

EU Type Examination Certificate

No. 0200-MID-07155 Revision 1

3590E / CPWE

AUTOMATIC CATCHWEIGHING / CHECKWEIGHING INSTRUMENT

Issued by **FORCE Certification**
EU - Notified Body No. 0200

In accordance with the requirements in Directive 2014/32/EU of the European Parliament and Council.

Issued to **Dini Argeo S.r.l.**
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Italy

In respect of An automatic check-/catchweighing instrument designated **3590E / CPWE** with variants of modules of load receptors, load cells and peripheral equipment.
Accuracy class XIII(1), Y(a)
Weighing mode: Static
Maximum capacity, $Max_i = n_i \times e_i$
Verification scale interval: $e \geq 0.1 \text{ g}$
Number of verification scale intervals: $n_i \leq 10000$
(however, dependent on environment and the composition of the modules)
Variants of modules and conditions for the composition of the modules are set out in the annex.

The conformity with the essential requirements in Annex 1 and the specific requirements in Annex VIII (MI-006), chapter I & II of the Directive 2014/32/EU is met by the application of OIML R51:2006, OIML D11:2004 sect. 12 & 13 and WELMEC Guide 7.2:2015.

The principal characteristics and approval conditions are set out in the descriptive annex to this certificate.

The annex comprises 8 pages.

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Descriptive annex

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1. Introduction

The instruments operate as automatic checkweighers (Category X) or catchweighers (Category Y) and are designed to weigh pre-assembled discrete loads or single loads of loose material.

The instruments may operate dynamically; this mode of operation is not covered by this certificate.

The instruments comprise a weight indicator, a weighing platform, one or more controller, sensors and mechanical handling facilities and optionally a weight-price label printing device. Figure 1 shows a typical configuration.

2. Description of the construction and function

2.1 Configuration

The weight indicator may be any model of the 3590 Series (Figure 2), or CPWE Series (Figure 3), as described in Evaluation Certificate 0200-WL-07154

The indicator is connected to one or more weighing platform(s), which may be part of a conveyor. Any number of in-feed and out-feed conveyors may be used. The type and size of transport system is not restricted under this certificate.

Sensors are used to detect the pack/material position; one or more controller may be used to manage the pack/material flow.

The indicator captures the static weight, when the pack or material is stable (stop and go weighing).

Reject devices or labellers may be used.

Optionally may a weight-price label printing device with an evaluation/part/test certificate be added.

2.2 Load cells

Any analogue load cell(s) may be used for instruments under this certificate of type examination provided the following conditions are met:

- 1) There is a respective OIML Certificate of Conformity (R60) or a Part / Evaluation / Test Certificate (EN 45501) issued for the load cell by a Notified Body responsible for type examination under Directive 2014/31/EU.
- 2) The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules (WELMEC 2:2015), and any particular installation requirements). A load cell marked NH is allowed only if humidity testing to EN 45501 has been conducted on this load cell.
- 3) The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in the above WELMEC 2 document, or the like, at the time of EC verification or declaration of EC conformity of type.
- 4) The load transmission must conform to one of the examples shown in the WELMEC 2.4 Guide for load cells.

2.3 Devices

The instruments are provided with the devices listed in Evaluation Certificate 0200-WL-07154.

In addition, the instruments are provided with:

- Automatic zero-setting after time interval (≤ 205 min)
- Batch identification (date/time for start/end)
- Average weight calculation
- Standard deviation calculation

2.4 Software

2.4.1 Security

The software is held on the Flash Memory and cannot be modified by the user. The calibration and legally relevant parameters are protected via physical or software means.

A jumper located on the main board prevents all access to the legally relevant parameters.

Alternatively, software sealing may be used to protect the calibration and legally relevant parameters. Two non-editable counters, designated CAL and CONFIG, are incremented each time the calibration and legally relevant parameters respectively are modified, with access to these parameters being password-protected. The counters' values can be display via the user menu.

2.4.2 Software identification

The software identification is fully described in the user manual and can be displayed at power up or via the software menu.

