



Australian Government
Department of Industry,
Innovation and Science

National Measurement Institute

Certificate of Approval

NMI 6/18/22B

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

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

RCM Model TS-1220 Overhead-track Weighing Instrument

submitted by Ross C Macnamara
 (formerly known as R C Macnamara Pty Ltd)
 23 Potato Point Road
 Bodalla NSW 2545

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 approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on **1/09/21**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – interim certificate issued	7/08/01
1	Pattern approved – certificate issued	3/12/01
2	Pattern reviewed & amended (submitor name) – notification of change issued	17/08/07
3	Pattern reviewed & updated – certificate issued	9/06/16

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI (or NSC) 6/18/22B' and only by persons authorised by the submittor.

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 National Measurement Institute (NMI) 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 document NMI P 106.

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

Special

The pattern as approved herein or with substitute indicator, shall comply with General Certificate of Approval No 6B/0.


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



Dr A Rawlinson

TECHNICAL SCHEDULE No 6/18/22B

1. Description of Pattern **approved on 7/08/01**

An RCM model TS-1220 class  overhead-track non-automatic weighing instrument of 600 kg maximum capacity.

1.1 Trackwork

The model TS-1220 trackwork (Figures 1 to 3) is approved for use with up to 3000 verification scale intervals, has the weigh-rail up to 1220 mm long supported by two load cells, and has a horizontal tie rod.

1.2 Load Cells

Two Precision Transducers model PSB 1000-C3 load cells of 1000 kg capacity, as described in the documentation of NSC approval No S338, are used and mounted as shown in Figure 4.

Alternatively, two Kelba model KA1000 C3 (or KA1000 C3-P) load cells of 1000 kg capacity, as described in the documentation of NSC approval No S155B are used.


Note that only these makes, models and capacities of load cells shall be used.

1.3 Indicator

A Gedge model GS1650 Mk3 digital indicator is used. The indicator is also described in the documentation of NSC approval No S193B.

1.4 Descriptive Markings

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full
Indication of accuracy class	
Pattern approval number for the instrument	NMI 6/18/22B
Maximum capacity	<i>Max</i> kg #1
Minimum capacity	<i>Min</i> kg #1
Verification scale interval	<i>e</i> = kg #1
Maximum subtractive tare	<i>T</i> = - kg #2
Serial number of the instrument
Serial numbers of the load cells #3
Pattern approval number for the instrument	NMI (or NSC 6/18/22B)
Pattern approval number for the indicator	NMI (or NSC No S...)

#1 These markings are also shown near the display of the result if they are not already located there.

#2 This marking is required if *T* is not equal to *Max*.

#3 Alternatively, these may be marked on a nameplate for the trackwork.

1.5 Verification Provision

Provision is made for the application of a verification mark.

1.6 Sealing Provision

Provision is made for the calibration adjustments of the indicator to be sealed as described in its approval documentation.

TEST PROCEDURE No 6/18/22B

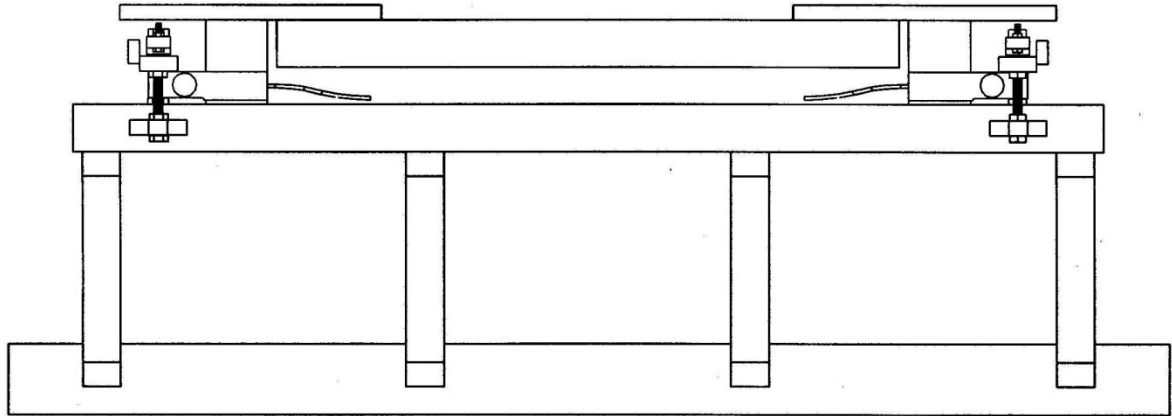
Instruments shall be tested in conjunction with any tests specified in the approval documentation for the indicator used, and in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

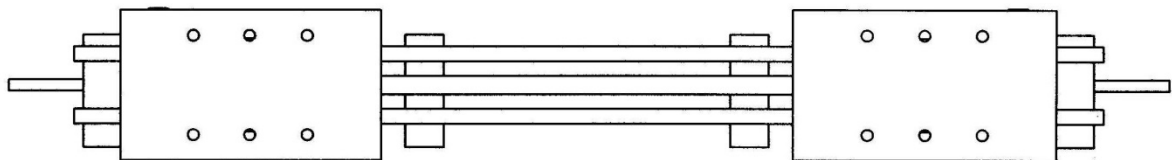
Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

