

Member State of OIML  
United Kingdom of Great Britain  
and Northern Ireland

OIML Certificate No  
R76/2006-GB1-14.08  
Revision 1

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**  
Person responsible: **Mannie Panesar – Head of Technical Services**

Applicant: **Società Cooperativa Bilanciali a.r.l.**  
**Via S. Ferrari No 16**  
**41011 Campogalliano**  
**Modena**  
**Italy**

Manufacturer: **The applicant**

Identification of the  
certified pattern: **DD700, DD700IC, DD700I**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

**OIML R76 - Edition 2006(E) for accuracy class: [III] and [IIII]**

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

This revision replaces previous versions of the certificate.

**Issue Date: 14 August 2017**

A handwritten signature in black ink, appearing to read 'Glas', written over a horizontal line.

**Grégory Glas**  
**Technical Manager**  
*For and on behalf of the Head of Technical Services*



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The conformity was established by testing and examinations described in the associated Evaluation Report P01226 which includes 15 pages.

### **Characteristics of the instrument:**

#### Characteristics:

The indicating devices are designated the DD700, DD700IC and DD700I indicators. The indicators are self-indicating, mains or DC-powered, and are designed to be used as part of a Class III or IIII, non-automatic weighing instrument.

#### Main features:

##### DD700

- ABS enclosure
- 240x64 graphics LCD display with 18 keys keyboard
- External power supply
- Main board with processor with A/D converter (2 multiplexed inputs)

##### DD700IC

- Stainless steel enclosure with cable connectors
- 240x64 graphics LCD display with 18 keys keyboard
- External power supply
- Main board with processor with A/D converter (2 multiplexed inputs)

##### DD700I

- Stainless steel enclosure with cable glands
- 240x64 graphics LCD display with 18 keys keyboard
- Internal power supply
- Main board with processor with A/D converter (2 multiplexed inputs)
- Multicolour LED bar (optional)

#### Devices:

- Initial zero setting
- Semi-automatic zero setting
- Zero tracking
- Automatic zero setting (negative load indications for more than 5 s)
- Semi-automatic subtractive tare weighing
- Determination of stability of equilibrium
- Indication of stability of equilibrium
- Zero indicator
- Preset tare
- MPP Alibi storage device
- Multiplexed scale inputs: scale selection (up to 2 scales) via function key
- Counting mode
- Load receptors summation
- "Weighbridge modes":
  - o AdR (or RDA): stores vehicle information except weights IN and OUT
  - o RcD: unknown vehicles, stores weight IN until weight OUT captured, record then deleted
- RpD (or RCP): stores vehicle information including weight IN
- Identification and recognition of the weighing board(s): the instrument records the A/D Converter unique identification number for each weighing channel, a new calibration is required if that number is not recognised at power up.

- Identification and recognition of the digital load cells and junction box type DILINK: the instrument records the unique S/N of each digital load cell and/or the A/D Converter unique identification number of DILINK junction box for each weighing channel, a new calibration is required if these numbers are not recognised at power up
- Weight data transmission in open networks or wireless transmission in protected mode utilising protocols complying with Welmec 7.2 (encrypted transmission of weight data to a remote indicator). The load receptor and the indicator displaying the weighing result must be simultaneously visible to the operator (directly or indirectly) in this configuration.
- Optional connection to an external PC and subsequent printing of measurement data from the PC using the data from the MPP Alibi storage device on the indicator
- Optional connection to an external PC allowing printing of measurement data stored on an external PC using the data from the MPP Alibi storage device on the indicator
- Connection to digital load cells type CPD-M
- Connection to smart junction box type DILINK

Interfaces:

- Load cell 6-wire shielded connection (analogue/digital)
- RS232/422/485
- Ethernet
- 0-10 V / 0-20 mA analogue input/output
- Digital I/O
- Field bus (Profibus...)
- USB host
- USB client

Technical data:

Power supply	110 – 240 VAC, 50 / 60 Hz 12 VDC via mains adaptor
Maximum number of scale intervals	6000 for single interval, Class III 4000 for multi-interval/range (2 partial ranges), Class III 3000 for multi-interval/range (3 partial ranges), Class III 1000 for single and multi-interval/range (2 and 3 partial ranges), Class III
Maximum tare	- Max
Maximum Preset Tare	- Max (single and multi-range) - Max <sub>1</sub> (multi-interval)
Load cell excitation voltage	5 VDC (10-18 VDC for digital load cells)
Minimum load cell impedance	29 Ω (per weighing module)
Maximum load cell impedance	1100 Ω
Minimum input voltage per scale interval	0.5 μV
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	27-30 mV

Fraction of maximum permissible error	$P_{ind} = 0.5$ ( $P_{ind} = 0$ for digital load cells) ( $P_{ind} = 0$ for analogues load cells with junction box DILINK)
Operating temperature range	-10°C / +40°C
Load cell connection (analogue load cells)	6-wire shielded Max length 15,162 m/mm <sup>2</sup>

Load cell:

Any compatible load cell(s) may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) issued for the load cell.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules, and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to R76 has been conducted on this load cell.
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation at the time of verification.
- The load cell transmission conforms to a standard type.

Digital load cells type CPD-M and junction box type DILINK may be connected to the indicator.

Sealing:

Access to the calibration and metrological configuration is only possible via a protected switch located on the instrument.

Software:

The legally-relevant software comprises the following modules (with x reflecting minor, non legally-relevant changes):

	Identification	Release	Checksum
Metrological software	BIL001	1.x	1CA3
Boot:	59300003	1.x	1691

The software information can be displayed by pressing the right arrow key and simultaneously switching on the indicator.

Alternatives:

Having the DD700 indicator with an alternative construction designated the DD700 Panel mount version. The casing is made of stainless steel and iron, and is designed for placement in a rack.

**CERTIFICATE HISTORY**

<b>ISSUE NO.</b>	<b>DATE</b>	<b>DESCRIPTION</b>
R76/2006-GB1-14.08	01 July 2014	Certificate first issued.
R76/2006-GB1-14.08 Revision 1	14 August 2017	DD700 Panel mount version added to Alternatives.