

Australian Government

Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval NMI 6/10B/60

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.

KSS Model BWS9000 Weighing Instrument

submitted by Kanawha Scales & Systems Inc. 303 Jacobson Drive Poca WV 25159 USA

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 **1/11/21**, and then every 5 years thereafter.

Rev	Reason/Details	Date
0	Pattern approved – interim certificate issued	15/10/97
1	Pattern approved – certificate issued	12/12/97
2	Pattern reviewed – notification of change issued	8/12/04
3	Pattern amended (indicator) & reviewed – notification of	26/02/10
	change issued	
4	Pattern amended (capacity) – notification of change issued	5/05/10
5	Pattern reviewed & updated – certificate issued	9/06/16

DOCUMENT HISTORY

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI (or NSC) 6/10B/60' 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.

The pattern as approved herein or with substitute NMI-approved load cells and/or indicators, and in other capacities, or with different platform sizes, shall comply with General Certificate 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 6/10B/60

1. Description of Pattern

approved on 15/10/97

A KSS model BWS9000 class ID self-indicating weighing instrument of up to 108 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals (Figures 1 and 2).

Note: Instruments may be of up to 108 000 kg in accordance with General Certificate 6B/0, including the use of alternative NMI approved load cells and indicators.

1.1 Basework

The model BWS9000 weighing instrument has the weigh bin fully supported by 4 load cells.

1.2 Load Cells

Four Artech model 80210-125K load cells of 56 700 kg maximum capacity are used and are mounted as shown in Figure 3. The load cells are also described in the documentation of NSC approval No S345.

1.3 Indicator

A Mettler Toledo model LYNX indicator is used (Figure 4). The indicator is also described in the documentation of approval NSC No S336. Alternatively, a Mettler Toledo model IND560 indicator is used. This indicator is also described in the documentation of approval NMI No S483.

Zero is automatically corrected to within $\pm 0.25e$ whenever power is applied and whenever the instrument comes to rest within 0.5e of zero.

The initial zero-setting device has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

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	
Name or mark of manufacturer's agent	
Indication of accuracy class	
Pattern approval number for the instrument	NMI or NSC No 6/10B/60
Maximum capacity	<i>Max</i> kg #1
Minimum capacity	<i>Min</i> kg #1
Verification scale interval	e = kg #1
Serial number of the instrument	
Serial number of the load cells	# 2
Serial number of the indicator	# 2

- #1 These markings are also shown near the display of the result if they are not already located there.
- #2 Alternatively, these may be marked adjacent to the verification mark.

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

TEST PROCEDURE

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 the *National Trade Measurement Regulations 2009*.



SHEETING AND SOME STEELWORK NOT SHOWN

KSS Model BWS9000 Weighing Instrument



Showing Weigh Bin and Test Weight Details



Showing Artech Model 80210-125K Load Cell Mounting



Mettler Toledo Model LYNX Digital Indicator

~ End of Document ~