Australian Government
Department of Industry, Science and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Interim Provisional Certificate of Approval NMI P6/10B/116

VALID FOR VERIFICATION PURPOSES UNTIL 30 November 2026

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.

Dini Argeo Model WWS Portable Weighing Instrument

submitted by Dini Argeo S.r.l.
Via della Fisica 20
41042 Spezzano di Fiorano
Modena
Italy

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

Rev	Reason/Details	Date
0	Pattern and variant 1 provisionally approved – interim certificate issued	18/11/25
1	Variant 2 provisionally approved – interim certificate issued	28/01/26

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI P6/10B/116' 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.

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

Special Conditions of Approval: (Provisional Approval)

Instruments purporting to comply with this approval shall be marked with approval number 'NMI P6/10B/116' and only by persons authorised by the submittor. (Note: The 'P' in the approval number may be a temporary marking.)

The approval will remain provisional pending consideration of performance following a period of 12 months of demonstrated use. The submittor shall retain details of testing carried out over this period, and supply this to NMI on request. Additional testing may be required at NMI's discretion.

In the event of unsatisfactory performance the approval may be cancelled (or altered).

The submittor shall implement such modifications as required by NMI. In the event that such modifications (if any are required by NMI) are not made to the satisfaction of NMI, this approval may be withdrawn.

Instruments complying with this approval and verified as complying with the requirements for a class  non-automatic weighing instrument may be used for determining a mass of a total road vehicle. Use of a single instrument is not permitted for any of these mass determinations.

Instruments are not approved for use to determine end-and-end measurements or axle weights.

1. Description of Pattern provisionally approved on 18/11/25

The Dini Argeo model WWS portable weighing instrument is a class (III) single interval self-indicating non-automatic weighing instrument (system) of 60 000 kg maximum capacity with a verification scale interval of 100 kg and with a minimum capacity of 2000 kg, intended only for the weighing of a road vehicle or similarly constructed objects.

1.1 Basework

The instrument comprised of ten (10) Dini Argeo WWSE2G4-6T-1 weighing pads of maximum capacity of 6000 kg and with a scale interval of 10 kg (Figure 4).

1.2 Weighing Pads

Each WWSE2G4-6T-1 weighing pad incorporates six (6) Dini Argeo model SBX2500-1KL load cells of 2500 kg maximum capacity (as approved in NMI S834) and a Dini Argeo model DFWL digital indicator (as approved in NMI S788), together with additional electronics, including a communication module (utilising the RF (radio frequency)) and battery. The operator controls (front panel buttons) of each Dini Argeo model DFWL digital indicator are disabled (except for the power button which may operate to switch on the display). The display of DFWL digital indicator switches off automatically once the weighing pad connects to the Dini Argeo model 3590ETKR2G4-1 indicator.

Dini Argeo LM levelling mats of the same thickness as the WWS weighing pad or levelling mats with ramp (Figures 2a and 2b) are provided with each weighing pad when in use.

1.3 Indicator

A Dini Argeo model 3590ETKR2G4-1 digital indicator (Figure 3a) is used.

The indicator has a stainless steel enclosure with an LCD touchscreen display for display of the weight value and with an integral printer for printing of the weight value. The indicator is placed inside of a rack type plastic case.

The weighing result of each weighing pad is transmitted to a Dini Argeo model 3590ETKR indicator via RF (radio frequency) interface.

1.4 Levelling

Each weighing pad incorporates a level indicator. The instrument is to be used with the pads level.

It is the operator's responsibility to ensure that the weighing pads are level when in operation (according to the level bubble provided) to ensure accurate weighing.

1.5 Stability of Ground and Operation

The site chosen for weighing must be firm and within the limits of the level indicating device.

The weighing pads are positioned on a level concrete floor and in the same plane.

The levelling mats (or mats with a ramp) are positioned between each weighing pad and each vehicle wheel and to be used as an approach to the weighing pads as shown in Figures 2a and 2b.

Note: NMI's Trade Measurement Section should be consulted regarding the thickness of the concrete floor which may be necessary in regard to operation of a mobile weighing instrument of this type.

1.6 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.

Note: A semi-automatic zero-setting device and a zero-tracking device of each weighing pad shall not be operational.

1.7 Tare

A semi-automatic subtractive taring device of up to the maximum capacity of the instrument may be fitted.

Note: A semi-automatic subtractive taring device of each weighing pad shall not be operational.

1.8 Display Check

A display check is initiated whenever power is applied to them.

1.9 Power Supply

Each weighing/display pad incorporates a rechargeable battery.

The indicator provides its own power.

1.10 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 S1/0B (in particular in regard to the data and its format).

