



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval
No 6/10B/79

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

Wagners Model BR005-0001 Weighing Instrument

submitted by Wagners Composite Fibre Technologies Pty Ltd
Cnr Anzac Ave & Alderley Street
TOOWOOMBAH QLD 4350.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 January 2012, and then every
5 years thereafter.

Instruments purporting to comply with this approval shall be marked with
approval number 'NMI 6/10B/79' 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 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.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

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

The pattern as approved herein or with substitute approved load cells and/or approved indicators and in other capacities, or with different platform sizes, shall comply with General Certificate of Approval No 6B/0.

Note: New instruments manufactured under this approval shall only use load cells and/or indicators with current Supplementary Certificates of Approval.

DESCRIPTIVE ADVICE

Pattern: approved 15 December 2006

- A Wagners model BR005-0001 self-indicating weighing instrument.

Variants: approved 15 December 2006

1. Certain alternative construction arrangements.
2. Certain models of the BR005 series in capacities from 15 000 to 60 000 kg capacity.
3. With two adjacent platforms.

Technical Schedule No 6/10B/79 describes the pattern and variants 1 to 3.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/10B/79 dated 24 July 2007

Technical Schedule No 6/10B/79 dated 24 July 2007 (incl. Test Procedure)

Figures 1 to 3 dated 24 July 2007

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



TECHNICAL SCHEDULE No 6/10B/79

Pattern: Wagners Model BR005-0001 Weighing Instrument
Submittor: Wagners Composite Fibre Technologies Pty Ltd
Cnr Anzac Ave & Alderley Street
TOOWOOMBAH QLD 4350

1. Description of Pattern

A Wagners model BR005-0001 self-indicating weighing instrument (Figure 1) approved for use with a maximum capacity of 30 000 kg and approved for use with up to 1500 verification scale intervals.

1.1 Basework

The Wagners model BR005-0001 basework has the platform fully supported by four load cells.

The platform dimensions are 8 m × 3.2 m.

Note: The instrument basework is constructed using a composite fibre material. The platform is in the form of two beams (also referred to by the manufacturer as 'planks') each 1200 mm wide, which are supported by end beams which are in turn supported by the load cells. The beams are intended to bear the weight of the load applied to the platform (i.e. the wheels of the vehicle being weighed). Infill sheets are provided between the beams for safety reasons – these infill sheets are not intended to carry concentrated loads and this should be taken into consideration during testing.

1.2 Load Cells

Four HBM model C16A C3 / 20t load cells of 20 000 kg capacity are used in each platform. The load cells are also described in the documentation of approval NSC S370.

1.3 Indicator

A Rinstrum model 5000 digital indicator is used. The indicator is also described in the documentation of approval NSC S363.

1.4 Special Features – Re-locatable Weighbridge

The instrument is intended by the manufacturer to be able to be readily re-located. It should be noted however that is necessary for this instrument to be verified/certified following any such re-location.

Note: State and Territory Trade Measurement Legislation may require particular arrangements regarding weighbridges (such as approaches and location of the weighbridge platform and indicator) to be met. This approval does not certify that such requirements have (or can be) met.

In re-locating the weighbridge consideration should be given to factors such as, notifying the State or Territory Authority of the move, ensuring that it is installed on level ground, ensuring that the stability and load bearing capability of the ground is adequate, and ensuring adequate provision for ramps or other approaches to access the weighbridge.

1.5 Sealing Provision

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

1.6 Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Wagners Composite Fibre Technologies Pty Ltd.
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NMI 6/10B/79
Pattern approval mark for the indicator	S...
Pattern approval mark for the load cells	S...
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Serial number of the instrument

* These markings shall also be shown near the display of the result if they are not already located there.

1.7 Verification/Certification Provision

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

2. Description of Variants

2.1 Variant 1

Instruments using alternative composite fibre construction arrangements (Figure 2) including full deck arrangements without the 'two beam' configuration described for the pattern.

2.2 Variant 2

Wagners model BR005 series instruments (with model numbers in the form BR005-xxxx) in capacities from 15 000 to 60 000 kg.

Instruments are approved for use with up to 1500 verification scale intervals (subject to the approval parameters of the load cells and indicator).

