Australian Government

National Measurement Institute

12 Lyonpark Road, North Ryde NSW 2113

Cancellation Certificate of Approval No 6/10B/49B

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in Approval 6/10B/49B issued in respect of the

Modern Weighbridge Model MW-2000 Weighing Instrument

submitted by Modern Weighbridge and Scale Service Pty Ltd
23 Davis Street
Wingfield SA 5013

has been cancelled in respect of new instruments as from 1 June 2005.

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

National Standards Commission

Certificate of Approval

No 6/10B/49B

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

Modern Weighbridge Model MW-2000 Weighing Instrument

submitted by Modern Weighbridge and Scale Service Pty Ltd
23 Davis Street
Wingfield SA 5013.

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/49A.

CONDITIONS OF APPROVAL

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

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Instruments purporting to comply with this approval shall be marked NSC No 6/10B/49B 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 and variants as approved herein or with substitute load cells and/or indicator and in other capacities, shall comply with General Certificate No 6B/0.

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

DESCRIPTIVE ADVICE

Pattern: approved 12 January 1999

- A Modern Weighbridge model MW-2000 self-indicating weighing instrument of 60 000 kg maximum capacity.

Variant: approved 12 January 1999

1. With a non-self-indicating headwork.

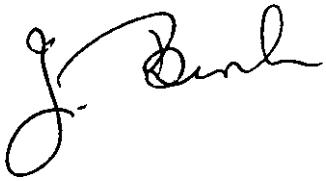
Technical Schedule No 6/10B/49B describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/49B dated 27 April 1999
Technical Schedule No 6/10B/49B dated 27 April 1999 (incl. Test Procedure)
Figures 1 to 3 dated 27 April 1999

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.



TECHNICAL SCHEDULE No 6/10B/49B

Pattern: Modern Weighbridge Model MW-2000 Weighing Instrument.

Submittor: Modern Weighbridge and Scale Service Pty Ltd
23 Davis Street
Wingfield SA 5013.

1. Description of Pattern

A Modern Weighbridge model MW-2000 self-indicating weighing instrument of 60 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

1.1 Basework

(i) The lever system, approved for use with up to 3000 verification scale intervals, comprises two or more main levers and may include a number of transfer levers. Figures 1 and 2 show various arrangements.

(ii) A Kelba model KA-1000-C3 load cell of 1000 kg maximum capacity is used. The load cell is also described in NSC approval No S155B.

(iii) The load cell may be fitted in a pullrod from the nose-end knife-edge of either the transfer lever or the main levers.

(iv) The platform is supported on the main lever knife-edges through a ball bearing support assembly. The lever fulcrum knife-edges are located on bearings mounted in fixed floor-mounted pedestals (Figure 3).

1.2 Indicator

A Gedge Systems model GS1650Mk3 digital indicator is used. The indicator is also described in the documentation of NSC approval No S193B.

1.3 Verification/Certification Provision

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

1.4 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.

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1.5 Markings

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

Manufacturer's mark, or name written in full	Modern Weighbridge
Indication of accuracy class	(III)
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/49B
Pattern approval mark for the load cell	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.

2. Description of Variant 1

With a full capacity steelyard. If tare bars are fitted, the markings described in clause **1.5** shall be amended to include the maximum additive tare value.

The load cell and digital indicator may be retained. Only one method of mass indication shall be in use at any time; the other shall be rendered inoperative.

