



**Australian Government**  
**Department of Industry, Science,  
Energy and Resources**

**National  
Measurement  
Institute**

36 Bradfield Road, West Lindfield NSW 2070

**Certificate of Approval**  
**NMI 6/4C/324**

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.

Wedderburn Model WS213 Weighing Instrument

submitted by W W Wedderburn Pty Ltd  
101 Williamson Road  
Ingleburn NSW 2565

**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 October 2015.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

**DOCUMENT HISTORY**

<b>Rev</b>	<b>Reason/Details</b>	<b>Date</b>
0	Pattern & variants 5 approved – certificate issued	17/01/22

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/324' and only by persons authorised by the submitter.

It is the submitter'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 of Approval 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*.



**Darryl Hines**  
Manager  
Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/4C/324

**1. Description of Pattern** **approved on 17/01/22**

A Wedderburn model WS213 class  non-automatic self-indicating single range weighing instrument (Figure 1) of 3 kg maximum capacity with a verification scale interval of 0.001 kg and with a minimum capacity of 0.02 kg.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless the maximum capacity of the instrument is greater than 100 kg (i.e. as may be the case for variant 3).

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices

**1.1 Base work**

The Wedderburn model WS213 instrument has a load receptor directly supported by a single load cell. The load receptor has a nominal dimension of 283 mm x 338 mm.

A Tedeo Huntleigh model 1130 C3 load cell of 10 kg maximum capacity is used.

**1.2 Indicator**

A UWE model VPS digital indicator having a stainless-steel enclosure is used. The indicator may be mounted on a column (Figure 1) or it may also be located remotely.

The indicator is powered by an internal 6 V rechargeable battery and/or a 12 V AC/DC mains adaptor (which also can recharge the internal battery).

Note: The AC/DC mains adaptor supplied by manufacturer is a GOE model GS2S-006-120-B1 power supply (output 12V DC, 500 mA) – the submitter should be consulted regarding the acceptability of alternative power supply units.

**1.3 Zero**

A zero-tracking device may be fitted.

The initial zero-setting device of the pattern 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 Tare**

A semi-automatic subtractive tare device may be fitted and/or an automatic subtractive taring device, each of up to one-third of the maximum capacity of the instrument, may be fitted.

**1.5 Display Check**

A display check is initiated whenever the instrument is switched on.

**1.6 Levelling**

The instrument is fitted with adjustable feet and level indicator.

The instrument is to be used in a level condition as indicated by the level indicator.

## 1.7 Interface

Instruments may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 of document NMI R76 (the basic intent of which is that it shall not be possible to alter weighing results via the interfaces).

Any measurement data output from the instrument or its interfaces shall only be used for trade in compliance with Supplementary Certificate of Approval No S1/0B (in particular in regard to the data and its format).


Instruments may be fitted with RS232C (Serial, D-Sub 9), and Centronics Printer Port (Parallel, D-SUB 25).

## 1.8 Verification Provision

Provision is made for the application of a verification mark.

## 1.9 Descriptive Markings and Notices

Instruments are marked with the following data:

Manufacturer's mark, or name written in full	WEDDERBURN
Indication of accuracy class	
Pattern approval number for the instrument	NMI 6/4C/324
Maximum capacity	Max..... g or kg #1
Minimum capacity	Min ..... g or kg #1
Verification scale interval	e = ..... g or kg #1
Maximum subtractive tare	T = - ... g or kg# 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*.

In addition, instruments shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording (see 1. *Description of Pattern* above).

Notes: For multiple range instruments, the maximum capacity, minimum capacity and verification scale interval for each range shall be marked, with an indication of the range to which they apply eg.

W1	Max = .....kg	Min = .....kg	e = d = .....kg
W2	Max = .....kg	Min = .....kg	e = d = .....kg

## 1.10 Software

The software version is designated v1.2 (Figure 2).

Using the following steps to access the software ID:

- With the instrument switched off, press and hold the 'TARE' button and then press the 'ON' button.
- Release the 'TARE' button when the function number is displayed.
- Press the 'TARE' button to scroll through until 'F2' is displayed.
- Press the 'MODE' button. The software ID is displayed.
- Press the 'TARE' button to return to the function mode.
- Press the 'ZERO' button to return to the normal weighing operation.

## 1.11 Sealing Provision

Provision is made for the calibration to be sealed by setting the JP1 calibration jumper on the mainboard within the instrument to a LOCK position. The JP1 is used to control calibration and internal function settings (F1 to F3).

