EU-TYPE EXAMINATION CERTIFICATE

0402-MID-495201

Electronic catchweighing instrument – XV

Issued to

INTERMERCATO AB

Bygatan 5, SE- 272 93 TOMMARP, Sweden

Electronic automatic catchweighing instrument – XV is fulfilling module B (Annex II) of directive 2014/32/EU on measuring instruments (MID), implemented in Swedish law by SWEDAC (The Swedish Board for Accreditation and Conformity Assessment) through STAFS 2016:1 The Measuring Instruments Regulations and STAFS 2016:7 The Regulations and Guidelines concerning Automatic weighing Instruments. RISE Certification Rule SPCR 302 issue 2017-02-15 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		
Measurement range:	10e-750e	Electromagnetic environment class:	E3
Accuracy class:	Y(b)	Climatic environment:	-10 to +40 °C

Originally issued: 31 January 2008
Expiry date: 31 January 2028

This certificate replaces earlier issues. The previous issues were in accordance with directive 2004/22/EC. Earlier issues are issued under the name SP Technical Research Institute of Sweden.

Issued by Notified Body No. 0402.

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9P02215

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

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

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

Other sensors

Type

- acceleration sensor	BW0048
Manufacturer of sensor	Bluewave Micorsystems 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 concern¬ing 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.

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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,	Max ≤ e*n
Minimum capacity,	Min ≥10e
Verification scale interval, class Y(b)	e ≥ 1 kg
Number of verification scale intervals, class Y(b),	100 ≤ n ≤ 750

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 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

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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 and MTmP705957-02 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.

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