Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4C/310

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-708 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 becomes subject to review on 1/06/24, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 & 2 approved – certificate issued	14/05/19

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI 6/4C/310’ 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 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*.

Darryl Hines
Manager
Pattern Approval, Policy and Licensing Section

TECHNICAL SCHEDULE No 6/4C/310

1. Description of Pattern approved on 14/05/19

A Teraoka model Digi DS-708 class (III) non-automatic self-indicating multi-interval weighing instrument (Figure 1a and Table 1) 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 minimum capacity of the instrument is 0.04 kg. Instruments may also be known as DS-708L.

The instrument may be provided with a single LCD display for the operator, or may also be provided with a customer display integrated into the body of the instrument (Figure 1b). Instruments shall be marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless two displays are present.

1.1 Zero

The initial zero-setting device 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.

A zero-tracking device may be fitted.

1.2 Tare

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

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Power Supply

Power for the model DS-708 instrument may be supplied by:

- AC mains power; and/or
- an internal 6 V rechargeable battery or 6 x C size dry battery.

1.5 Levelling

The Instrument is provided with adjustable feet and a level indicator.

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

1.6 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 R 76 (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 NMI General Supplementary Certificate No S1/0B (in particular in regard to the data and its format).

Instruments may be fitted with Bluetooth and RS-232 interfaces.

1.7 Verification Provision

Provision is made for the application of a verification mark.

1.8 Descriptive Markings and Notices

(a) 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	(III)
Pattern approval mark for the instrument	NMI 6/4C/310
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 shown near the display of the result.

#2 This marking is required if *T* is not equal to *Max*.

(b) In addition, instruments shall carry a notice stating NOT FOR TRADING DIRECT WITH THE PUBLIC, or similar wording unless two displays are present.

1.9 Sealing Provision

Provision is made for the calibration to be sealed by using a 'lead and wire' type seal with drilled screws or using destructible labels placed over the securing screw and span switch access hole underneath the instrument as shown in Figure 2.

1.10 Software

The software is designated u1.xx (where xx refers to the identification of non-legally relevant software).

The software version and number can be seen in the switch-on display sequence (when the power is first applied to the instrument).

2. Description of Variant 1 **approved on 14/05/19**

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

TABLE 1 – approved multi-interval instruments

Maximum Capacity (Max_1 / Max_2)	Verification Scale Interval (e_1 / e_2)	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 approved on 14/05/19

The pattern as single interval instruments of certain capacities as listed in Table 2 below.

TABLE 2– approved single interval instruments

Maximum Capacity (*Max*)	Verification Scale Interval (*e*)	Maximum Subtractive Tare Capacity (*T* = - …)
3 kg	1 g	1.499 kg
6 kg	1 g	2.999 kg
6 kg	2 g	2.998 kg
15 kg	5 g	7.495 kg
30 kg	5 g	14.995 kg
30 kg	10 g	14.99 kg

TEST PROCEDURE No 6/4C/310

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

Maximum Permissible Errors

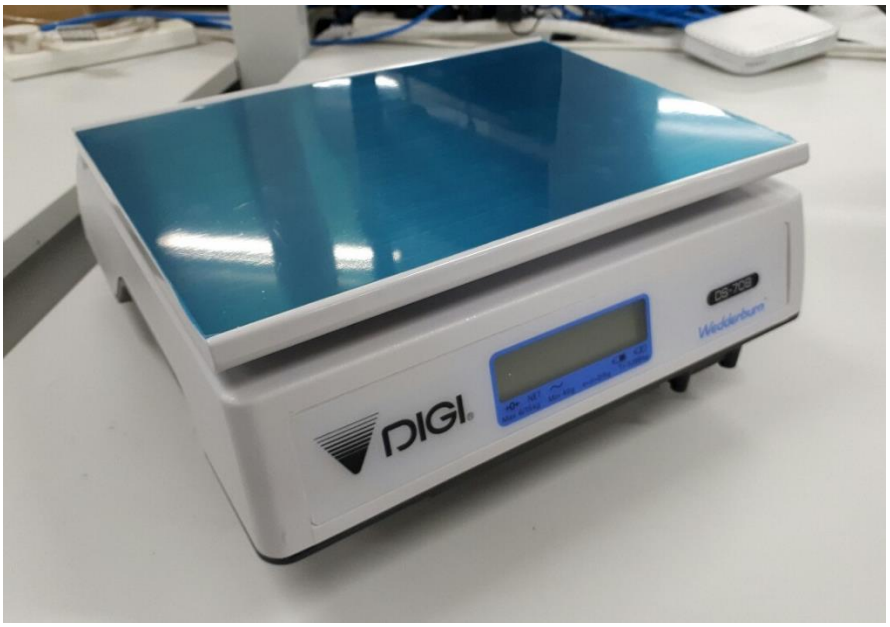
The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

For multi-interval 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.

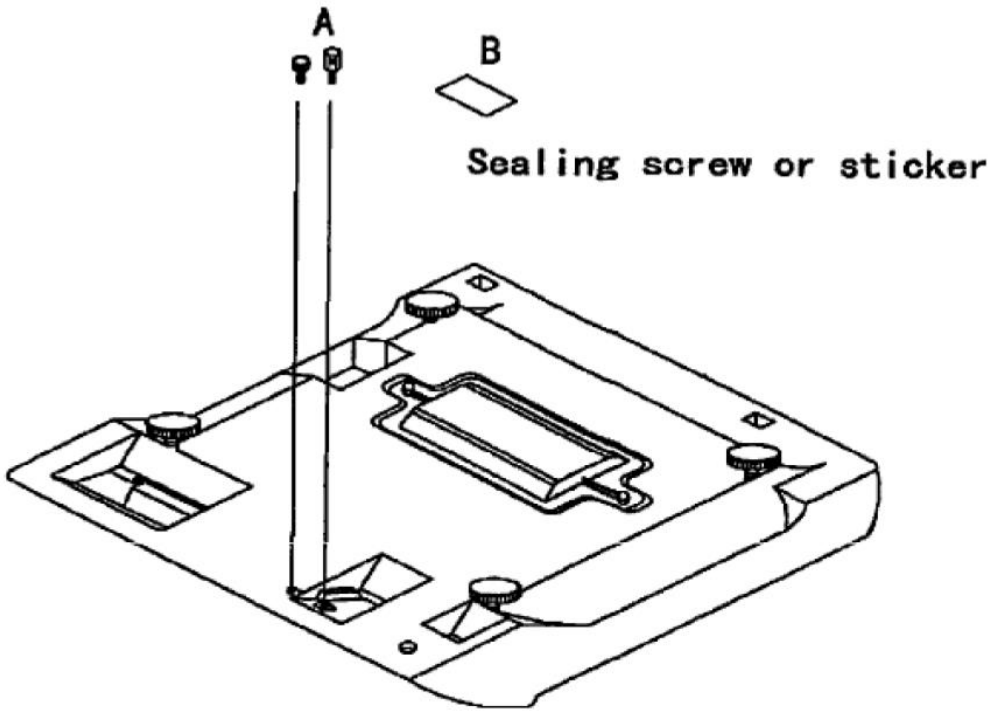
FIGURE 6/4C/310 – 1

(a) Teraoka Model Digi DS-708 Weighing Instrument (Operator side)



(b) Teraoka Model Digi DS-708 Weighing Instrument (Customer side)

FIGURE 6/4C/310 – 2



Showing Typical Sealing

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