TEST PROCEDURE

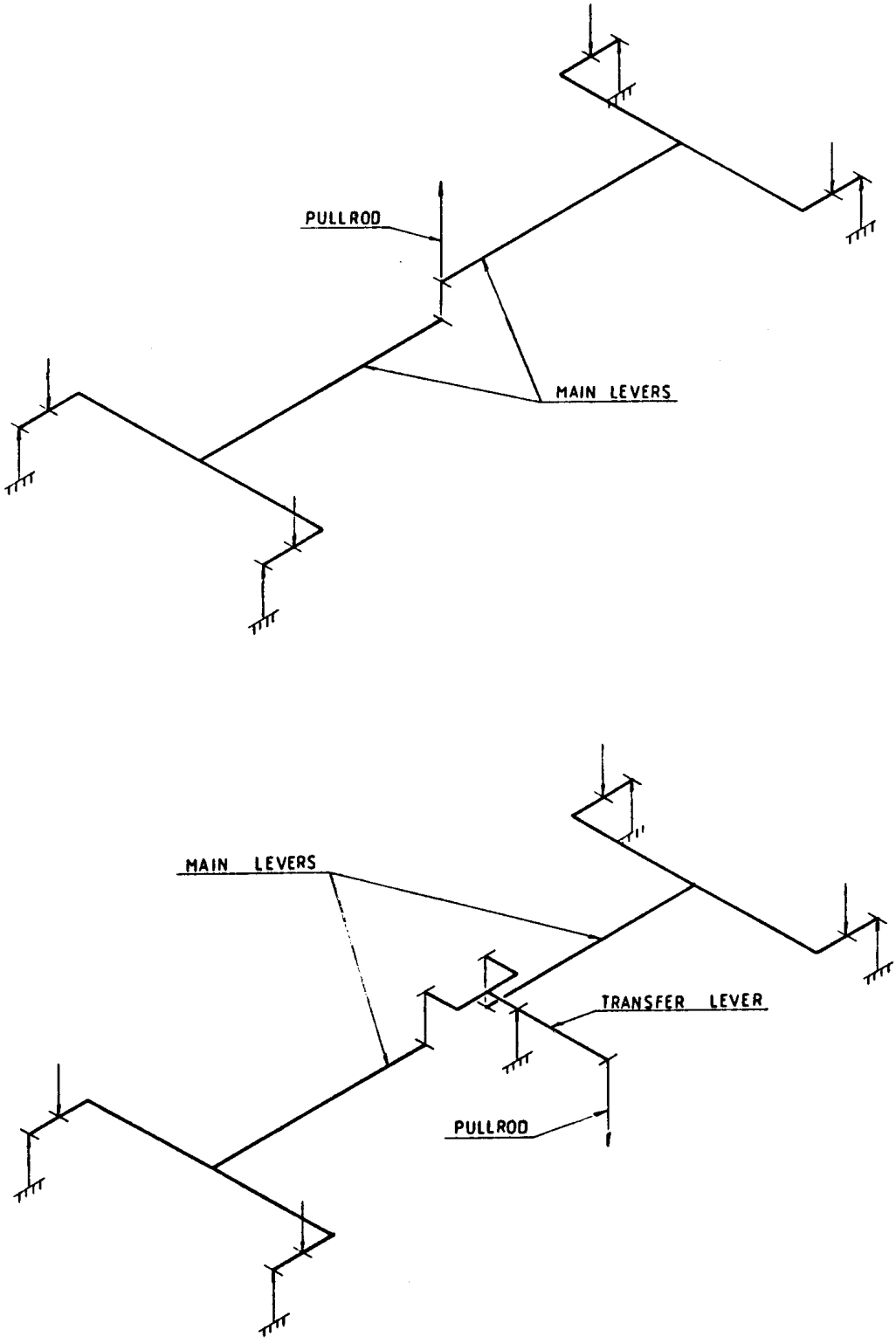
Instruments should be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the Inspector's Handbook.

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:

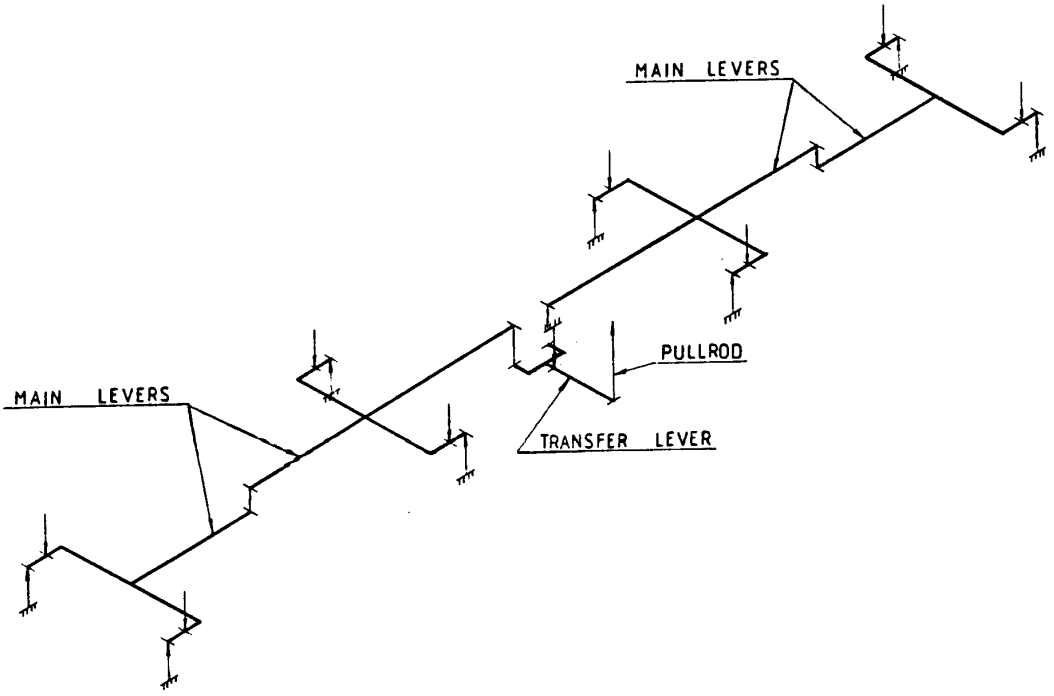
±0.5 *e* for loads $0 \leq m \leq 500$;
±1.0 *e* for loads $500 < m \leq 2\,000$; and
±1.5 *e* for loads $2\,000 < m \leq 10\,000$.

