National Measurement & Regulation Office

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

OIML Certificate No
R61/2004-GB1-15.01

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement and Regulation Office**

Person responsible: **Paul Dixon – Director, Certification Services**

Applicant: **Applied Weighing International Limited**
5 Southview Park
Caversham
Reading
Berkshire
RG4 5AF
United Kingdom

Manufacturer: **The applicant**

Identification of the certified pattern: **290 Series**

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 R 61 - Edition 2004(E) for **Reference accuracy class 0.1**

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.

Issue Date: **20 May 2015**
Reference No: **TS0104/0013**

G Stones
Technical Manager - Certification Services
For and on behalf of the Chief Executive

UKAS PRODUCT CERTIFICATION
0135

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The NMRO is an Executive Agency of the Department for Business Innovation and Skills

The conformity was established by tests and examination described in the associated pattern evaluation report P01442 which includes 9 pages.

Characteristics of the instrument:

Main features:

This pattern of an automatic gravimetric filling instrument for dispensing predetermined loads of powdered, granular or liquid materials consists of a feeding device, a weighing unit, and a 290 Series weighing controller.

The feeding device may be any one of the following:

- Gravity feeder
- Gravity feeder with agitator
- Single screw or double screw feeder
- Belt feeder
- Vibratory feeder

Controller:

The 290 Series of weighing controllers comprises the Status 290P and Status 290S models.

- Plastic enclosure (panel-mounted model Status 290P)
- Stainless steel enclosure (desktop model Status 290S)
- Internal connectors
- LED display
- 4 function keys

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.

Devices:

- Semi-automatic zero setting (≤ 4%Max)
- Automatic subtractive tare balancing
- Target weight
- Gross/Net and Actual (product dispended in/out) weight indications
- Zero-indicator
- Indication of stable equilibrium
- Net indicator
- Printing
- Weighing In mode of operation

- Weighing Out mode of operation

Technical data:

Power supply	100-240 VAC, 50/60 Hz, or 10-32 VDC
Scale interval	≥ 1g
Maximum number of scale intervals	10,000
Reference accuracy class, Ref(x)	0.1
Maximum subtractive tare	- Max
Load cell excitation voltage	5 VDC
Minimum load cell impedance	44 Ω
Maximum load cell impedance	1100 Ω
Minimum input voltage per verification scale interval	1.0 µV
Measuring range minimum voltage	-39 mV
Measuring range maximum voltage	39 mV
Fraction of maximum permissible error	p_i = 0.5
Operating temperature range (controller)	-10 °C to + 50 °C
Climatic environment	Closed, non-condensing
EM Classification	E1 and E2
Load cell cable (from controller to load cell junction box) - Maximum length	1,790 m/mm2 (6-wire configuration)

Minimum values of MinFill (g):

d (g)	X(0.1)	X(0.2)	X(0.5)	X(1)	X(2)
1	1334	334	45	23	12
2	2668	1334	178	46	24
5	6670	3335	1335	335	115
10	20000	6670	2670	1340	340
20	40000	20000	5340	2680	1340
50	100000	40000	20000	6700	3350
100	200000	100000	40000	20000	6700
200	400000	200000	100000	40000	20000
500+	1000d	500d	200d	100d	50d

Software:

The software is held in firmware on the circuit board, and has the identification number V4.xx, with xx reflecting non-legally relevant changes. The software version number is displayed at power-up.

Download of firmware is only possible via the sealed USB port.

Access to the legally relevant parameters is password-protected, a non-editable counter designated Calibration Number increments every time a legally relevant parameter is changed. The value of the counter is displayed at power up.

Interfaces:

The instrument may have the following protected interfaces:

- Load cell connection
- Analogue output with RS232
- CAN bus
- Profibus DP
- Ethernet TCP/IP
- Ethernet IP
- Profinet
- EtherCAT
- Relay output (3)
- Digital input (2)

Sealing measures:

Access to the electronics, USB port and load cell connection shall be secured by a tamper-evident label bearing a securing mark and placed over the front and rear parts of the enclosure.

The junction box (when applicable) shall be secured by a wire and seal solution or tamper-evident label, bearing a securing mark.

Certificate History

ISSUE NO.	DATE	DESCRIPTION
R61/2004-GB1-15.01	20 May 2015	Certificate first issued.
-	-	No revisions have been issued.