



OIML Member State
Denmark

OIML Certificate No.
R50/2014-A-DK2-2023.01

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: **FORCE Certification A/S**
Address: **Park Allé 345, 2605 Brøndby, Denmark**
Person responsible: **Per Rafn Crety**

Applicant

Name: **Marel Iceland ehf.**
Address: **Austurhraun 9
210 Gardabaer
Iceland**

Manufacturer **Marel Iceland ehf.**

Identification of the certified type (*the detailed characteristics will be defined in the additional pages*)

M2400-B04-FB02-xxx

Designation of the module (*if applicable*)

Continuous totalizing automatic weighing instrument

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):

OIML R 50-1, Edition (year): 2014

For accuracy class (if applicable): **0.5 or 1**

**OIML Certificate No.
R50/2014-A-DK2-2023.01**

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 reports:

Type examination report: No. 122-27085.10, dated 02 June 2023, that includes 75 pages

Type evaluation report: No. 122-27085.90.20, dated 14 June 2023, that includes 28 pages

The technical documentation relating to the identified type is contained in documentation file:
122-27085

OIML Certificate History

Revision No.	Date	Description of the modification
Initial version	29 June 2023	

Identification, signature and stamp

The OIML Issuing Authority

FORCE Certification A/S

Date: 29 June 2023

Jens Hovgård Jensen

Certification Manager

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

The M2400-B04-FB02-xxx according to OIML R50:2014 is a continuous totalizing automatic weighing instrument

M2400-B04-FB02-xxx consist of a weighing controller designated M2400-B04 with two analog load cell inputs and a FB02 belt unit with a rigid plastic link belt. The center part of FB02 is the load receptor consisting of two plates fixed in the outer ends and resting end to end in the centre on two individual measured load cells, one in each side of the belt, using wire-rope hangers.

The belt width is 922mm (FB02-900). The weighing instruments comes also in a version with 615 mm belt width (FB02-600).

The belt speed is measured by a 12 tooth sprocket wheel and a sensor, mounted to the end of the motor drive axle. The belt is pulled over the weighbridge.

The software of the tested M2400-B04 has firmware version 1.03-01, checksum 3FBCEF7D, Weighing module version 100 and application version “B4000 v1.06”.

The test was performed according to OIML R50-1:2014 and OIML D11:2004 section 12 & 13 applying severity level 3.

The test items fulfilled the requirements in OIML R50-1:2014, WELMEC Guide 7.2:2022 and EU Directive 2014/32/EU annex I and annex MI-006 chapter I & V, as described in the annexes.

The test items fulfilled the requirements.

A short summary of the specifications for the continuous totalizing automatic weighing instrument M2400-B04-FB02-xxx is as follows:

- Accuracy class 0.5 or 1
- Maximum flow rate (Q_{max}): 40 000 kg/h to 100 000 kg/h¹
- Minimum flow rate (Q_{min}): 20% of Q_{max}
- Minimum totalized load (Σ_{min}): 2% of load totalized in one hour at Q_{max}
- Totalisation scale interval (d_i): 1 kg
- Maximum capacity (Max): 55.6 kg
- Weigh length: 1 m
- Reduction ratio (R): 0.5
- Belt length: 4 m
- Belt speed (v): single speed, range from 0.2 m/s to 0.5 m/s
- Electromagnetic class: E2
- Humidity: non-condensing
- Temperature range: -10°C to +40°C
- Products to be weighed: fish, meat, poultry, and similar / bulk of food products, like meat or vegetables

¹ Depending on the belt speed

Software

The firmware of M2400-B04 is displayed during start up and can also be found in the Main menu/0-identity.

The software version is given on the form a.bb-cc where a reflects major changes including the legal software, bb reflects major bug fixes not affecting the legal software and cc reflects minor bug fixes.

Approved firmware versions are 1.03-01 or higher.

The firmware also lists the version of the weighing module. Approved version is 100.

