

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

OIML Certificate No  
R51/2006-GB1-14.02

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement Office**  
Person responsible: **Paul Dixon – Director, Certification Services**  
Applicant: **Marel Limited  
Wyncolls Road  
Severalls Industrial Park  
Colchester  
CO4 9HW  
United Kingdom**

Manufacturer: **The applicant**

Identification of the  
certified pattern: **MCheck2**

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.

**Issue Date:** 24 April 2014  
**Reference No:** TS0101/0026



**Signatory: G Stones  
for Chief Executive**



The conformity was established by tests and examination described in the associated pattern evaluation report P01261 which includes 12 pages.

Characteristics:

Mains-powered automatic checkweighing/catchweighing instrument designated the MCheck2.

Maximum capacity (Max)	≤ 1 kg	≤ 3 kg	≤ 6 kg
Scale interval (e =)	≥ 0.5 g	≥ 1 g	≥ 2 g
Minimum capacity (Min)	40 g		
Single or multi-interval	Any combination of the above		
Maximum Preset Tare (PT)	PT ≤ 23% Gross (single interval) PT ≤ 23% Gross and PT ≤ Max <sub>1</sub> (multi interval)		
Operating speed	40 g to 250 g: 0.3 to 1.33 m/s 250 g to 1000 g: 0.3 to 1.1 m/s 1000 g to 3000 g: 0.3 to 1.0 m/s 3000 g to 6000 g: 0.3 to 0.8 m/s		
Climatic environment	0°C to +35 °C		
	Non-condensing (closed)		
EM environments	E1 and E2		
Load cell excitation voltage	14 Vdc		
Power supply	220-240 Vac 50/60 Hz		
Accuracy classes	XIII(1) and Y(a)		

Load cell:

The weighing device comprises a single strain gauge load cell type PC1 C3 ( $E_{max} = 30$  kg) manufactured by Flintec, and located below the centre of the weigh conveyor.

Alternatively, 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 than 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 0.46  $\mu$ V/e (Min to 1 kg range) and 1.87  $\mu$ V/e (1 kg to 6 kg range).

Interfaces:

- Ethernet
- 2 core for reject
- RS232
- CAN
- External stop (4 core)
- E-Stop switch loop

Devices:

- Automatic zero setting device active during automatic operation ( $\leq 4\%$  max, overdue zero message and packs rejected, at least every 15 min if no zero tracking has occurred)
- Zero tracking ( $\leq 4\%$  max)
- Initial zero-setting ( $\leq 20\%$  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
- Program 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 plates between which the electrical cabinet and control and display pod are mounted, with and adjustable screw feet for machine levelling
- Level-indicator on top of the weigh head conveyor
- In-feed, weigh head, and out-feed conveyors (driven by DC motors), fitted with a selection of photocells for pack detection
- Electrical cabinet located behind the conveyors housing the electrical hardware
- Control and display pod located on top of the cabinet, comprising a touchscreen display

Software:

The legally-relevant section of the software has its own version number, 1.0.0, which is displayed in the Info page of the Authorities login.

Sealings:

Legally relevant parameters are protected by two event counters, designated “Calibration Changes” and “Configuration Changes”, which can be displayed via the user menus. The weighing unit is physically sealed.

Alternatives:

Having a “remote pod” configuration, the control and display pod is connected to the electrical cabinet via a conduit

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R51/2006-GB1-14.02	24 April 2014	OIML certificate first issued.
-	-	No revisions have been issued