



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/14G/25

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.

Teraoka Model DIGI AW-4600CPR-IWC Automatic Catchweighing 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 51, *Automatic Catchweighing Instruments*, dated July 2004.

This approval becomes subject to review on 1/1/17, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	14/12/11

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/14G/25' 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 Certificates No S1/0/A or No S1/0B.

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 his powers under Regulation 60 of the *National Measurement Regulations 1999*.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the bottom.

TECHNICAL SCHEDULE No 6/14G/25

1. Description of Pattern

approved on 14/12/11

A Teraoka model DIGI AW-4600CPR-IWC class Y(a) automatic catchweighing instrument (Figure 1) which is only approved for use to weigh objects statically.

1.1 Details

The pattern is a class Y(a) multi-interval self-indicating price-computing automatic catchweighing instrument (Figure 1) with a verification scale interval e_1 of 0.002 kg for up to 6 kg and with a verification scale interval e_2 of 0.005 kg from 6 kg to 15 kg with a minimum capacity of 0.04 kg ($20e$).

The instrument uses an in-feed conveyor and centring system (IWC) to introduce the object to be weighed (package) to the weighing receptor conveyor. The package is weighed statically (package stops on the weighing receptor). Following this the package is wrapped and labelled by the system. A secondary printer (e.g. for content information) may also be provided.

Instruments may be fitted with data sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices, and for the external programming of PLU and labelling data.

The instrument may operate up to a maximum of 30 packages per minute.

The pattern comprises:

- A terminal/indicator with an LCD colour touchscreen display;
- An in-feed conveyor, gate and weighing receptor conveyor unit mounted in front of the main unit;
- A wrapping and heat sealing system incorporated within the main unit;
- Printing units incorporated within the main unit; and
- Arrangements for handling the output of the system (e.g. output roller slide).

1.2 Zero

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, capable of setting zero to within $\pm 0.25e_1$.

Zero is automatically corrected to within $\pm 0.25e$ whenever the instrument comes to rest within $0.5e$ of zero (this may operate whilst the conveyors are operating).

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

1.3 Tare

A semi-automatic subtractive taring device of up to 5.998 kg capacity may be fitted. This device may only be activated (tare obtained) whilst the conveyors are stationary, however the value obtained may continue to be used when the instrument is set into automatic weighing mode (automatic feed of packages).

The instrument has a non-automatic keyboard-entered pre-set subtractive taring device of up to 5.998 kg capacity. Pre-set tare values may be stored in association with product-look-up (PLU) items.

1.4 Operation

A package moves along the in-feed conveyor system until it arrives at the gate of the in-feed conveyor and is stopped; two aligning arms will then align the package in the centre of the conveyor. When ready the gate drops and the package moves onto the weighing receptor and stops. Weighing takes place in a stationary position upon the weighing receptor conveyor. After weighing is completed the package is moved further into the machine for wrapping and sealing. A label (including with the weight value) is then printed and applied to the package which is then delivered at the output of the system.

1.5 Terminal/Indicator

The terminal/indicator is fitted with an LCD colour touchscreen display, as well as a keypad. This is used to control the system and store data such as system parameters.

It displays the weight (in kg).

Instruments have unit price to \$9999.99/kg, total (pack) price to \$9999.99, a product-look-up (PLU) facility and a separate tare display.

1.6 Weighing Unit

The weighing unit uses a Teraoka type N load cell of 23 kg capacity supporting a load receptor with belt conveyor of 235 mm (W) × 295 (L) mm.

1.7 Sealing Provision

A calibration switch is located on the A/D board which has its own cover and is located inside the basework (below the weighing receptor conveyor). A separate cover which provides access to the calibration switch may also be provided. Sealing is achieved by use of means such as destructible adhesive labels (or lead and wire or similar type seals) to seal access to the calibration switch, e.g. by sealing screws which could allow removal of either of the two covers mentioned above. Figure 2 indicates the location of such screws.

1.8 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Teraoka	
Importer's mark, or name written in full	WEDDERBURN	
Model designation	
Serial number	
Accuracy class	Y(a)	
Pattern approval mark	NMI 6/14G/25	
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

#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*.

1.9 Verification Provision

Provision is made for the application of a verification mark.

2. Description of Variant 1 approved on 14/12/11

As a multi-interval automatic catchweighing instrument with a verification scale interval e_1 of 0.001 kg for up to 3 kg and with a verification scale interval e_2 of 0.002 kg from 3 kg to 6 kg. The maximum subtractive tare capacity is 2.999 kg.

3. Description of Variant 2 approved on 14/12/11

As single interval automatic catchweighing instruments in capacities as listed in Table 1.

