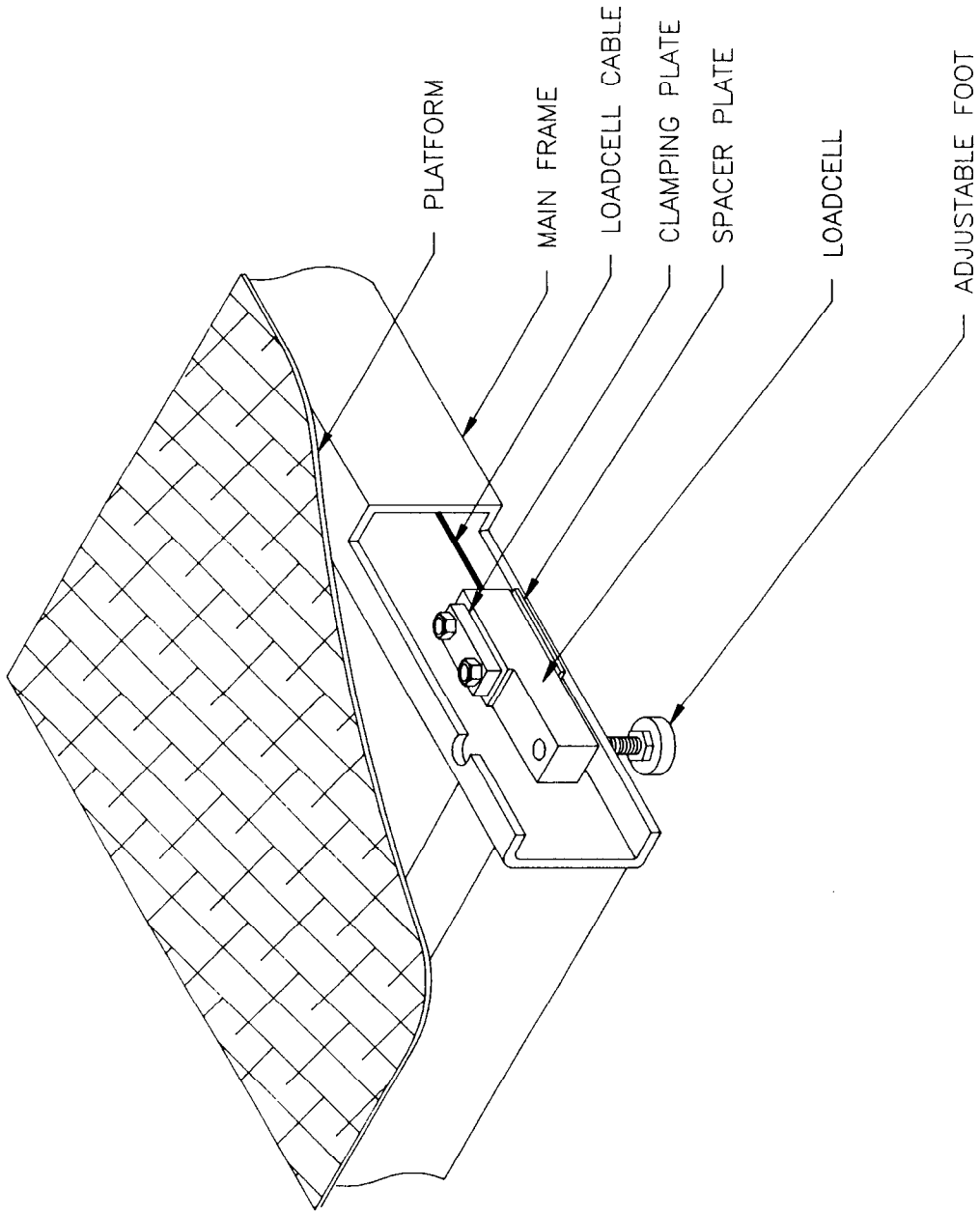


FIGURE 6/9C/220A - 2

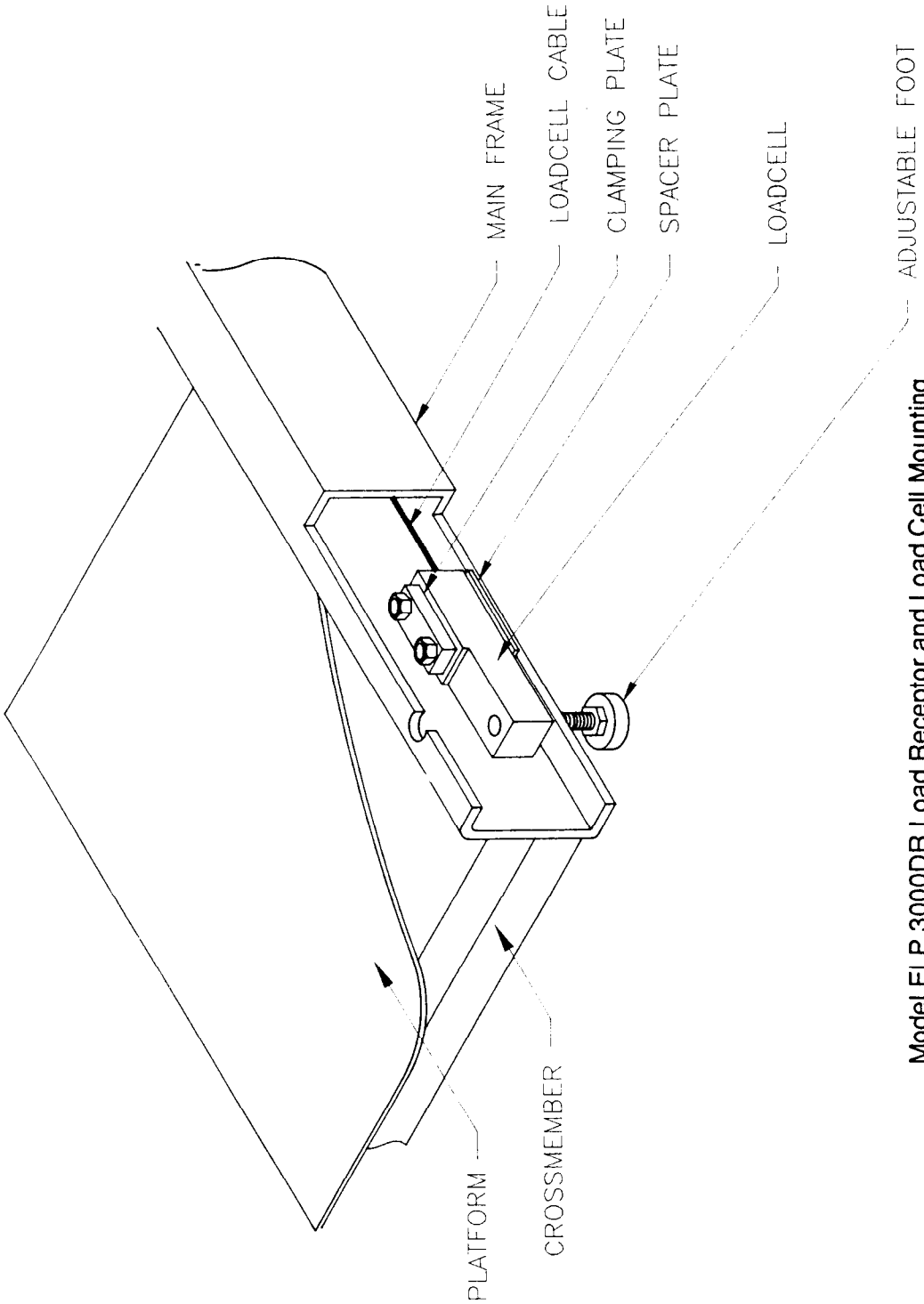


Model ELP 3000 Load Receptor and Load Cell Mounting

