



Australian Government  
Department of Industry,  
Innovation and Science

## National Measurement Institute

### Certificate of Approval

### No 6/10B/88

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.

Grainline Model WS8030 Weighing Instrument

submitted by            Grainline  
                                 1 Hartog Place  
                                 Wagga Wagga    NSW    2650

**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.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – interim certificate issued	25/07/14
1	Pattern & variant 1 amended (validity) – interim certificate issued	14/10/14
2	Pattern & variant 1 amended (validity) – interim certificate issued	7/05/15
3	Pattern & variant 1 approved – certificate issued	2/12/15

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/10B/88' 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 of Approval 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*.



**Dr A Rawlinson**

TECHNICAL SCHEDULE No 6/10B/88

**1. Description of Pattern** **approved on 25/07/14**

A Grainline model WS8030 class  $\text{III}$  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.

The model WS8030 basework has the 8 m x 3 m platform fully supported by eight load cells.

**1.2 Load Cells**

Eight Flintec model RC3-30t-C3 load cells of 30 000 kg maximum capacity are used to support the platform. The load cells are also described in the documentation of approval NMI No S695.

**1.3 Indicator**

A Leon Engineering model LD 5290 digital indicator. The indicator is described in the documentation of approval NMI S676.

**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.

**1.5 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	Grainline
Indication of accuracy class	$\text{III}$
Pattern approval number for the instrument	NMI 6/10B/88
Pattern approval number for the load cells	NMI S....
Pattern approval number for the indicator	NMI S....
Maximum capacity	<i>Max</i> ...../..... g or kg #1
Minimum capacity	<i>Min</i> ..... g or kg #1
Verification scale interval	<i>e</i> = ...../..... g or kg #1
Maximum subtractive tare	<i>T</i> = - ..... g or kg #2
Serial number of the instrument	.....

For single interval instruments (see variants) there is only one range therefore only one value of maximum capacity and verification scale interval to be marked.

#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*.

**1.6 Verification Provision**

Provision is made for the application of a verification mark.

## 1.7 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.

## 2. Description of Variant 1

approved on 25/07/14

Other Grainline model WSxxyy series instruments, as single interval, multiple range or multi-interval instruments similar to the pattern, of other capacities subject to approval parameters of the load cells and indicator, and compliance with General Certificate of Approval No 6B/0.

The model number may contain suffixes indicating length and width of the particular model version (e.g. 'WS18030' indicates instrument with a 18 m x 3 m platform).

The platform is fully supported by no less than 4 and with up to 12 NMI approved load cells. Instruments may be in capacities of:

- 100 kg up to 1499 kg;
- 1500 kg up to 14 999 kg;
- 15 000 kg up to 149 999 kg; and
- 150 000 kg and above,

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.

### TEST PROCEDURE No 6/10B/88

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/88 – 1



Typical Grainline Model WS8030 Weighing Instrument

~ End of Document ~