

Australian Government

Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval

NMI 6/4D/359

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 DS-700 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 July 2004.

This approval becomes subject to review on **1/09/21**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern – approved – certificate issued	26/08/11
1	Pattern reviewed & updated – certificate issued	7/03/17

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4D/359' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI 6/4D/359' in addition to the approval number of the instrument, 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 Certificates No S1/0/A or No S1/0B.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Signed

Stephen Horrocks

TECHNICAL SCHEDULE No 6/4D/359

1. Description of Pattern

approved on 26/08/11

A Teraoka model DIGI DS-700 class non-automatic self-indicating pricecomputing multi-interval weighing instrument with a verification scale interval (e_1) of 0.002 kg up to 6 kg and a verification scale interval (e_2) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg.

The instrument is fitted with two LCD displays integrated into the body of the instrument (one operator display and one customer display) as shown in Figure 1. For each display, the display consists of displays for weight, unit price and total price, zero and net indicators.

Instruments have unit price to \$999.99/kg, price to \$9999.99.

The instrument operates from mains AC power (240 V AC, 50 Hz) or internal battery supply of 9 V DC.

1.1 Zero

A zero-tracking device may be fitted.

The initial zero-setting device of the pattern has a nominal range of approximately 20% of the maximum capacity of the instrument.

The instrument has automatic and semi-automatic zero-setting devices with a nominal range of not more than 4% of the maximum capacity of the instrument.

1.2 Tare

A semi-automatic subtractive tare device up to 5.998 kg maximum tare capacity may be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

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

1.5 Verification Provision

Provision is made for the application of a verification mark.

1.6 Sealing Provision

Provision is made for the calibration adjustments and configuration parameters to be sealed by means of lead and wire type seals with drilled screws, or destructible labels placed over the span switch access hole and on opposite sides of a join in the instrument housing. Typical sealing arrangements are shown in Figure 2.

1.7 Descriptive Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Teraoka
Name or mark of manufacturer's agent	WEDDERBURN
Indication of accuracy class	
Pattern approval mark for the instrument	NMI 6/4D/359
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	$T = - \dots g \text{ or } kg \#2$
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*.

Note:

For multi-interval instruments the markings shall be as above, with the exception that the 'Maximum capacity' and 'Verification scale interval' shall be marked for both interval ranges, e.g. as follows:

Maximum capacity	<i>Max</i> / g or kg
Verification scale interval	e = g or kg

2. Description of Variant 1

The pattern or variants as multi-interval instruments of certain other capacities as listed in Table 1 below (the pattern is shown in **bold**).

TABLE 1

Maximum Capacity (Max1 / Max2)	Verification Scale Interval (e1/e2)	Maximum Subtractive Tare Capacity ($T =$)
3 / 6 kg	1 / 2 g	2.999 kg
6 / 15 kg	2 / 5 g	5.998 kg
15 / 30 kg	5 / 10 g	14.995 kg

3. Description of Variant 2

The pattern or variants as single interval instruments of certain capacities as listed in Table 2 below. A semi-automatic subtractive tare device, up to the maximum tare capacity shown in the table, may be fitted.

TABLE 2

Maximum Capacity	Verification Scale Interval	Maximum Subtractive	
(Max)	(<i>e</i>)	Tare Capacity $(T =)$	
1.5 kg	0.5 g	749.5 g	
3 kg	1 g	1.499 kg	
6 kg	2 g	2.998 kg	
15 kg	5 g	7.495 kg	
30 kg	10 g	14.99 kg	

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4. Description of Variant 3

approved on 26/08/11

The pattern or variants 1 to 2 with the customer display together with an additional operator display, mounted on a column rather than within the main instrument housing (Figure 3).

TEST PROCEDURE No 6/4D/359

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*.

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

FIGURE 6/4D/359-1



Teraoka Model DIGI DS-700 Weighing Instrument (Operator Side)



Teraoka Model DIGI DS-700 Weighing Instrument (Customer Side)

FIGURE 6/4D/359 - 2



(a) Sealing With Lead and Wire and Drilled Screws



(b) Sealing of Span Switch Access Hole with a Destructible Adhesive Labels



(c) Sealing of Instrument Housing with Destructible Adhesive Labels

Typical Sealing Methods

FIGURE 6/4D/359-3



Teraoka Model DIGI DS-700 Weighing Instrument (With Column-mounted Displays – Variant 3)

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