Devices

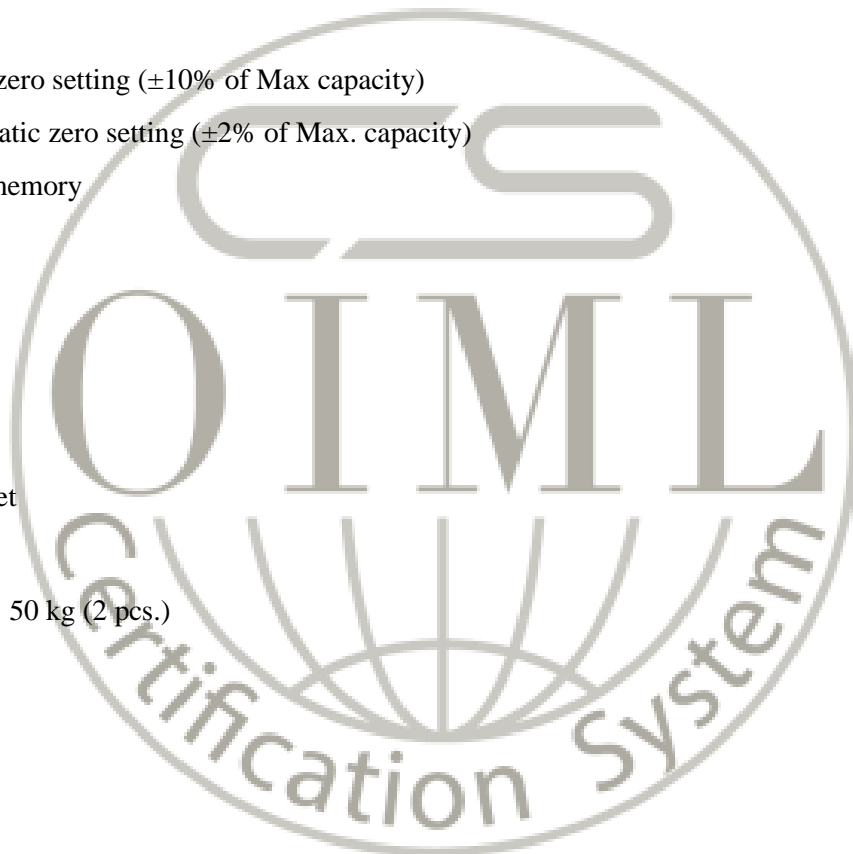
- Initial zero setting ($\pm 10\%$ of Max capacity)
- Automatic zero setting ($\pm 2\%$ of Max. capacity)
- Alibi memory

Interfaces

- RS232
- CAN
- USB
- Ethernet

Load cells

Flintec PC6 C3 50 kg (2 pcs.)



Pictures



No.	Description	No.	Operation principle and/or element
1	Rating plate	6	Lua display; flow rate history and progress of zero and age of zero.
2	Four programmable function keys	7	Keyboard
3	Display for marking function keys	8	Page/menu key
4	Firmware display; Totalized weight.	9	Check key
5	Verified settings		