FIGURE 6/10B/49B - 1



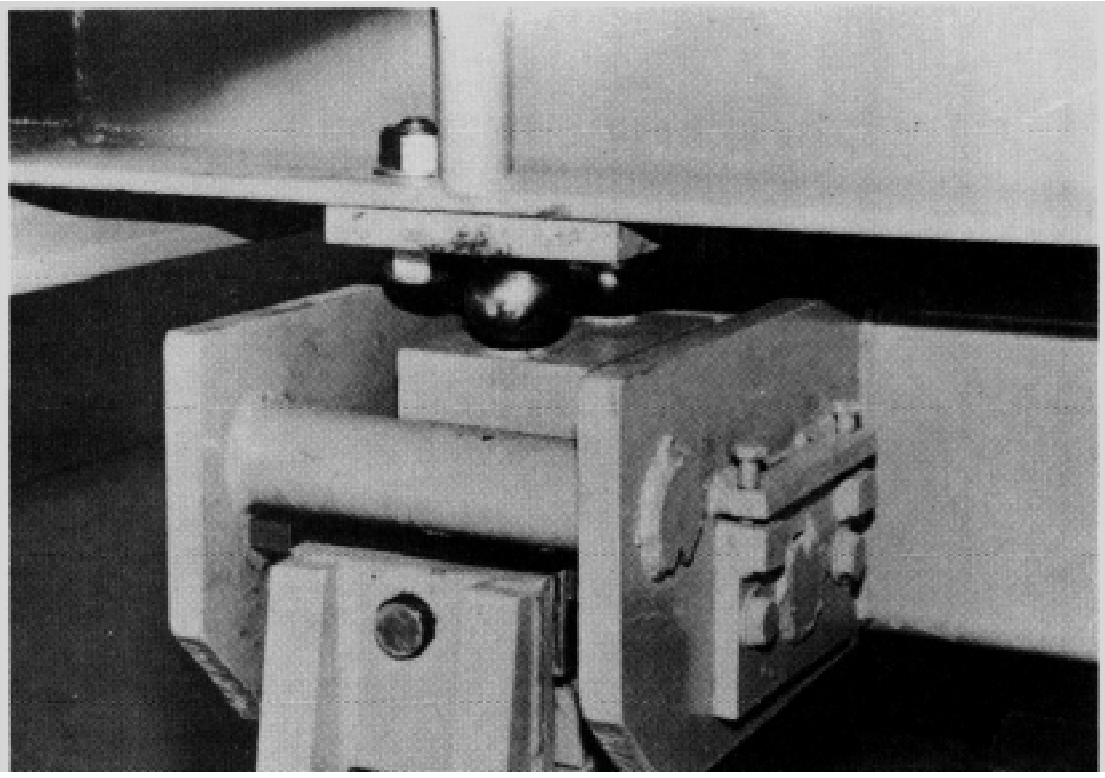
MW-2000 Alternative Lever Arrangements

FIGURE 6/10B/49B - 2



MW-2000 Alternative Lever Arrangements

FIGURE 6/10B/49B - 3



Floor-mounted Pedestal