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| OIML Member State United Kingdom of Great Britain and Northern Ireland | OIML Certificate No. R51/2006-A-GB1-22.01 |
| OIML CERTIFICATE ISSUED UNDER SCHEME A | |
| OIML Issuing Authority NMO Stanton Avenue Teddington TW11 0JZ United Kingdom 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 type 9000 Series Checkweigher / Weight or Weight-Price labeller <i>(the detailed characteristics are defined in the Descriptive Annex)</i> | |
| <p>This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):</p> <p>OIML R 51, Edition: 2006</p> <p>For accuracy classes: XIII(1) and/or Y(a)</p> | |
| <p>The OIML Issuing Authority</p> <p>Issue date: 09 February 2022</p>  <p>Grégory Glas Lead Technical Manager <i>For and on behalf of the Head of NMO</i></p> | |

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated OIML type evaluation report:

No. P03096 dated 09 February 2022 that includes 13 pages

The technical documentation relating to the identified type is contained in documentation file:

No. P03096-D dated 09 February 2022

OIML Certificate History

| Revision No. | Date | Description of the modification |
|---------------------|------------------|--|
| 0 | 09 February 2022 | Certificate first issued |
| - | - | - |

No revisions have been issued.

Important note:

Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

DESCRIPTIVE ANNEX

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).

The instrument comprises a weighing device with associated thermal label printer and mechanical handling facilities and is designed to weigh packs dynamically. Pricing, pack, and labelling information is stored in files, known as Comformats, selectable for the commodity or labels being processed. Labels are printed with the required transaction data and are applied to the packs automatically.

The 9000 Series comprise two main models, the 9000 is designed for lighter weights and the 9500 / 9500W is for heavier weights.

Construction:

Mechanical:

The instrument is constructed in stainless steel, anodised aluminium, and plastics. The main framework consists of a stainless steel reinforced electrical cabinet that houses the control and display unit, electrical controls, and adjustable screw feet for machine levelling. A level-indicator is provided on top of the weigh head conveyor. The modular conveyor section is fastened to the top of the electrical cabinet, and comprises in-feed, weigh head, and out-feed conveyors. The in-feed and out-feed conveyors are driven by dc motors. The weigh head conveyor is self-contained and is also driven by a dc motor.

The instrument may have multiple outfeed conveyor sections, each one capable of supporting up to two labellers; or may have no outfeed conveyor (designated an "Integrated" model) to enable the instrument to be integrated with external conveyor and labelling apparatus. All models including Integrated models have interlocks provided to ensure that the correct label is placed on each pack.

The pole-mounted control and display unit, situated behind the conveyors, houses the conveyor based electrical hardware and display. Commands are entered via the LCD touchscreen display. Access is through a lockable rear cover. The machine covers are stainless steel throughout with a transparent plastic cover provided over the weighing area (9000 models only). A selection of photocells are mounted along the centreline of the conveyors for pack detection. One or two photocells are mounted on the infeed belt sections to pitch packs onto the weigh table, one is placed between the gap of the infeed conveyor and weigh table, another is placed between the weigh table and the outfeed conveyor.

Electrical:

The electrical hardware is based in three main locations: the control and display unit, the electrical cabinet, and the label printers.

The control of the instrument is provided by the main motherboard, located in the electrical cabinet, which may be an:

- Elvis, PM860 Power PC Module,
- Elvis lite, PM860 Power PC Module, or
- M10K, Beagle bone black*

*When using an M10K, Beagle Bone Black, the control and display unit may operate only on the Windows 7 or Windows 10 operating system, and the instrument name is suffixed with a plus (+), for example "9000+".

The Marel MWS2 is the ADC module and is held in the electrical cabinet. The MWS2 directly receive the analogue load cell signal and provides digital weighing data to the main motherboard.

A Common I/O module is located in the electrical cabinet and handles the basic I/O functions and conveyor-based dc motors. The Common I/O board facilitates communication between the main motherboard, labellers, and motors.