Figure 1 Indicator front view

Flowscales W922

GR3402

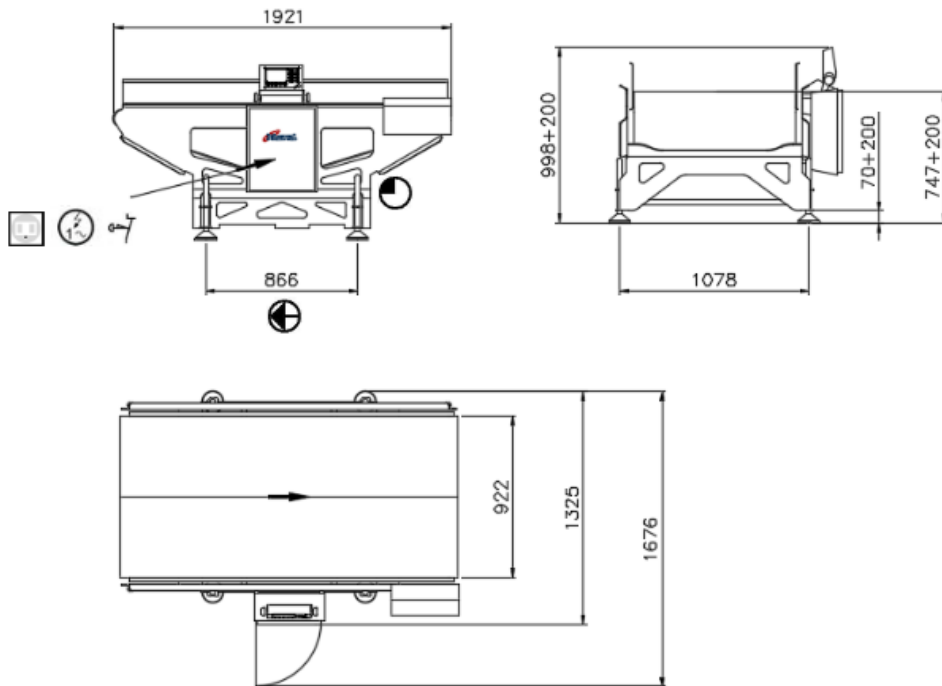
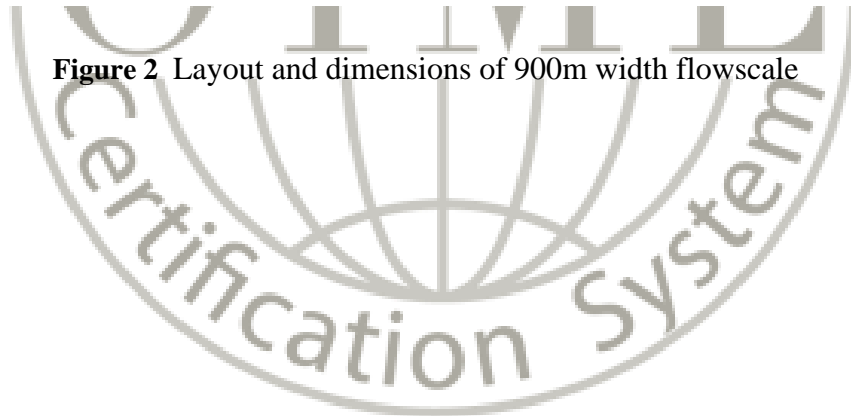


Figure 2 Layout and dimensions of 900m width flowscale



Flowscales W615

GR3401

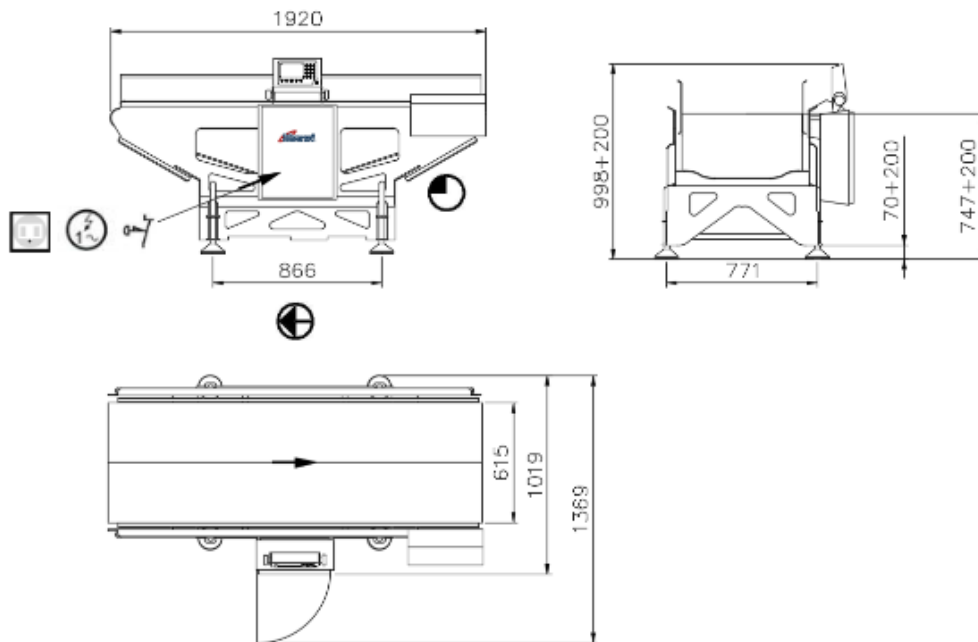
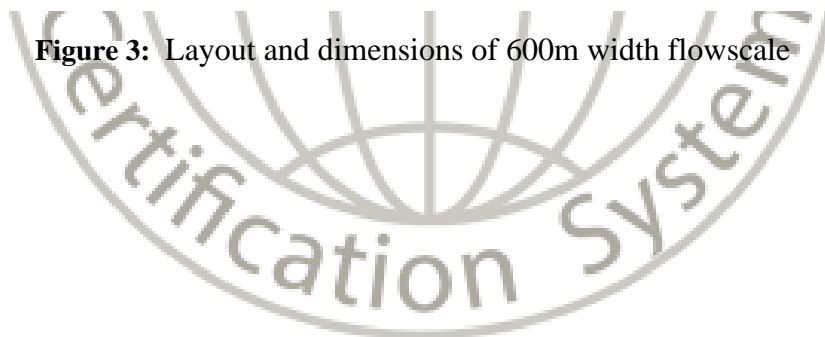