Instruments may be fitted with RS-232/485 and RF (radio frequency) interfaces.

1.11 Verification Provision

Provision is made for the application of a verification mark.

1.12 Sealing Provision

(a) WWS weighing pad:

Sealing to prevent access within the weighing pad housing may be achieved by using a destructible adhesive label placed over a join in the instrument housing as shown in Figure 5.

(b) Dini Argeo model 3590ETKR2G4-1 indicator:

Provision is made for the calibration to be sealed by setting a link on the main board within the instrument to 'CLOSE' position, and then preventing access within the protective cover.

It is possible to determine that the link status is in the 'CLOSE' position by pressing the top right of the LCD touchscreen to enter setup menu when the power is first applied to the indicator.

- If the link is in the 'CLOSE' position, the instrument will display 'Technical setup (LEGAL FOR TRADE)'. In this case the instrument may be verified.
- Otherwise the instrument will display 'Technical setup (Internal use only)' in which case the instrument should not be verified until the link has been correctly set to the 'CLOSE' position.

Alternative instructions for determining that the link status is in the 'CLOSE' position are as follows (starting from the normal weighing mode):

- Press the 'MENU' key and then 'Diagnostic' key.
- Press the 'Indicator information' key. 'LEGAL FOR TRADE' or 'Internal use only' is displayed**.**

Sealing to prevent access within the protective housing may be achieved by using a destructible adhesive label placed over the securing screw in the protective cover within the indicator (Figure 6)

1.13 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location, in the form shown at right (#1):

Manufacturer's mark, or name written in full	Dini Argeo S.r.l.
Indication of accuracy class	(III)
Pattern approval number for the instrument	NMI P6/10B/116
Maximum capacity	*Max* ..... kg #1
Minimum capacity	*Min* ..... kg #1
Verification scale interval	*e* = ... kg #1
Serial number (of the instrument – i.e. the set)	Equipment Set SN: …..
Serial number of each weighing pad	A:……..
	B:……..
	C:……..
	D:……..
	……..
	……..

#1 These markings are also shown near the display of the result.

For each Dini Argeo WWS weighing pad, markings are provided as shown below:

Manufacturer's mark, or name written in full	Dini Argeo S.r.l.
Pattern approval number for the instrument	NMI P6/10B/116
Pattern approval mark for the indicator	Indicator: NMI S788
Pattern approval mark for the load cell	Loadcell: NMI S834
Maximum capacity	*Max* ..... kg
Scale interval	*d* = ... kg
Serial number (of the pad):	……..

1.14 Software

(a) The legally relevant software for weighing pad is identified by a number 02.01.

The instrument type number and software version number can be seen by pressing the '↓' key during the switch-on display sequence (when the power is first applied to the instrument).

(b) The legally relevant software for the indicator is identified by a number 01.01.

The instructions for accessing the legally relevant version numbers are as follows (starting from the normal weighing mode):

- Press the 'MENU' key and then 'Diagnostic' key.
- Press the 'Indicator information' key. The legally relevant version is displayed.

2. Description of Variant 1 provisionally approved on 18/11/25

The pattern or variants using an alternative Dini Argeo model 3590EKR2G4-1 Indicator (Figure 3b) or DFWKRP2G4-1 Indicator (Figure 3c). The indicator is placed inside of a rack type plastic case.

3. Description of Variant 2 provisionally approved on 28/01/26

The Dini Argeo Model WWS Portable Weighing Instruments series which are similar to the pattern and variant 1 but using Dini Argeo WWS weighing pads in Table 8 and in certain other capacities as listed in Tables 1 to 7 below (the patten is shown in **bold**).

The instrument is approved for a maximum of 1000 verification scale intervals.

Table 1

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
6000 kg	200 kg	10 kg	4 x WWSC2G4-1.5T-1
12 000 kg	400 kg	20 kg	8 x WWSC2G4-1.5T-1
15 000 kg	400 kg	20 kg	10 x WWSC2G4-1.5T-1

Table 2

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
12 000 kg	400 kg	20 kg	4 x WWSC2G4-3T-1
30 000 kg	1000 kg	50 kg	10 x WWSC2G4-3T-1

Table 3

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
60 000 kg	2000 kg	100 kg	10 x WWSC2G4-6T-1
60 000 kg	2000 kg	100 kg	10 x WWSD2G4-6T-1
60 000 kg	**2000 kg**	**100 kg**	**10 x WWSE2G4-6T-1**