The control and display unit is a touchscreen PC operating on Windows XP, Windows 7, or Windows 10 operating system. The control and display unit may be pole mounted above the electrical cabinet or in a remote pod connected to the electrical cabinet by a conduit. The touchscreen module is manufactured by Review Display Systems, housing a Fujitsu D2703, D3313, or D3713 single board computer. The 9500 model may have touchscreen modules manufactured by Marel designated M6415 or M6215.

Interconnecting conduits between the main electrical cabinet and the labeller(s) contain mains power, signal and communication cables, and air supply. Each labeller comprises a main processor module, host board for I/O and optionally, a display and keypad. The main processor module incorporates a 32-bit microprocessor memory, communication ports and a connection to the host I/O board.

Technical Data:

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| Maximum Capacity (Max) | ≤ 40 kg |
| Verification scale interval (e) | ≥ 1 g |
| Number of verification scale intervals (n) | ≤ 2750 (per interval) |
| 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 | XIII(1) and/or Y(a) |

Maximum operating speed:

0-0.1 kg: 0.8 m/s 0.1-1 kg: 1.0 m/s 1-3 kg: 0.8 m/s 3 kg - Max: 0.6 m/s

Load cell:

9000:

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| Maximum capacity (Max) | ≤ 5.5 kg | |
| Load cell type | Tedea Huntleigh 1040 C3 | HBM SP4M C3 |
| E _{max} | 10 or 15 kg | 15 kg |

9500 / 9500W:

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|------------------------|-------------------------|--------------|
| Maximum capacity (Max) | ≤ 40 kg | |
| Load cell type | Tedea Huntleigh 1260 C3 | HBM PW16A C3 |
| E _{max} | 50 or 75 kg | 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 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 1.87 $\mu\text{V/e}$.

Devices:

- Automatic zero setting device active during automatic operation (at least every 3 h)
- Semi-automatic zero-setting ($\leq 4\%$ max, testing mode only)
- 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
- Label editing (restricted to access levels higher than operator)
- Comformat 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 framework consisting of a stainless steel reinforced 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)
- LCD touchscreen (control and display unit)
- Machine covers are stainless steel throughout with a transparent plastic cover provided over the weighing area
- Selection of photocells mounted along the centreline of the conveyors for pack detection
- weighing device comprising of a single strain gauge load cell located below the centre of the weigh conveyor.
- label head mounted above or below the out-feed conveyor, containing the hardware necessary to print, feed and apply self-adhesive labels from a reel (excluding Integrated models).

Interfaces:

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

Software:

The legally relevant section of the software has its own version number which is displayed by navigating to “System Information” from the Home screen. The legally relevant software version number may be:

- 1.1, or
- 1.2

The overall software version number is also shown in this window and is of the form w.x.y.z where z is set to zero for all production software. The overall software does not include any legally relevant software.

The firmware boot code software version number is also shown in this window and is currently at 1.13.0. The boot code does not include any legally relevant software.

Any changes to legally relevant parts of the software will result in a change to the legally relevant software version numbers. Any changes to the non-legally relevant parts of the software will result in a change to the overall software version number.

Security:

Legally relevant parameters are protected by two event counters, one specifically for weight calibration and the other one for all other legally relevant parameters. The value stored in these counters is incremented each time any of the legally relevant parameters are altered. These counters are designated “Calibration Count” and “Configuration Count” and can be displayed by navigating to “System Information” from the Home screen. Access to these legally relevant parameters shall be password-protected, and both counters must be written on a tamper-evident label, located on or near the rating plate.

Printing (Weight/Weight-Price Labeller: category Y)

Editing of the printed labels format is restricted to Manager or Supervisor levels. The labels must bear the weight, unit price and price to pay (when applicable), with associated units. Currency units must be in accordance with the country of use.

When preset tare values are printed, they must be identified as such, and net and/or gross weights should be clearly identified when printed with a tare value. Net weights do not require such identification when the preset tare value is not printed.

Printing below Min is not authorised.

Alternatives:

1. Modified 9000 model, with the control and display unit replaced by an RD6385 manufactured by Review Display Systems, run by a Fujitsu 3313 motherboard which is mounted in the electrical cabinet instead of the head unit.