NMO

OIML

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

OIML Certificate No
R51/2006-GB1-09.03
Revision 5

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**

Person responsible: **Mannie Panesar – Head of Technical Services**

Applicant: **Marel Limited**
Wyncolls Road
Severalls Industrial Park
Colchester
CO4 9HW
United Kingdom

Manufacturer: **The applicant**

Identification of the certified pattern: **9000 Series Checkweigher / Weight or Weight-Price labeller**

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 51 - Edition 2006(E) for **accuracy classes: XIII(1) and Y(a)**

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: **22 December 2017**

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

UKAS PRODUCT CERTIFICATION
0135

NMO I Stanton Avenue I Teddington I TW11 OJZ I United Kingdom
Tel +44 (0) 20 8943 7272 I Fax +44 (0) 20 8943 7270 I Web www.gov.uk/government/organisations/regulatory-delivery
NMO is part of the Regulatory Delivery directorate within the Department for Business, Energy & Industrial Strategy

The conformity was established by testing and examinations described in the associated Evaluation Report P01129 which includes 13 pages.

Characteristics of the instrument:

This pattern of an automatic catchweigher, designated the 9000 Series, operates as an automatic weight or weight/price labeller (Category Y). The instrument may also operate as an automatic checkweigher (Category X).

Specifications:

Range	All
Minimum capacity (Min)	20e
Tare (T)	-450 e (single interval) -450 e1 (multi interval)
Climatic environment	0°C to +35 °C
	Non-condensing (closed)
EM environments	E1 and E2
Load cell excitation voltage	14 Vdc
Power supply	230 Vac 50/60 Hz
Display/keyboard location	Control and display unit
Accuracy classes	Y(a) and XIII(1)

Maximum operating speed:

Single interval:	0-1500e: 0.8 m/s	1501e-Max: 0.6 m/s
Multi-interval:	0-1500e2: 0.8 m/s	1501e2-Max: 0.6 m/s

Load cell:

Entry / Mid-range:

Maximum capacity (Max)	1500 / 3000 g	1500 / 4600 g	3000 g	4600 g	5500 g
Verification scale interval (e)	1/2 g	1/2 g	2 g	2 g	2 g
Load cell type	Tedea Huntleigh 1040 C3				
E_{max}	10 or 15 kg				

Top range:

Maximum capacity (Max)	1500 g	1500 g
Verification scale interval (e)	1 g	2 g
Load cell type	Tedea Huntleigh 1040 C3	
E_{max}	10 or 15 kg	

Heavy range:

Maximum capacity (Max)	10/20 kg	5/10/40 kg	10/40 kg	27.5 kg	40 kg
Verification scale interval (e)	5/10 g	5/10/20 g	10/20 g	10 g	20 g
Load cell type	Tedea Huntleigh 1260 C3				
E_{max}	50 or 75 kg				

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.
- It is not a load cell with digital output
- The characteristics of the replacement load cell such as nlc, Y, Z are the same or better that the load cell tested dynamically (Tedea 1040 C3, capacity 15 kg)
- The design of the load cells and the material are the same
- No oil damper is used

The minimum voltage input per scale interval shall not be less than 1.87 μV/e.

Devices:

- Automatic zero setting device active during automatic operation (at least every 3 h)
- Semi-automatic zero-setting (≤ 4% max, testing mode only)
- Initial zero-setting (≤ 20% max)
- Pre-set tare device (subtractive)
- Static calibration, not accessible to the user
- Belt speed setting, accessible to the user
- Internal memory for storage of batch data (category X)
- Device acting upon significant faults
- Screen check at power-up
- Label editing (restricted to access levels higher than operator)
- Conformat editing (restricted to access levels higher than operator)
- High resolution mode (0.1e) for testing purposes, not accessible to the user
- Operation under Category Y only or X and Y selection device, accessible to the user (restricted to access levels higher than operator, see note below)

Construction:

- Main frame work consisting of a stainless steel re-enforced electrical cabinet that houses the control and display unit, electrical controls and adjustable screw feet for machine levelling
- Level-indicator on top of the weigh head conveyor
- Modular conveyor section fastened to the top of the electrical cabinet, and comprising in-feed, weigh head, and out-feed conveyors (driven by DC motors)
- Pole-mounted control and display unit, situated behind the conveyors, housing the conveyor based electrical hardware and display. Alternatively, the control and display unit may be included in a remote pod connected to the electrical cabinet by a conduit
- 15" TFT LCD touch-screen (control and display unit)
- Machine covers are stainless steel throughout with a perspex cover provided over the weighing area
- Selection of photocells mounted along the centreline of the conveyors for pack detection

Interfaces:

- RS232/RS485/RS422
- Ethernet
- Digital I/O

Software:

The legally-relevant section of the software has its own version number, 1.1, which is displayed in the Info page of the Test Window.

Alternatives:

1. Any type of labeller and sleeving/labelling is permitted, as well as their location on the instrument.

2. The pole-mounted control and display unit described in the construction section in page 3 may be replaced by a remote pod with conduit, mounted on a stand.

3. The instrument may be manufactured by:

AEW Delford Systems
Wyncolls Road
Severalls Industrial Park
Colchester
CO4 9HW
United Kingdom

4. The instrument may be fitted with a modified board, designated the Elvis Lite.

5. The instrument may have a modified construction. The PM860 interface described in construction section in page 3 is replaced by an interface type M6215. The M6215 is fixed to the top of the electrical cabinet located behind the conveyors. This instrument is designated the 9500W Series.

6. Having a modified instrument, with the PM860 Power PC Module replaced by a processor board type M10K.

7. Having the maximum speed set to 1.0 m/s for the following weighing ranges:
100e – 1000e (single-interval) and $100e_2$ – $1000e_2$ (multi-interval).

8. Having a modified instrument, with the PM860 interface described under construction, or the M6215 interface described in Alternative 5, replaced by an interface type M6415.

9. Having modified instruments designated the 9000+ and 9500+. The 9000+ and 9500+ instruments run Windows 7 operating system and have legally relevant software version 1.2, which is displayed in the Info page of the Test Window.

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R51/2006-GB1-09.03	01 May 2009	OIML certificate first issued.
R51/2006-GB1-09.03 Rev 1	22 February 2011	Applicant's name changed from AEW Delford Systems to Marel Limited. Construction section added.
R51/2006-GB1-09.03 Rev 2	07 October 2013	Minimum voltage input per scale interval added. Software and alternatives sections added.
R51/2006-GB1-09.03 Rev 3	15 October 2015	Alternative 6 added.
R51/2006-GB1-09.03 Rev 4	11 February 2016	Alternative 7 added.
R51/2006-GB1-09.03 Rev 5	22 December 2017	Alternatives 8 and 9 added.