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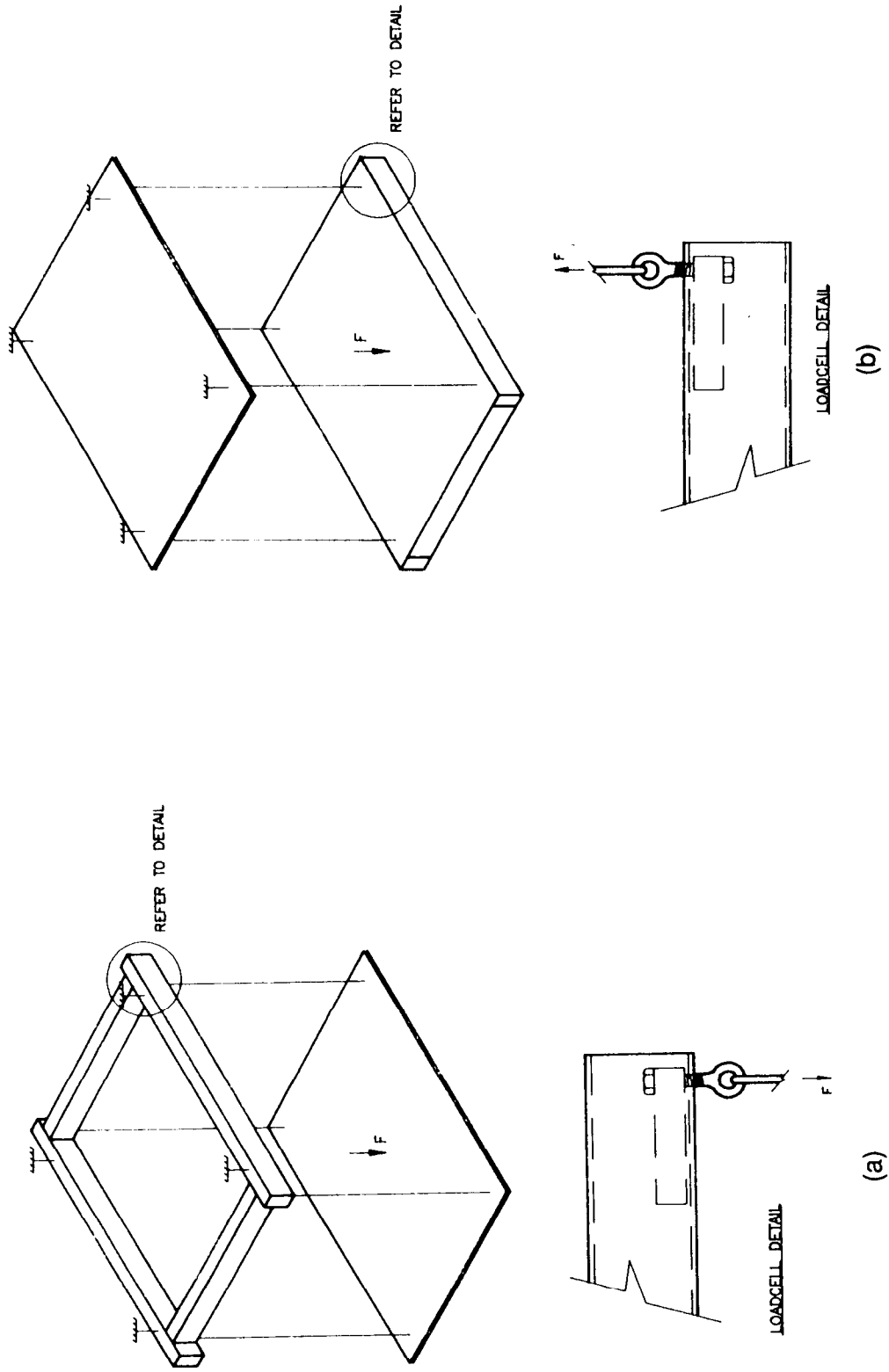
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FIGURE 6/9C/220A - 3



Model ELP 3000DR Load Receptor and Load Cell Mounting

FIGURE 6/9C/220A - 4



Alternative Model ELP 3000-SW Instruments