It is possible to determine that the JP1 jumper is in the LOCK position using following steps:

- With the instrument switched off, press and hold the 'TARE' button, then press the 'ON' button.
- Release the 'TARE' button when the function number is displayed.
- Press the 'TARE' button to scroll through until 'F3' is displayed.
- Press the 'MODE' button.
- If the JP1 calibration jumper is in the LOCK position, the instrument will display 'F4'. In this case the instrument may be verified.
- Otherwise the instrument will display something else in which case the instrument should not be verified until the JP1 jumper is correctly located in the LOCK position.
- Press the 'ON' or 'ZERO' button to return to the normal weighing operation.

Sealing to prevent access within the instrument housing may be achieved by means of lead and wire type of seal or destructible adhesive labels over the opposite sides of a join in the instrument housing (Figure 3).

## 2. Description of Variant 1

**approved on 17/01/22**

The Wedderburn model WS213 series single range instruments using a Tedeo Huntleigh model 1130 C3 load cell in certain other capacities as listed in Table 1 (the pattern is shown in **bold**).

Table 1 – Single Range Instrument Capacities

Maximum Capacity ( <i>Max</i> )	Minimum Capacity ( <i>Min</i> )	Verification Scale Interval ( <i>e</i> )	Platform size (mm x mm)	Tedeo Huntleigh Model 1130 C3 Load Cell Capacity ( <i>E<sub>max</sub></i> )
<b>3 kg</b>	<b>0.02 kg</b>	<b>0.001 kg</b>	<b>283 x 338</b>	<b>10 kg</b>
6 kg	0.04 kg	0.002 kg	283 x 338	10 kg or 15 kg or 20 kg
15 kg	0.1 kg	0.005 kg	283 x 338	20 kg or 30 kg or 50 kg
30 kg	0.2 kg	0.01 kg	283 x 338	50 kg or 75 kg

**3. Description of Variant 2**

**approved on 17/01/22**

The Wedderburn model WS213 series instruments which are similar to the pattern and variant 1 in certain multiple range capacities as listed in Table 2.

Table 2 – Multiple Range Instrument Capacities

Maximum Capacity <i>(Max<sub>1</sub>/Max<sub>2</sub>)</i>	Minimum Capacity <i>(Min<sub>1</sub>/Min<sub>2</sub>)</i>	Verification Scale Interval <i>(e<sub>1</sub>/e<sub>2</sub>)</i>	Platform size <i>(mm x mm)</i>	Tedea Huntleigh Model 1130 C3 Load Cell Capacity <i>(E<sub>max</sub>)</i>
3 kg/6 kg	0.02 kg/0.04 kg	0.001 kg/0.002 kg	283 x 338	10 kg
6 kg/15 kg	0.04 kg/0.1 kg	0.002 kg/0.005 kg	283 x 338	20 kg
15 kg/30 kg	0.1 kg/0.2 kg	0.005 kg/0.01 kg	283 x 338	50 kg

**4. Description of Variant 3**

**approved on 17/01/22**

The Wedderburn model WS213 instruments which is similar to the pattern but having a Zemic model BM6G C3 load cell in certain single range capacities as listed in Table 3.

Table 3 – Single Range Instrument Capacities

Maximum Capacity <i>(Max)</i>	Minimum Capacity <i>(Min)</i>	Verification Scale Interval <i>(e)</i>	Platform size <i>(mm x mm)</i>	Zemic Model BM6G C3 Load Cell Capacity <i>(E<sub>max</sub>)</i>
6 kg	0.04 kg	0.002 kg	283 x 338	20 kg
15 kg	0.1 kg	0.005 kg	283 x 338	20 kg or 50 kg
30 kg	0.2 kg	0.01 kg	330 x 450	50 kg or 75 kg
60 kg	0.4 kg	0.02 kg	330 x 450 430 x 525	75 kg or 100 kg
150 kg	1 kg	0.05 kg	430 x 525	200 kg or 300 kg
300 kg	2 kg	0.1 kg	430 x 525	400 kg or 500 kg

**5. Description of Variant 4**

**approved on 17/01/22**

The Wedderburn model WS213 instruments which are similar to variant 3 in certain multiple range capacities as listed in Table 4.