2.3 Variant 3

Instruments comprising two adjacent BR005 platforms (Figure 3). Each platform shall be configured as a separate weighing instrument. This may be achieved by either:

- (a) a separate indicator being provided for each platform (a separate summing indicator may be provided – see General Supplementary Certificate No S1/0/A); or
- (b) the use of an indicator which has provision for the connection of two separate baseworks (see the approval documentation for the indicator).

TEST PROCEDURE

Instruments should be tested in accordance with any relevant tests specified in the Uniform Test Procedures.

Notes: See **1.4 Special Features – Re-locatable Weighbridge** in regard to issues relating to the re-location of this instrument.

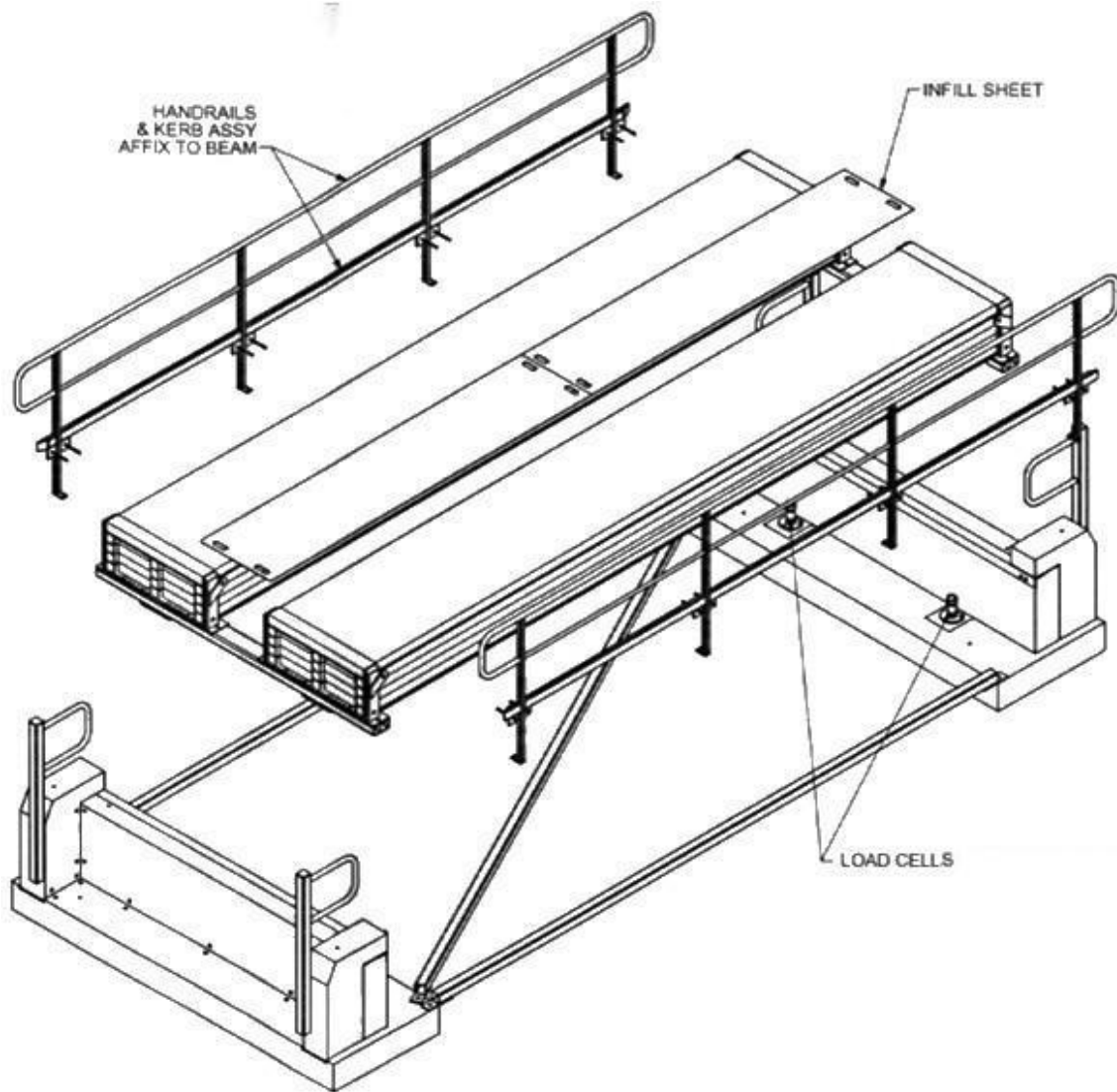
Certain models of this instrument may consist of two beams ('planks') intended to be loaded by the vehicle wheels, with infill sheets between these beams. The infill sheets are not intended for concentrated loading and procedures used in testing will need to be altered to take account of this. In particular for eccentricity testing the load may be placed on either 'plank' for half its length, for 'centre' loading the loads should be applied on both sides of the infill sheet (not on the infill sheet).

