



Australian Government  
Department of Industry,  
Innovation and Science

## National Measurement Institute

### Certificate of Approval

#### NMI 6/10B/90

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.

Brisweigh Model SPWB Weighing Instrument

submitted by      Precia SA  
                            BP 106  
                            07000      Privas  
                            FRANCE

**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 1/04/20, and then every 5 years thereafter.

#### DOCUMENT HISTORY

| Rev | Reason/Details   | Date     |
|-----|--|----------|
| 0   | Pattern & variants 1 to 4 approved – certificate issued                    | 13/03/15 |
| 1   | Variant 1 amended, variant 5 approved, submittor name – certificate issued | 23/01/18 |
|     |  |          |

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/10B/90' 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 Certificate No S1/0B.

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.


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



**Darryl Hines**

TECHNICAL SCHEDULE No 6/10B/90

**1. Description of Pattern** **approved on 13/03/15**

A Brisweigh model SPWB class  non-automatic self-indicating weighing instrument (Figure 1) of 30 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

**1.1 Basework**

The model SPWB basework has the platform fully supported by 6 load cells. Dimensions of the platform are 9 × 3 m (nominal).

**1.2 Load Cells**

Six Zemic model BM14C-C3-20t-13B6 load cells of 20 000 kg capacity are used to support the platform.

The load cells are also described in the documentation of approval NMI S561.

**1.3 Indicator**

A Rinstrum model R420 digital indicator is used.

The indicator is also described in the documentation of approval NMI S463.

**1.4 Weighbridge Requirements**

Where the instrument is intended to be installed as a weighbridge, it shall be ensured that all relevant weighbridge requirements of the National Measurement Legislation are met (e.g. in relation to weighbridge approaches, visibility and the location of the weighbridge indicator and platform).

This approval does not certify that such requirements have (or can be) met.

The requirements of the National Measurement Legislation regarding the ground or floor under the platform vary according to whether the instrument is installed as a portable weighbridge, weighbridge without a pit or a weighbridge with a pit. However, bolting of the load cell support pads to suitable concrete piers is considered essential to provide a suitable stable base, irrespective of other aspects of instrument installation.

Note that it is important that suitable provision be made for the loading of test masses. For example, clear access for a forklift may be necessary at both sides of the platform.

**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 in the indicator to be sealed as described in the approval documentation for the indicator used.

## 1.7 Descriptive Markings and Notices

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 | Precia SA #2         |
| Indication of accuracy class                 | Ⓜ                    |
| Pattern approval mark for the instrument     | NMI 6/10B/90         |
| Pattern approval mark for the indicator      | NMI S...             |
| Pattern approval mark for the load cells     | NMI S...             |
| Maximum capacity                             | Max ..... t or kg #1 |
| Minimum capacity                             | Min ..... t or kg #1 |
| Verification scale interval                  | e = ..... t or kg #1 |
| Serial number of the instrument              | .....                |

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

#2 Manufacturer may also be shown as 'Brisweigh' or 'Precia Molen'.

## 2. Description of Variant 1

**approved on 13/03/15**  
**amended on 23/01/18**

Other SPWB series instruments in certain other capacities.

The platform is fully supported by no less than 4 and with up to 10 NMI approved load cells. Instruments may be in capacities of 30 000 kg up to 149 999 kg using approved load cells and an approved digital indicator (in accordance with General Certificate of Approval No 6B/0).

Instruments are approved for use with up to 4000 verification scale intervals (subject to the approval parameters of the load cells and indicator).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause **4. Wind Effects** of General Certificate of Approval No 6B/0.

## 3. Description of Variant 2

**approved on 13/03/15**

Certain SPWB series instruments, which are similar to the pattern but have a cross beam frame supporting the load cells underneath the load receptor.

The instrument is intended to be bolted to concrete pads or solid ground to provide level conditions, stability and adequate load bearing capacity.

The instrument may be designed to facilitate re-location of the instrument. However verification of the instrument is required following any re-location of the instrument.

Instruments may be in capacities of 30 000 kg up to 149 999 kg, using approved load cells and an approved digital indicator (in accordance with General Certificate of Approval No 6B/0).

Instruments are approved for use with up to 4000 verification scale intervals (subject to the approval parameters of the load cells and indicator).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause **4. Wind Effects** of General Certificate of Approval No 6B/0.

**4. Description of Variant 3** **approved on 13/03/15**

Instruments comprising a number of SPWB platforms. 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 S1/0B); or
- (b) the use of an indicator which has provision for the connection of two separate baseworks (see the approval documentation for the indicator).

**5. Description of Variant 4** **approved on 13/03/15**

Model SPWB instruments with hopper or tank-type load receptors in capacities from 15 000 to 200 000 kg, and approved for use with up to 3000 verification scale intervals (VSI).

Instruments are either:

- (a) fitted with 3, 4 or 5 NMI-approved load cells (arranged symmetrically to ensure even loading of each cell) where the hopper is a vertical cylindrical or tank-type load receptor directly supported by the load cells; or
- (b) fitted with 4 NMI-approved load cells where the hopper is a non-vertical cylindrical, or other hopper-type load receptor.

Note: Instruments with more than 4 load cells may be acceptable if prior written agreement from NMI is obtained.

In addition suitable provision must be made for the application of suitable verified masses to the instrument as required for verification purposes.

It may be necessary for such masses to be incorporated within the design of the instrument.

**6. Description of Variant 5** **approved on 23/01/18**

Model SPWB series instruments having a steel deck (Figure 1), or steel frame and concrete deck (Figure 2), or full concrete deck (Figure 3).

**TEST PROCEDURE No 6/10B/90**

Instruments shall be tested 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 6/10B/90 – 1



Typical Model SPWB Weighing Instrument - Steel Deck

FIGURE 6/10B/90 – 2



Typical Model SPWB Weighing Instrument - Steel Frame and Concrete Deck

FIGURE 6/10B/90 – 3



Typical Model SPWB Weighing Instrument - Full Concrete Deck

~ End of Document ~