TABLE 1 – Single-interval instruments

Maximum Capacity (<i>Max</i>)	Verification Scale Interval (<i>e</i>)	Maximum Subtractive Tare Capacity (<i>T</i> = - ...)
6 kg	0.002 kg	6 kg
15 kg	0.005 kg	15 kg

(#) Note that the tare capacity need not be included in the markings if *T* is equal to *Max*.

4. Description of Variant 3 approved on 14/12/11

The model AW-4600CPR-IW which is the same as the pattern except that the in-feed conveyor does not have automatic package centring pads (Figure 3).

The in-feed conveyor of the AW-4600CPR-IW may be fitted with manually-adjustable guides for centring.

TEST PROCEDURE No 6/14G/25

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

FIGURE 6/14G/25 – 1



Teraoka Model AW-4600CPR-IWC Automatic Catchweighing Instrument

FIGURE 6/14G/25 – 2

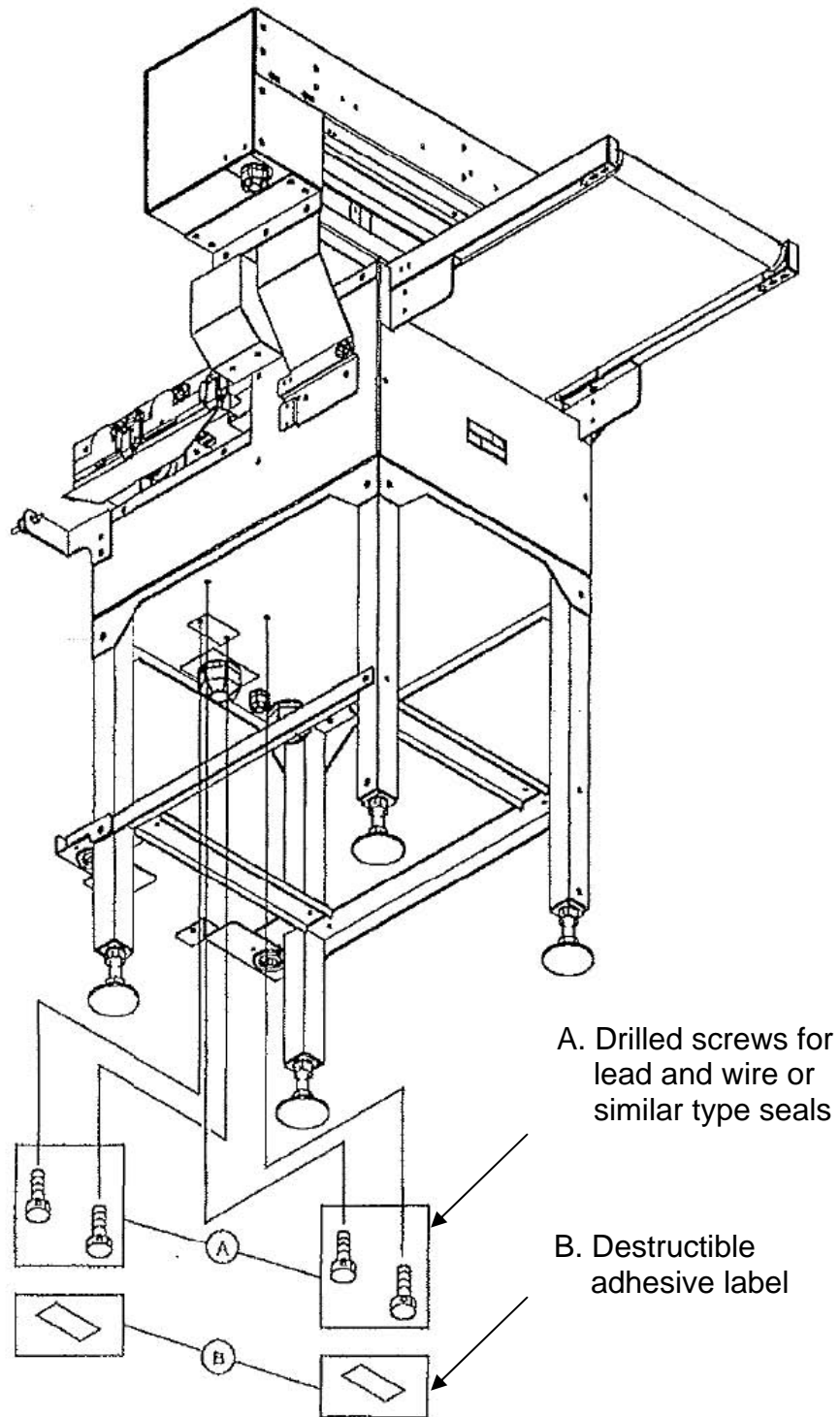


FIGURE 6/14G/25 – 3



AW-4600CPR-IW In-feed Conveyor and Weighing Unit

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