

Member State of OIML  
United Kingdom of Great Britain  
and Northern Ireland

OIML Certificate No  
R51/2006-GB1-17.03

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**  
Person responsible: **Mannie Panesar – Head of Technical Services**  
Applicant: **Straininstall UK Limited  
9-10 Mariners Way  
Cowes, Isle of Wight  
United Kingdom**  
Manufacturer: **The applicant**  
Identification of the certified pattern: **CWS™ (diaphragm load cell based)**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

**OIML R51 - Edition 2006(E) for accuracy class: Y(b)**

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Issue Date: **16 June 2017**



**Marek Bokota**  
**Technical Manager**  
*For and on behalf of the Head of Technical Services*

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The conformity was established by testing and examinations described in the associated Evaluation Report P01915 which includes 13 pages.

**Characteristics of the instrument:**

The CWS™ (diaphragm load cell based) is an automatic catchweigher designed to weigh containers statically with no operator intervention. The instrument comprises digital load cells, an interface unit and a control and display unit. The instrument captures the container weight automatically once the container has been lifted and reached a stable position.

Construction:

The system is designed for permanent installation on the various types of container handlers. The load cells and electronics are permanently installed on the spreader. The system uses Diaphragm digital load cells which are fitted to the lifting equipment. The load values from the load cells are transmitted to a display unit (typically installed in the operators cab) via an interface unit. The final data is transmitted to the container loading system (Terminal Operating System, TOS) which oversees the operation of the weighing instrument.

The interface and display units have aluminium enclosures for all types of the systems. The display unit comprises a communications and display controller fitted with an LCD display and 8 keys: 6 functional control keys and 2 navigation keys. The units are powered by the container handlers with a nominal 24V DC external source. The interface unit provides the supply voltage for the strain gauge bridges in the load cells.

The instrument can be installed in the following configuration:

- Spreader, 4 load cells ( $E_{max} = 15 \text{ t}$ )

Devices:

- Semi-automatic zero-setting ( $\leq 4\% \text{ Max}$ ) via user interface or TOS
- Long term storage device
- Display and storage of individual and total weights

Technical data:

|  |                      |
|--|----------------------|
| Max capacity (Max)                                 | $\leq 45 \text{ t}$  |
| Scale interval (e =)                               | $\geq 0.2 \text{ t}$ |
| Minimum capacity (Min)                             | $\geq 2.4 \text{ t}$ |
| Maximum number of verification scale intervals (n) | $\geq 100$           |
| Accuracy class                                     | Y(b)                 |
| Power supply                                       | 24 VDC               |
| Temperature range                                  | -10 °C to +40 °C     |

Software:

The software modules are protected by a version number and checksum, held on the eMMC memory. The software is identified by a version number and a checksum, which shall be as follows:

|                         | Display unit | Interface unit | Load cell |
|-------------------------|--------------|----------------|-----------|
| Software version number | V2.20        | V2.20          | V2.00     |
| Checksum                | FFAE         | 23E9           | 8E69      |

Access to the legally relevant parameters is password-protected; a non-editable counter designated Config Version counter increments every time a legally relevant parameter is changed.

The software identification and value of the Config Version counter can be displayed on the display unit by pressing the “OK|MENU” button on the display.

Interfaces:

The instrument may have the following interface types:

- Link between interface and display unit
- RS 232 / RS 422 / RS 485
- CANBUS
- Ethernet
- Wifi

Sealings:

Access to the electronics (interface and display unit) is prevented by securing the enclosure with a seal bearing a securing mark.

The load cell serial numbers are indelibly written on the data plate.

The value of the Config Version counter must be written on a tamper-evident label on or near the rating plate.

**CERTIFICATE HISTORY**

| <b>ISSUE NO.</b>   | <b>DATE</b>  | <b>DESCRIPTION</b>             |
|--------------------|--------------|--------------------------------|
| R51/2006-GB1-17.03 | 16 June 2017 | Certificate first issued.      |
| -                  | -            | No revisions have been issued. |