The legally relevant software is identified by two parts: **prefix/version**.

The **prefix** shows the instrument model and shall be 01.

The **version** shows the legally relevant software version shall be 01

The **prefix/version** may be followed by a suffix indicating the software program version and other options installed, which may be freely modified.

Since the code may be longer than the digits available on the display, it is shown in two parts.

The software complies with Welmec Guide 7.2 (Issue 5), Risk class B, Type P, Extension L and T.

3. Technical data

The weight indicators are fully described in Evaluation Certificate 0200-WL-07154.

4. Interfaces and peripheral equipment

4.1 Interfaces

The instrument may have the following interfaces:

- Load cell 4-wire or 6-wire shielded connection
- DC voltage input
- RS-232
- RS-485
- Control inputs/outputs
- USB
- Ethernet
- Bluetooth
- Optoisolated inputs
- Photomosfet outputs
- SENOR (Digital in)
- RF (radio frequency)
- WiFi
- Analogue output and input
- Profibus
- Profinet
- DevicNet
- CANopen
- Ethercat

4.2 Peripheral devices

The instrument may be connected to any peripheral device that has been issued with a Part Certificate or Evaluation Certificate issued by a Notified Body responsible for Module B for MI-006 under Directive 2014/32/EU and bears the CE marking of conformity to the relevant directives; or

A peripheral device without a Part or Evaluation certificate may be connected under the following conditions:

- it bears the CE marking for conformity to the EMC Directive;
- it is not capable of transmitting any data or instruction into the measuring instrument, other than to release a printout, checking for correct data transmission or validation;
- it prints measurement results and other data as received from the measuring instrument without any modification or further processing; and
- it complies with the applicable requirements of Paragraph 8.1 of Annex I.

5. Approval conditions

5.1 Compatibility of modules

The instrument shall fulfil composition of modules according to EN 45501:2015 annex F.

5.2 Installation

The instrument shall be permanently installed or shall be provided with a level indicator.

6. Special conditions for verification

The environmental conditions should be taken into consideration by the composition of modules for a complete weighing instrument, for example instruments with load receptors placed outdoors and having no special protection against the weather.

The composition of modules shall agree with section 5.1.

7. Securing and location of seals and verification marks

7.1 Securing and sealing

Seals shall bear the verification mark of a notified body or alternative mark of the manufacturer or his representative according to ANNEX II, module F or D of Directive 2014/32/EU.

The inscription plate is located visible on the indicating device and is secured, either by sealing or by being of a form such that it is destroyed when removed.

Swapping of Flash Memory and access to the legally relevant parameters is prevented by sealing the jumper located on the main board by a tamper-evident label bearing a securing mark.

Components that may not be dismantled or adjusted by the user must be secured.

When software sealing is used, the CONFIG and CAL counters' values shall be written on a tamper-evident label on or near the rating plate.

A junction box for load cells shall – if present - be sealed against opening with wire and seal or brittle plastic sticker(s).

8. Location of CE mark of conformity and inscriptions

8.1 Scale

8.1.1 CE mark

CE mark and supplementary metrological marking shall be applied to the instrument according to article 20 of Directive 2014/32/EU.

8.1.2 Inscriptions

Max, Min, and e= shall be located near the display.

On the inscription plate of the instrument:

- Manufacturer's name and/or trademark
- Postal address of manufacturer
- Type designation
- Serial number
- Product(s) designation
- Accuracy class
- Max, Min, e =
- Temperature range: -10 / +40 °C (optional)
- Electromagnetic class: E2
- Humidity: Non-condensing
- EU type examination certificate number
- Supply voltage
- Pneumatic/hydraulic pressure (if applicable)
- Maximum subtractive tare (if \neq -Max)
- Information in respect of the conditions of use (if applicable)
- Information whether or not additional devices providing metrological results comply with the provisions of Directive 2014/32/EU on legal metrological control (if applicable)

The markings and inscriptions shall fulfil the requirements of Article 8, Article 21, Article 22 and Point 9 of Annex I of Directive 2014/32/EU.