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:

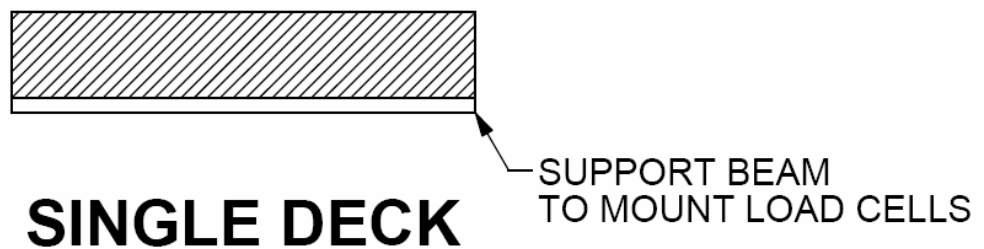
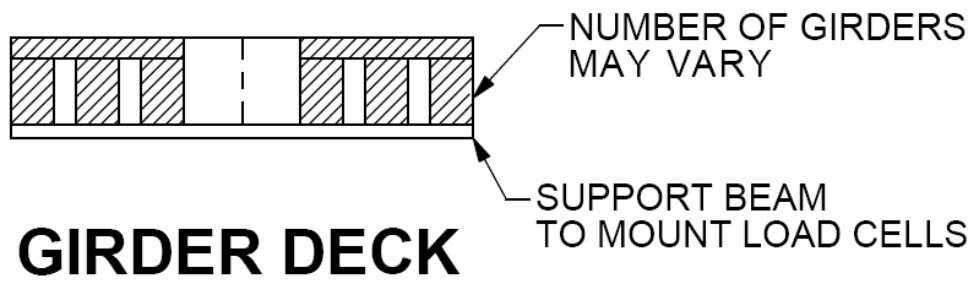
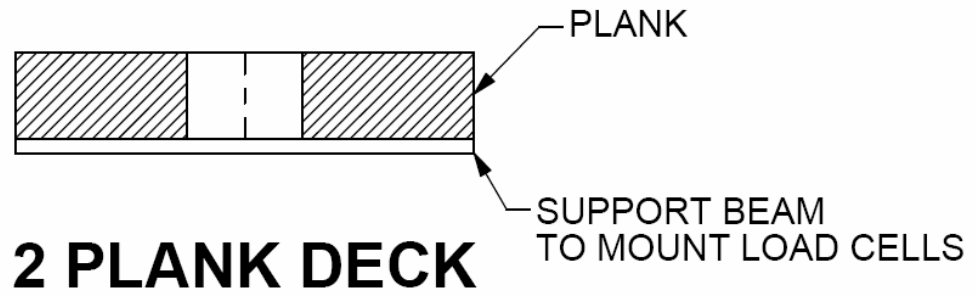
- $\pm 0.5 e$ for loads $0 \leq m \leq 500$;
- $\pm 1.0 e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5 e$ for loads $2\,000 < m \leq 10\,000$.

FIGURE 6/10B/79 – 1



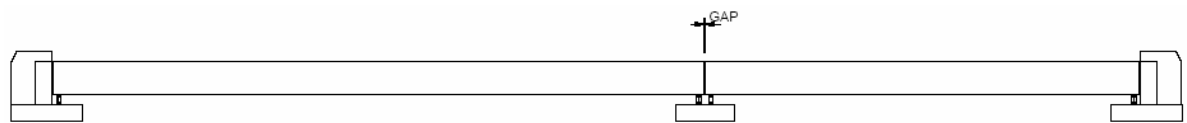
Typical BR005 Weighbridge With '2 Plank' Deck

FIGURE 6/10B/79 – 2



Alternative Construction Arrangements (Cross-sectional View)

FIGURE 6/10B/79 – 3



Arrangement With Two Adjacent Platforms
(Restraints are provided to maintain a gap between decks)