FIGURE 6/18/22B – 1



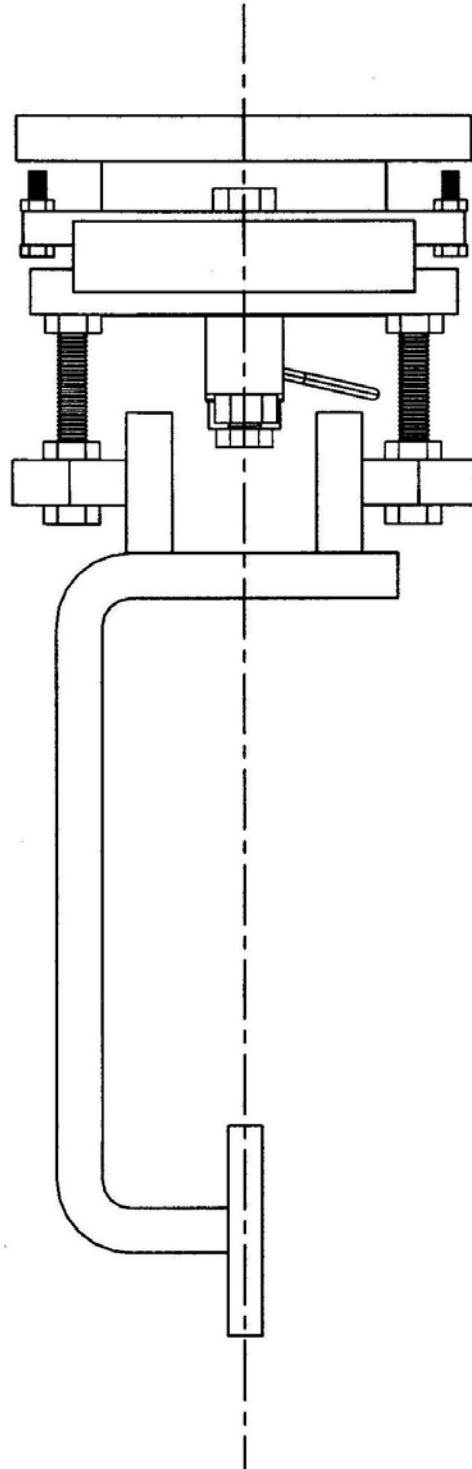
FRONT ELEVATION



TOP ELEVATION

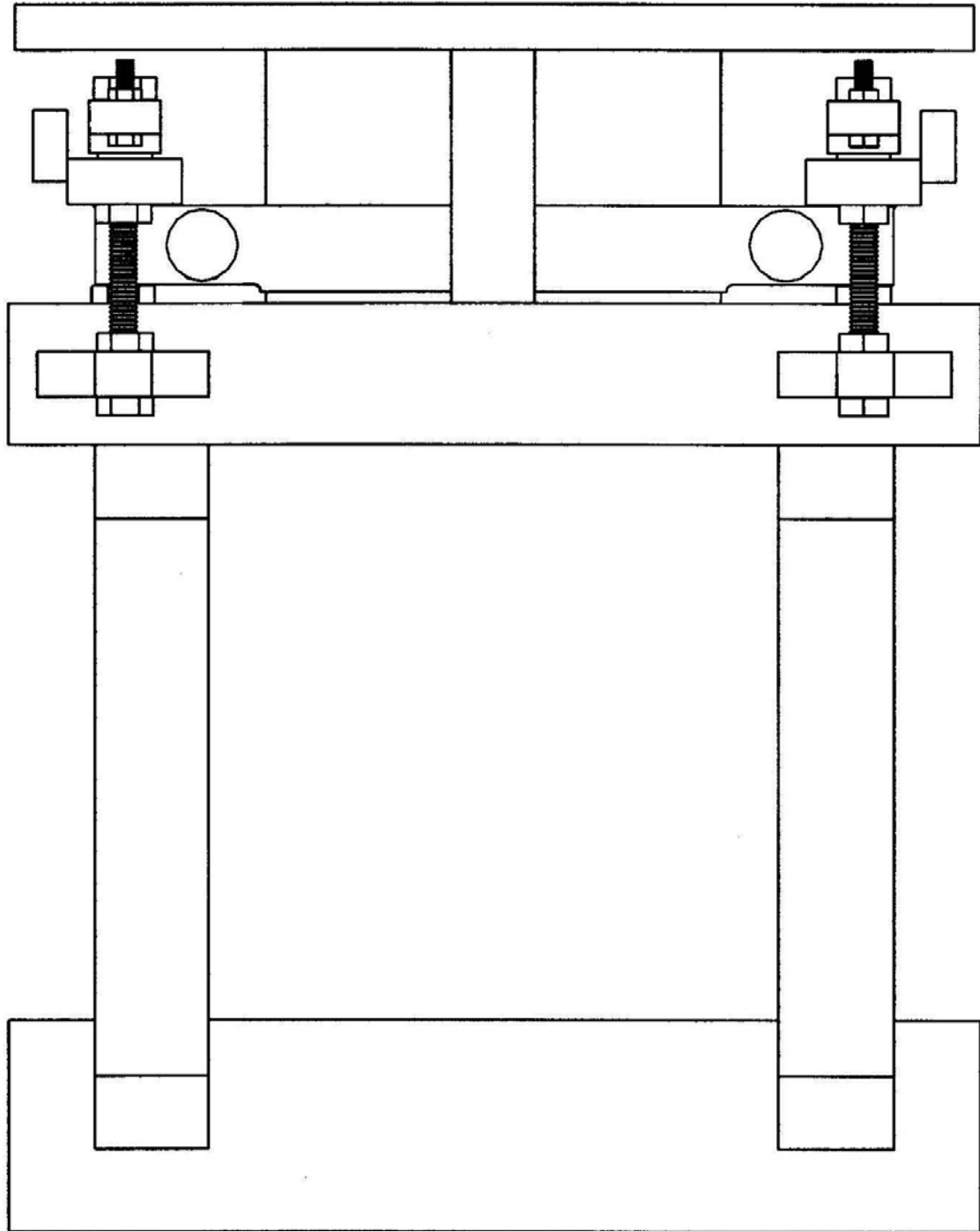
RCM Model TS-1220 Trackwork (1200 mm Weigh-rail)