9. Pictures

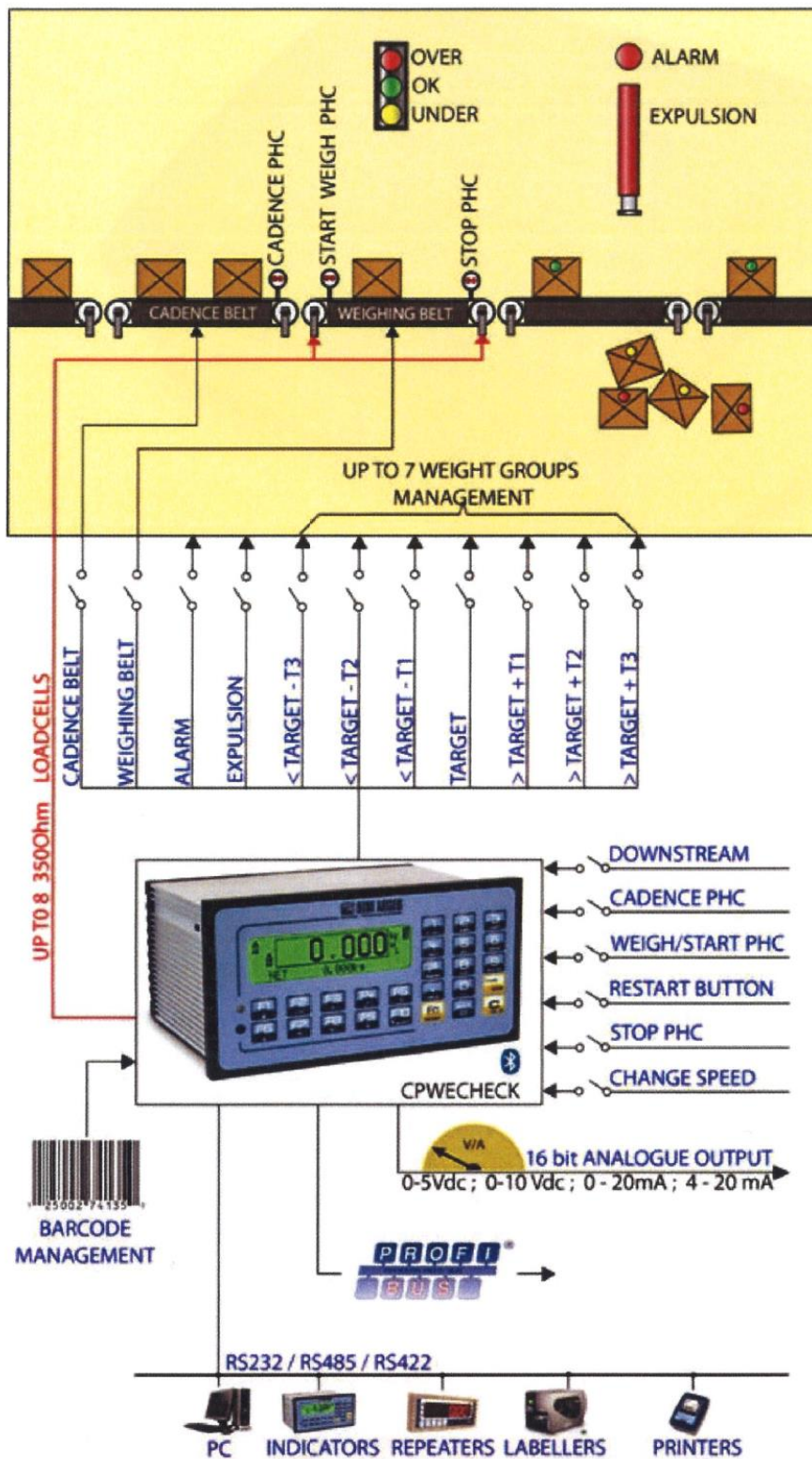


Figure 1 Typical configuration



Figure 2 3590E indicator model



Figure 3 CPWE indicator model