Table 4

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
40 000 kg	1000 kg	50 kg	4 x WWSC2G4-10T-1 4 x WWSD2G4-10T-1 4 x WWSE2G4-10T-1
60 000 kg	2000 kg	100 kg	6 x WWSC2G4-10T-1 6 x WWSD2G4-10T-1 6 x WWSE2G4-10T-1
80 000 kg	2000 kg	100 kg	8 x WWSC2G4-10T-1 8 x WWSD2G4-10T-1 8 x WWSE2G4-10T-1
100 000 kg	2000 kg	100 kg	10 x WWSC2G4-10T-1 10 x WWSD2G4-10T-1 10 x WWSE2G4-10T-1
120 000 kg	4000 kg	200 kg	12 x WWSC2G4-10T-1 12 x WWSD2G4-10T-1 12 x WWSE2G4-10T-1
140 000 kg	4000 kg	200 kg	14 x WWSC2G4-10T-1 14 x WWSD2G4-10T-1 14 x WWSE2G4-10T-1
160 000 kg	4000 kg	200 kg	16 x WWSC2G4-10T-1 16 x WWSD2G4-10T-1 16 x WWSE2G4-10T-1

Table 5

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
50 000 kg	2000 kg	100 kg	4 x WWSC2G4-15T-1
100 000 kg	4000 kg	200 kg	8 x WWSC2G4-15T-1
125 000 kg	4000 kg	200 kg	10 x WWSC2G4-15T-1

Table 6

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
60 000 kg	2000 kg	100 kg	4 x WWSD2G4-15T-1 4 x WWSE2G4-15T-1
120 000 kg	4000 kg	200 kg	8 x WWSD2G4-15T-1 8 x WWSE2G4-15T-1
150 000 kg	4000 kg	200 kg	10 x WWSD2G4-15T-1 10 x WWSE2G4-15T-1

Table 7

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Number of Dini Argeo Model WWS Weighing Pads
80 000 kg	2000 kg	100 kg	4 x WWSD2G4-20T-1
120 000 kg	4000 kg	200 kg	6 x WWSD2G4-20T-1
160 000 kg	4000 kg	200 kg	8 x WWSD2G4-20T-1
200 000 kg	4000 kg	200 kg	10 x WWSD2G4-20T-1
280 000 kg	10 000 kg	500 kg	14 x WWSD2G4-20T-1
320 000 kg	10 000 kg	500 kg	16 x WWSD2G4-20T-1

3.1 Weighing Pads

The Dini Argeo WWS weighing pads which are similar to the weighing pads in **Clause 1.2** and variant 1 as listed in Table 8.

Table 8

Model	Maximum Capacity (*Max*)	Scale Interval (*d*)	Weighing Area	Number of Dini Argeo Model SBX-1KL C3 series Load Cell
WWSC2G4-1.5T-1	1500 kg	2 kg	565 x 400 mm	4 x SBX1000-1KL
WWSC2G4-3T-1	3000 kg	5 kg	565 x 400 mm	4 x SBX2500-1KL
WWSC2G4-6T-1	6000 kg	10 kg	565 x 400 mm	4 x SBX2500-1KL
WWSC2G4-10T-1	10 000 kg	10 kg	565 x 400 mm	6 x SBX2500-1KL
WWSC2G4-15T-1	12 500 kg	20 kg	565 x 400 mm	6 x SBX2500-1KL
WWSD2G4-6T-1	6000 kg	10 kg	950 x 500 mm	6 x SBX2500-1KL
WWSD2G4-10T-1	10 000 kg	10 kg	950 x 500 mm	6 x SBX2500-1KL
WWSD2G4-15T-1	15 000 kg	20 kg	950 x 500 mm	8 x SBX2500-1KL
WWSD2G4-20T-1	20 000 kg	20 kg	950 x 500 mm	10 x SBX2500-1KL
WWSE2G4-6T-1	6000 kg	10 kg	750 x 450 mm	6 x SBX2500-1KL
WWSE2G4-10T-1	10 000 kg	10 kg	750 x 450 mm	6 x SBX2500-1KL
WWSE2G4-15T-1	12 500 kg	20 kg	750 x 450 mm	6 x SBX2500-1KL

TEST PROCEDURE No P6/10B/116

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures NITP 6.1 to 6.4: non-automatic weighing instruments, taking into account the following notes.

Maximum Permissible Errors

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

Notes:

Levelling Arrangements and Stability of Ground (**clause 1.5**)

Testing of the system comprises two elements:

A. Individual Weighing Pad

Tests

(a) Apply a test load of not less than half the capacity of the instrument to the load receptor at least three times to exercise the instrument.

(b) Zero the instrument.

(c) Apply an appropriate zero test using test loads of 0.25 *e* and 0.75 *e*.

(d) Apply an appropriate discrimination test.

(e) Apply a repeatability test.

(f) Where practical, apply an eccentricity test.

