

Australian Government

Department of Industry, Innovation and Science

National Measurement Institute

# **Certificate of Approval**

# No 6/10B/89

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.

Truck Weighbridge Model L630 Weighing Instrument

Truck Weighbridge T/A EI & BJ Lynch and Sons			
Mount Barker	WA	6324	
	Truck Weighbri T/A EI & BJ Lyr Muir Highway Mount Barker	Truck Weighbridge T/A EI & BJ Lynch and Muir Highway Mount Barker WA	

**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 1/08/19, and then every 5 years thereafter.

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – interim certificate issued	17/07/14
1	Pattern & variant 1 amended (validity) – interim certificate issued	14/10/14
2	Pattern & variant 1 approved – certificate issued	19/02/15
3	Variant 2 approved – certificate issued	19/08/15
4	Variant 3 approved – interim certificate issued	22/12/15
5	Variant 3 approved – certificate issued	25/05/16

#### DOCUMENT HISTORY

#### CONDITIONS OF APPROVAL

#### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/10B/89' 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.

#### Special

This approval shall NOT be used in conjunction 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/89

#### 1. Description of Pattern

#### approved on 17/07/14

A Truck Weighbridge model L630 class 1 single-interval non-automatic selfindicating weighing instrument (Figure 1 and Table 1) of 30 000 kg maximum capacity with a verification scale interval of 10 kg.

The model L630 basework has the platform fully supported by four load cells. Dimensions of the platform are  $3 \times 6$  m (nominal).

## 1.1 Load Cells

Four Zemic model HM9B load cells of 20 000 kg maximum capacity are used to support the platform (Figure 2).

#### 1.2 Indicator

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

## 1.3 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.

#### 1.4 Verification Provision

Provision is made for the application of a verification mark.

#### 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 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	Truck Weighbridge	
Pattern approval number for the instrument	NMI 6/10B/89	
Pattern approval number for the load cells		
Pattern approval number for the indicator	NMI S193B	
Maximum capacity	<i>Max</i> kg or t	#1
Minimum capacity	<i>Min</i> kg or t	#1
Verification scale interval	e = kg or t	#1
Maximum subtractive tare	<i>T</i> = kg or t	#2
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 This marking is required if *T* is not equal to *Max*.

#### 2. Description of Variant 1

Certain other capacities of single-interval instruments with various platform sizes, using various capacity Zemic HM9B series load cells and with other parameters as listed in Table 1.

#### 3. Description of Variant 2

The pattern and variant using an alternative Gedge Systems model GS600 digital indicator which is also described in the documentation of approval NMI S621.

The sealing arrangements are described in the documentation of approval NMI S621.

#### 4. Description of Variant 3

The pattern and variants using an alternative Rinstrum model R420 or R423 digital indicator which is also described in the documentation of approval NMI S463.

The sealing arrangements are described in the documentation of approval NMI S463.

#### TEST PROCEDURE No 6/10B/89

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*.

# approved on 19/08/15

approved on 22/12/15

approved on 17/07/14

# TABLE 1 – Approved Models of the L Single-interval Series

Model	Maximum	Maximum	Verification	Nominal	Number	Capacity of
Number	Capacity	Capacity	Scale	Platform	of load	Zemic
	(Max)	(Min)	Interval	Dimension	cells	HM9B Load
			( <i>e</i> )	(mm × mm)	used	Cells
L520	20 000 kg	200 kg	10 kg	3000 × 5000	4	#1
L620	20 000 kg	200 kg	10 kg	3000 × 6000	4	#1
L630	30 000 kg	200 kg	10 kg	3000 × 6000	4	#1
L720	20 000 kg	200 kg	10 kg	3000 × 7000	4	#1
L730	30 000 kg	200 kg	10 kg	3000 × 7000	4	#1
L850	50 000 kg	400 kg	20 kg	3000 × 8000	6	#2
L860	60 000 kg	400 kg	20 kg	3000 × 8000	6	#2
L950	50 000 kg	400 kg	20 kg	3000 × 9000	6	#2
L960	60 000 kg	400 kg	20 kg	3000 × 9000	6	#2
L1050	50 000 kg	400 kg	20 kg	3000 × 10 000	6	#2
L1060	60 000 kg	400 kg	20 kg	3000 × 10 000	6	#2
L1250	50 000 kg	400 kg	20 kg	3000 × 12 000	6	#2
L1260	60 000 kg	400 kg	20 kg	3000 × 12 000	6	#2
L1450	50 000 kg	400 kg	20 kg	3000 × 14 000	8	#2
L1460	60 000 kg	400 kg	20 kg	3000 × 14 000	8	#2
L1650	50 000 kg	400 kg	20 kg	3000 × 16 000	8	#2
L1660	60 000 kg	400 kg	20 kg	3000 × 16 000	8	#2
L1850	50 000 kg	400 kg	20 kg	3000 × 18 000	8	#2
L1860	60 000 kg	400 kg	20 kg	3000 × 18 000	8	#2
L2080	80 000 kg	1000 kg	50 kg	3000 × 20 000	10	#2
L2280	80 000 kg	1000 kg	50 kg	3000 × 22 000	10	#2
L2480	80 000 kg	1000 kg	50 kg	3000 × 24 000	10	#2

(The pattern (model L630) is shown in **bold** text.)

#1 20 000 kg

#2 20 000/30 000 kg

## FIGURE 6/10B/89-1



Truck Weighbridge Model L630 Weighing Instrument

# FIGURE 6/10B/89-2



Typical Load Cell Mounting