

Australian Government

National Measurement Institute Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4D/371

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.

Marel Model 9010 Weighing Instrument

submitted by Marel Australia P/L 1/53 Neumann Road Capalaba QLD 4157

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 1/8/18, and then every 5 years thereafter.

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	18/07/13
1	Pattern & variant 1 approved – certificate issued	13/02/14

DOCUMENT HISTORY

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4D/371' and only by persons authorised by the submittor.

Instruments purporting to comply with this approval and currently marked 'NMI P6/4D/371' may be re-marked 'NMI 6/4D/371' but 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

Certain aspects of this instrument (in particular transaction record printing formats) are able to be configured by the user. Whilst NMI believes that acceptable formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

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 6/4D/371

1. Description of Pattern provisionally approved on 18/07/13 approved on 13/02/14

A Marel model 9010 class ID non-automatic self-indicating single interval weighing instrument comprised of a Marel model 9010 indicator connected to a Delford model PL2020 basework (Figure 1). The instrument is of 6 kg maximum capacity with a verification scale interval of 0.002 kg. May also be known as Delford instruments of the same model.

The Delford model PL2020 basework is fitted with a Tedea Huntleigh model 1130 load cell of either 10 kg or 15 kg capacity.

The instrument has a LCD touch screen display/keyboard consisting of displays for presentation of preset tare, weight, unit price and price information, 'net' indicator and functions relating to product look up (PLU) items.

May be fitted with a Marel desktop label printer (Figure 2) to form a model WPL9010 weigh/price/labelling instrument.

Instruments have unit price to \$99.99/kg, price to \$599.94, and have a product look up (PLU) facility.

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

Instruments are not to be used for trading direct with the public and are so marked.

Instruments are approved for use over a temperature range of 0°C to +35°C and are so marked.

The instrument operates from mains AC power (230 V AC, 50 Hz).

1.1 Zero

A zero-tracking device may be fitted.

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

1.2 Tare

A pre-set tare subtractive device of up to 0.9 kg may be fitted. Pre-set tare values may be stored in association with product look up (PLU) items.

A separate display of tare values is provided.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Software

Instruments are fitted with Microsoft Windows NT.5.1.2600 Service pack 2 software, Marel embedded measurement software version 2.1.0.0 and Marel touch screen software version 2.2.6.0.

The software versions and numbers can be seen in 'Home Screen (Main Menu)/System Information'.

1.5 Interfaces

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 No S1/0/B (in particular in regard to the data and its format).

Instruments may be fitted with Ethernet and USB (dongle only) serial data interface.

1.6 Levelling

The basework is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use or similar wording.

1.7 Descriptive Markings and Notices

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	Marel Limited Marel Australia P/L
Pattern approval number for the instrument	NMI 6/4D/371
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	T = - g or kg #2
Special temperature limits	0°C to +35°C
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.

1.8 Verification Provision

Provision is made for the application of a verification mark.

1.9 Sealing Provision

The instrument is sealed by Marel USB dongle (Figure 2a) and a password. In addition, evidence of alteration is provided by recording the non-resettable calibration and configuration counters on verification (Figure 2b).

The instrument automatically increments a configuration and/or calibration value (audit trail number) each time the indicator is re-configured and/or calibrated.

The value(s) of these counters may be recorded on a destructible adhesive label attached to the instrument (e.g. as Calibration x, Configuration y).

Any subsequent alteration to the calibration or configuration will be evident as the recorded values and the current counter values will differ.

The value of these counters can be seen in 'Home Screen (Main Menu)/System Information'.

2. Description of Variant 1

approved on 13/02/14

Using certain other capacities of the Delford basework as listed in Table 1 below (the basework of the pattern is shown in **bold**).

Delford Basework Model	Maximum Capacity (<i>Max</i>)	Verification Scale Interval (<i>e</i>)	Maximum Subtractive Tare Capacity (<i>T</i> =)	Platform Size (mm × mm)	Load Cell Used Emax
PL2020	6 kg	0.002 kg	0.9 kg	250 × 300	Tedea Huntleigh 1130 of 10 kg or 15 kg
PL2020	15 kg	0.005 kg	2.25 kg	250 × 300	Flintec PC30 of 10 kg or 15 kg (Y=15000)
PL3020	30 kg	0.01 kg	4.5 kg	290 × 390	Tedea Huntleigh 1130 of 50 kg or 75 kg
PL3020	30 kg	0.01 kg	4.5 kg	290 × 390	Flintec PC30 of 50 kg
PL4020	30 kg	0.01 kg	4.5 kg	400 × 550	Tedea Huntleigh 1510 of 100 kg or Flintec PC7 of 100 kg
PL4020	60 kg	0.02 kg	9 kg	400 × 550	Tedea Huntleigh 1510 of 100 kg or Flintec PC7 of 100 kg

TABLE 1

TEST PROCEDURE No 6/4D/371

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 6/4D/371 - 1



Marel Model 9010 Weighing Instrument (Marel Model 9010 Indicator and a Delford Model PL2020 Basework)

FIGURE 6/4D/371 - 2

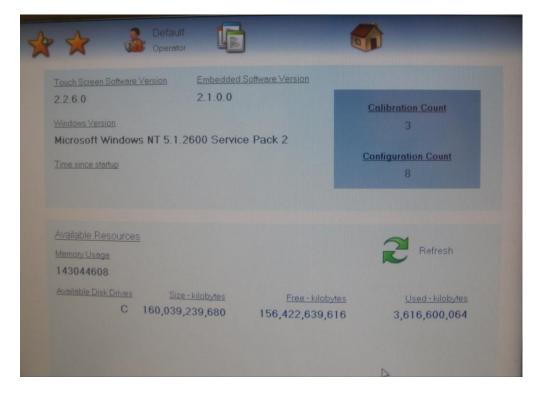


Marel Desktop Label Printer

FIGURE 6/4D/371 - 2



(a) Marel USB Dongle



Display of Marel Software Versions, Configuration and Calibration Counters

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