(g) With the zero indication correct, apply test loads to the centre of the load receptor in not less than five approximately-equal steps increasing to the maximum capacity.

Ensure that the indications are within the maximum permissible error for the load applied.

Each test load is to be applied at least twice and, where test masses are used and the test load consists of more than one test mass, the test load is to be applied as one mass.

Ensure that after the load test, the zero indication is within ±0.25 *e*.

B. WWS Portable Weighing Instrument

Testing shall be in accordance with any relevant tests specified in the National Instrument Test Procedures NITP 6.1 to 6.4, taking into account the following notes.

(i) The tests shall be applied to the instrument in-situ using a road vehicle of known weight, provided is able to be loaded by standard weights.

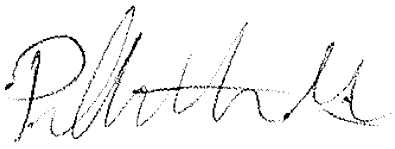
(ii) Testing shall be carried out on a concrete/asphalt floor with the weighing pads arranged to be level and in the same plane, and set to zero prior to testing. For testing purposes a platform of known (calibrated) weight representing a vehicle may need to be provided.

Gravity Variation

Where the instrument is verified in one location and subsequently moved to another location, the effects of differences in the acceleration of gravity at each location may need to be considered.

Note: NMI's Trade Measurement Section should be consulted regarding any special arrangements which may be necessary in regard to operation of a mobile weighing instrument of this type.

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



Phillip Mitchell
A/g Manager
Policy and Regulatory Services

FIGURE P6/14B/116 – 1

Dini Argeo WWS Portable Weighing Instrument

FIGURE P6/14B/116 – 2

(a) Dini Argeo LM Levelling Mat

(b) Dini Argeo LM Levelling Mat With Ramp

FIGURE P6/14B/116 – 3

(a) Dini Argeo Model 3590ETKR Indicator

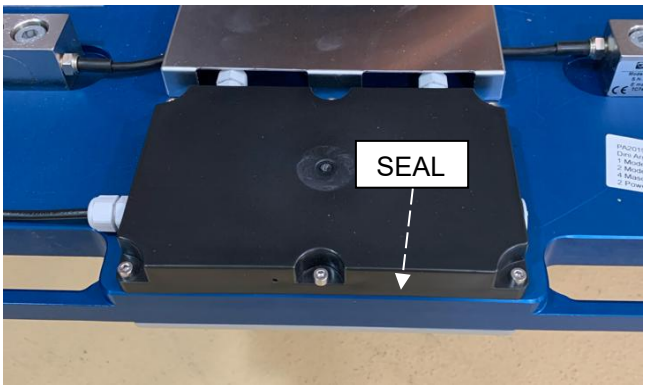
(b) Dini Argeo Model 3590EKR Indicator

(c) Dini Arge Model DFWKRP Indicator

FIGURE P6/14B/116 – 4

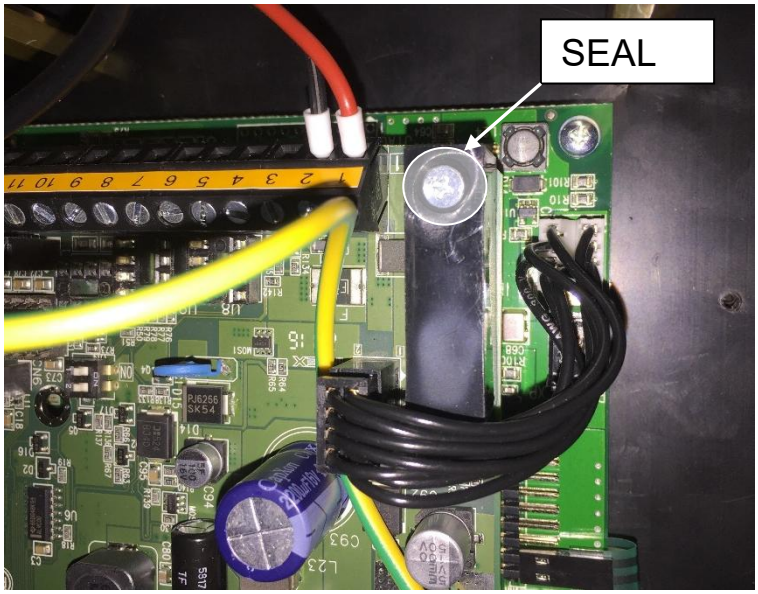
Dini Argeo Model WWS Weighing Instrument

FIGURE P6/14B/116 – 5



Sealing of WWS Weighing Pad

FIGURE P6/14B/116 – 6



Typical Sealing of Protective Cover

~ End of Document ~