FIGURE 6/18/22B – 2



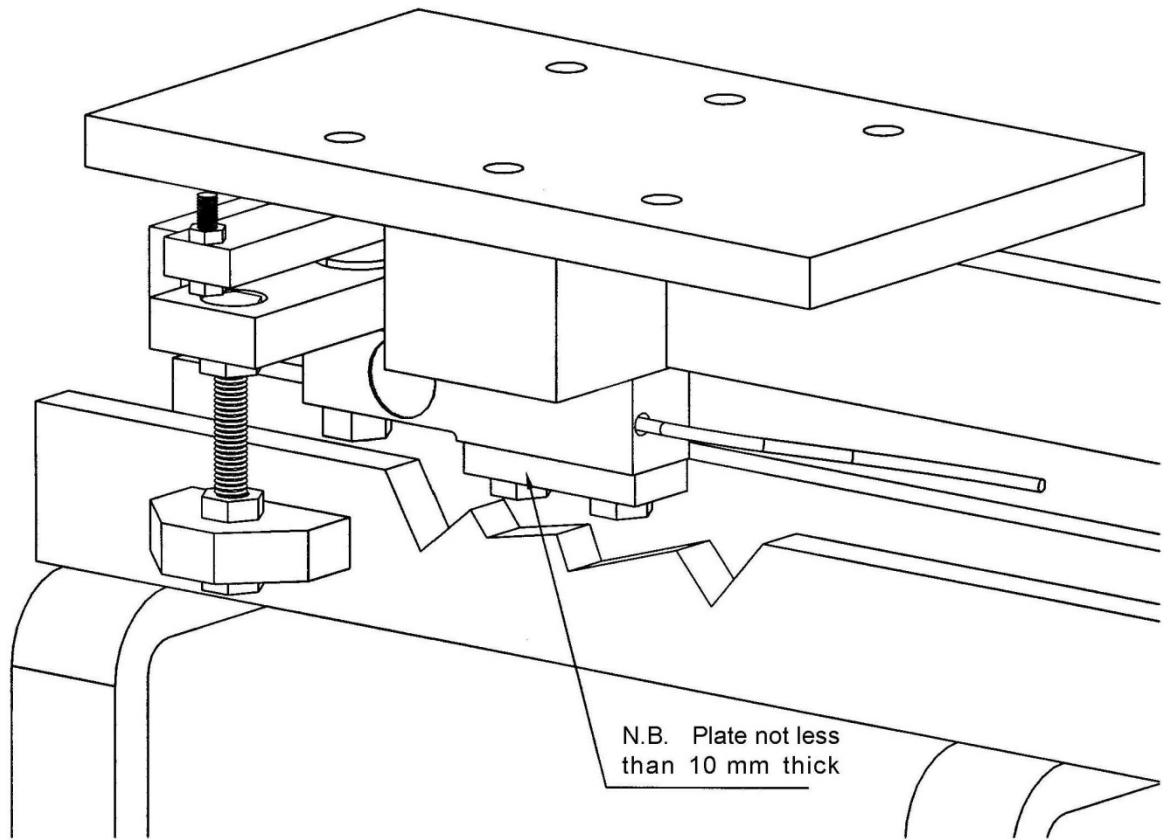
RCM Model TS-1220 Trackwork

FIGURE 6/18/22B – 3



RCM Model TS-1220 Trackwork (300 mm Weigh-rail)

FIGURE 6/18/22B – 4



Load Cell Mounting

~ End of Document ~