

Issued by Notified Body No. 0402 according to Directive 2014/32/EU MID annex II Module B, regarding:

Electronic catchweighing instrument XW/IW

Issued to

INTERMERCATO AB

Bygatan 5, SE- 272 93 TOMMARP, Sweden

Certificate

The weighing instrument specified in this certificate is fulfilling the requirements of directive 2014/32/EU on measuring instruments (MID), implemented in Swedish law by SWEDAC Regulations STAFS 2016:1, The Measuring Instruments Regulations and STAFS 2016:7, The Regulations and Guidelines concerning Automatic weighing Instruments. The conformity assessment is performed according to annex II, Module B of Directive 2014/32/EU. RISE Certification Rule SPCR 302 has been applied.

Applicable essential requirements of directive 2014/32/EU

- Annex I, Essential requirements
- Annex VIII, (MI-006), Automatic weighing instruments

Harmonised standards and normative documents used

OIML R51, edition 2006, Automatic catchweighing instruments

Further applied documents

- WELMEC 2.6, Guide for the testing of automatic catchweighing instruments (Issue 3)
- WELMEC 7.2, Software Guide (Issue 3)

Rated operating conditions

Measurand:	Weight in grapple		Mechanic environment class:	NA
Measurement range:	10 e-750 e (load cells LT)	10e-300e (load cells CLC)	Electromagnetic environment class:	E3
Accuracy class:	Y(b)		Climatic environment:	-10 to +40 °C

Originally issued: 2008-01-31

Expiry date: 2028-01-31

This issue of the certificate replaces earlier issues and is issued due to addition of an alternative series of load cells: CLC types.

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Specification of the instrument:

1. Design of the instrument

1.1 Construction

The electronic automatic weighing instrument is mounted on a crane. The weighing system consists of a load cell built into a structure (weighing body) and connected to a measuring unit being part of the weighing body. Measuring data are sent from the measuring unit to an indicating unit (instrument). The weighing is performed dynamically.

1.2 Sensor

Load cell

Manufacturer of load cell: Intermercato AB

Load cell LT

Types	LT 50	LT 100	LT 200
Capacity (kg)	5 000	10 000	20 000

Load cell CLC

Types	CLC50	CLC100	CLC150	CLC250
Capacity (kg)	5 000	10 000	15 000	25 000

Other sensors

Type

Acceleration sensor	BW0048
Manufacturer of sensor	Bluewave Microsystems AB

1.3 Measurement value processing

Hardware

The weighing instrument consists of a load cell, measuring the forces applied to the crane arm system, indicating unit with control electronics.

Software

The validation of software was based on the essential requirements given in MID and WELMEC Guide 7.2. A report with number MTmP705957-02, dated 2008-12-18 was issued and is held by RISE .

The software identification number, which is 1.x.x.x (the xx is not concerning metrological functions), is shown on the display.

The program checksum is set at initial verification and shall be checked and noted.

1.4 Indication of the measurement results

The control electronic unit may use different displays and interfaces. The control unit consists of a digital data processing unit, Bluescale-UNI, Bluescale-ComBox (in this case the software BlueAutoScale is installed in a PC or an Android Smartphone/Tablet), the DSD is in the ComBox processor.

1.5 Optional equipment and functions subject to MID requirements

- Dynamic setting function (configuration" and "calibration), only adjustable during set up
- Data storage device

1.6 Technical documentation

The operating manual includes technical specifications and for example how to get access to the checksum.

1.7 Integrated equipment and functions not subject to MID

See operating manual.

2. Technical data

2.1 Rated operating conditions

Measurand

Any material within the measuring range, weight expressed in kg.

Measurement range LT load cells

Maximum capacity,	$\text{Max} \leq e \cdot n$
Minimum capacity,	$\text{Min} \geq 10e$
Verification scale interval, class Y(b)	$e \geq 1 \text{ kg}$
Number of verification scale intervals, class Y(b),	$100 \leq n \leq 750$

Measurement range CLC load cells

Maximum capacity,	$\text{Max} \leq e \cdot n$
Minimum capacity,	$\text{Min} \geq 10e$
Verification scale interval, class Y(b)	$e \geq 1 \text{ kg}$
Number of verification scale intervals, class Y(b),	$100 \leq n \leq 300$

Accuracy

Y(b)

Environments classes / influence quantities

Climatic:	-10 to +40°C
Electromagnetic:	class E3

Durability period under rated operating conditions estimated by the manufacturer

Durability period estimated to be 24 months.

2.2 Other operating conditions

Not applicable.

3. Interfaces and compatibility conditions

The instrument may use the following protective interfaces for data communication:

- Printer (RS232, USB),
- USB interface,
- Reverse signal
- RS232 (cable/modem)
- RS485 (J1708)
- CAN (J1939) for external communication
- Wi-Fi

4. Requirements on production, putting into use and utilization

4.1 Requirements on production

No special requirements identified.

4.2 Requirements on putting into use

No special requirements.

4.3 Requirements for consistent utilizations

No special requirements identified.

5. Control of the measuring tasks of the instrument in use

No special measuring tasks are identified.

6. Security measures

6.1 Sealing

Interfaces

No sealing of interfaces is necessary

Indicator

No sealing of indicator is necessary

Main unit is not sealed. The main card serial number is recorded in event recorder and in verification documents.

Load cells / pressure sensors

The load cell is built into a structure and not visible as such. Only the weighing body in which the load cell is mounted, is marked with serial number. The serial number shall be marked on the descriptive plate.

Descriptive plate

The descriptive plate (plates) shall be secured with sealing stickers unless the plate cannot be removed without being destroyed.

Bucket/shovel

The shovel shall be clearly and permanently marked with its number.

Sensors

Acceleration sensor is software sealed.

6.2 Data logger

The instrument has a Data storage device.

7. Labelling and inscriptions

7.1 Information to be borne by the instrument

The descriptive plate mounted on the instrument shall contain the following information:

- name or identification mark of the manufacturer
- postal address to the manufacturer
- serial number and type designation
- number of type examination certificate
- accuracy class

- verification scale interval, e
- checksum(s)
- maximum capacity, Max
- minimum capacity, Min
- temperature range
- electrical supply

7.2 Conformity marking in accordance to MID article 21

The instrument shall be marked in accordance to MID article 21 which e.g. describes the CE-marking together with M, year of marking and the notified body number.

7.3 Further inscriptions, if necessary

No further inscriptions considered necessary.

8. Testing and examination

All the plans, schematic diagrams and documentations are recorded under reference files MTi9P02215-1, MTmP705957, MTmP705957-02 and 105102-173397-1 issued by RISE, report No. 101469 and 68092 issued by Nemko and Test Certificate No. FIT 07.L.02, dated 2007-03-27 issued by Inspecta.