Figure 3: Layout and dimensions of 600m width flowscale



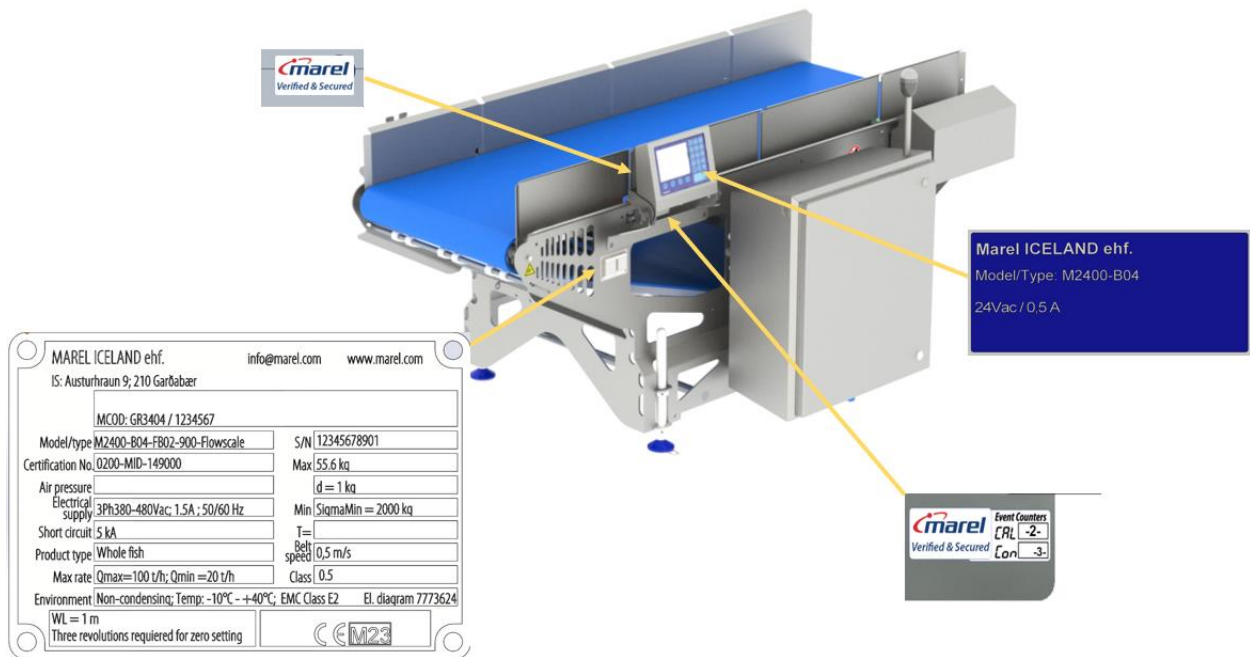


Figure 4 Verification and label overview.