Table 4 – Multiple Range Instrument Capacities

Maximum Capacity <i>(Max<sub>1</sub>/Max<sub>2</sub>)</i>	Minimum Capacity <i>(Min<sub>1</sub>/Min<sub>2</sub>)</i>	Verification Scale Interval <i>(e<sub>1</sub>/e<sub>2</sub>)</i>	Platform size <i>(mm x mm)</i>	Zemic Model BM6G C3 Load Cell Capacity <i>(E<sub>max</sub>)</i>
15 kg/30 kg	0.1 kg/0.2 kg	0.005 kg/0.01 kg	330 x 450 430 x 525	50 kg
30 kg/60 kg	0.2 kg/0.4 kg	0.01 kg/0.02 kg	330 x 450 430 x 525	75 kg or 100 kg
150 kg/300 kg	1 kg/2 kg	0.05 kg/0.1 kg	430 x 525	400 kg or 500 kg

**6. Description of Variant 5**

**approved on 17/01/22**

The Wedderburn model WS214 instruments (Figure 5) which are similar to the pattern and variants 1 to 4 but using a UWE model VFS digital indicator.

**6.1 Sealing Provision**

Provision is made for the calibration to be sealed by setting the JP1 calibration jumper on the mainboard within the instrument to a LOCK position.

It is possible to determine that the JP1 jumper is in the LOCK position using following steps:

- With the instrument switched off, press and hold the 'TARE' button, then press the 'ON' button.
- Release the 'TARE' button when the function number is displayed.
- Press the 'TARE' button to scroll through until 'F3' is displayed.
- Press the 'MODE' button.
- If the JP1 calibration jumper is in the LOCK position, the instrument will display 'SI\_on'. In this case the instrument may be verified.
- Otherwise the instrument will display something else in which case the instrument should not be verified until the JP1 jumper is correctly located in the LOCK position.
- Press the 'ON' or 'ZERO' button to return to normal operation.

Sealing to prevent access within the instrument housing may be achieved by means of lead and wire type of seal or destructible adhesive labels over the opposite sides of a join in the instrument housing (Figure 3).

## TEST PROCEDURE No 6/4C/324

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*.

For multi-interval and multiple range instruments with verification scale intervals of  $e_1, e_2 \dots$ , apply  $e_1$  for zero adjustment, and maximum permissible errors apply  $e_1, e_2 \dots$ , as applicable for the load.

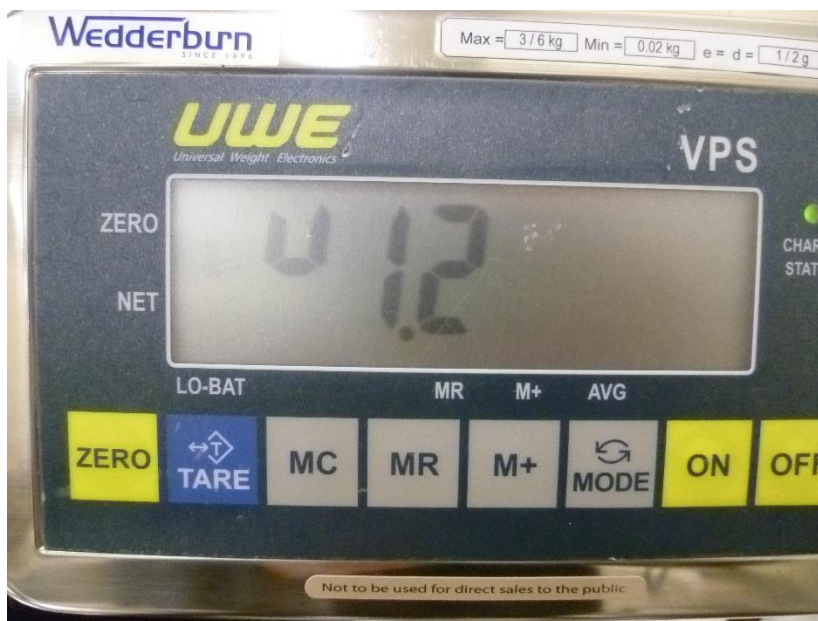


FIGURE 6/4C/324 – 1



Wedderburn model WS213 (Pattern) Fitted With a 283 mm x 338 mm Basework

FIGURE 6/4C/324 – 2



Software Version Number

FIGURE 6/4C/324 – 3



Sealing locations for Indicator

FIGURE 6/4C/324 - 4



Alternate Basework 330 mm x 450 mm

FIGURE 6/4C/324 - 5



Wedderburn Model WS214 Weighing Instrument (Variant 5)  
Fitted With UWE Model VFS indicator and 430 mm x 525 mm Basework

~ End of Document ~