



CERTIFICATE OF EC TYPE EXAMINATION

Electronic automatic catchweighing instrument - Catchweigher XW

No. 0402-MID-495201

Issued to

INTERMERCATO AB, Bygatan 5, SE- 272 93 TOMMARP, Sweden

In respect of (type of instrument)

An electronic automatic catchweighing instrument.

The electronic automatic weighing instrument is mounted on a crane.

In accordance with

STAFS 2006:4 Measuring Instruments Regulations

STAFS 2006:10 Automatic Weighing Instruments; implementing in the NB's country law the Directive 2004/22/EC of 31 March 2004 on measuring instruments (MID).

Applicable essential requirements

- Annex 1, Essential requirements
- Annex 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
- WELMEC 7.2, Software Guide (Issue 3)

Rated operating conditions

Measurand:	Weight in grab/grabble	Mechanic influence class:	NA
Accuracy class:	Y(b)	Climatic influence class:	-10°C - +40°C
Measurement range:	10e – 750e	Electromagnetic influence class:	E3

The weighing instrument may be of either single or multi-interval type.

Validity and Miscellaneous

Valid until 23rd February 2019. The certificate was first issued on 23rd Feb 2009. This is the sixth version and replaces earlier version dated 10th January 2012. Changes in this version: Adding of Android smartphone/tablet in annex p. 1.4, Wi-Fi in p. 3.

The principal characteristics, approval conditions are set out in the appendix hereto, which forms part of the approval documents and consists of 4 pages. All the plans, schematic diagrams and documentations are recorded under reference files MTmP705957 and MTmP705957-02 issued by SP, report No. 101469 and 68092 issued by Nemko and Test Certificate No. FIT 07.L.02, dated 2007-03-27 issued by Inspecta.

Borås 23rd September 2014

**SP Technical Research Institute of Sweden
Certification**

Lennart Aronsson
Product Certification Manager

Susanne Hansson
Certification Officer

Certificate issued by Notified Body No. 0402

SP Technical Research Institute of Sweden

Postal address Phone / Fax Reg.number E-mail / Internet
SP, Box 857 +46 33-16 50 00 556464-6874 info@sp.se
SE-501 15 Borås +46 33-13 55 02 www.sp.se
SWEDEN

Swedish Notified Bodies are appointed by SWEDAC, the Swedish Board for Accreditation and Conformity Assessment, under the terms of Swedish legislation.
This certificate may not be reproduced other than in full, except with the prior written approval by SP. File 495201



CERTIFICATE OF EC TYPE EXAMINATION

Electronic automatic catchweighing instrument - Catchweigher XW

No. 0402-MID-495201 - Appendix

The instruments / measuring systems must correspond with the following specifications:

1 Design of the instrument

1.1 Construction

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 Load cell and accelerometer

Load cells

Manufacturer of load cell Intermercato AB

Types	LT 50	LT 100	LT 200
Capacity (kg)	5000	10 000	20 000

Accelerometer

Manufacturer of sensor Bluewave Micorsystems AB

Type - acceleration sensor BW0048

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 SP.

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. The indicating unit is equipped with a DSD (data storage device)

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.



CERTIFICATE OF EC TYPE EXAMINATION

Electronic automatic catchweighing instrument - Catchweigher XW

No. 0402-MID-495201 - Appendix

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

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),	$n \leq 750$

Accuracy class

Y(b)

Environments / influence quantities

Climatic: -10 to +40°C

Mechanic: class M3

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



CERTIFICATE OF EC TYPE EXAMINATION

Electronic automatic catchweighing instrument - Catchweigher XW

No. 0402-MID-495201 - Appendix

4 Requirements on production, putting into use and utilisation

4.1 Requirements on production

No special requirements identified.

4.2 Requirements on putting into use

No special requirements.

4.3 Requirements for consistent utilisations

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.

Sensors

Acceleration sensor is software sealed.

Descriptive plate

The descriptive plate shall be secured by a sticker.

6.2 Data logger

The control unit is quipped with a DSD (Data storage device)



CERTIFICATE OF EC TYPE EXAMINATION

Electronic automatic catchweighing instrument - Catchweigher XW

No. 0402-MID-495201 - Appendix

7 Labelling and inscriptions

7.1 Information to be borne by and to accompany the instrument

The descriptive plate mounted on the weighing body shall contain the following information:

- name or identification mark of the manufacturer
- serial number and type designation
- number of EC type examination certificate
- accuracy class
- verification scale interval, e
- checksum(s)
- load cell serial number
- maximum capacity, Max
- minimum capacity, Min
- temperature range
- electrical supply

7.2 Conformity marking in accordance to article 17

The instrument shall be marked in accordance to article 17 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.