

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

OIML Certificate No
R51/2006-GB1-08.01
Revision 12

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**
Person responsible: **Max Linnemann – Head of Certification Body**
Applicant: **Loma Systems Group and ITW Group
Southwood
Farnborough
Hampshire
GU14 0NY
United Kingdom**
Manufacturer: **The applicant**
Identification of the certified pattern: **CW³ Checkweigher**

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 R 51 - Edition 2006(E) for accuracy class: XIII(1)

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.

This revision replaces previous versions of the certificate.

Issue Date: 10 November 2016



G Stones
Technical Manager
For and on behalf of the Head of Certification Body

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The conformity was established by testing and examination as described in the associated Evaluation Report P01417 which includes 13 pages.

Characteristics of the instrument:

The pattern is a mains-powered automatic checkweighing instrument designated the CW³.

Maximum capacity:	1500 g ≤ Max ≤ 6000 g
Minimum capacity (Min):	≥ 50 g
Scale interval:	Min to 200 g: e ≥ 0.5 g 200 g to Max: e ≥ 1 g
Maximum number of scale intervals:	n ≤ 6000
Tare:	T ≤ -10% Max / 300g
Load cell Emax	10 or 20 kg
Climatic environment	0°C to +40 °C
	Non-condensing (closed)
Electromagnetic environments	E1 and E2
Power supply	100 - 240 Va.c. 50 Hz
Accuracy class	XIII(1)

Maximum belt speed:

Load	Lightweight variant	Mid-Range variant
50 g to 200 g (e = 0.5 g)	70 m/min	50 m/min
50 g to 200 g (e ≥ 1 g)	80 m/min	50 m/min
50 g to 200 g	80 m/min	50 m/min
201 g to 1500 g	100 m/min	100 m/min
1501 g to 2000 g	-	100 m/min
2001 g to 6000 g	-	70 m/min

Load cell:

The load cell is a Vishay Tedea Huntleigh 240 C3, capacity 10 kg (Lightweight variant, maximum capacity 1500g) or 20 kg (Mid-Range variant, maximum capacity 6000g). The PC console provides the 5.5 VDC excitation voltage.

Alternatively, any compatible load cell may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) issued for the load cell.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules and any particular installation requirements.
- It is not a load cell with digital output
- The characteristics of the replacement load cell such as nlc, Y, Z are the same or better than the load cell tested dynamically (Vishay Tedea Huntleigh 240 C3, E_{max} = 10 kg)
- The design of the load cells and the material are the same
- No oil damper is used
- The sensitivity is greater than 0.67 μV/division

Devices:

- Automatic zero setting device active during automatic operation (active if the time between two packs is more than 500 ms)
- Pre-set tare device (subtractive)
- Static calibration not accessible to the user
- Dynamic calibration accessible to the user
- Belt speed setting accessible to the user
- Internal memory for storage of batch reports
- Device to determine the stability of equilibrium, active during dynamic operation
- Device that acts upon significant faults
- Screen check at power-up

Display:

The instrument uses either a PP420 or PP520 PC console manufactured by B&R, and housing a 10.4-inch colour touch screen.

Interfaces:

- RS 232
- USB
- Ethernet

The instrument may be connected to the Loma OPC, LomaEnet or TRACS systems for the collection of batch reports.

The load transport system may consist of conveyor belts driven by rollers or by sets of chains (designated as "Drag Link").

Software:

The software is version number V02.32.XX.Y.Z (or V.02.32.XX) where 02.32 reflects the legally relevant part of the software and XX.Y.Z (or XX) reflects changes to the non-legally relevant part of the software. The software version is shown in the start-up window when the instrument is in warm-up mode and can also be displayed at any time upon command.

The version number may be V02.33.XX.Y.Z where 02.33 reflects the legally relevant part of the software and XX.Y.Z reflect changes to the non-legally relevant part of the software.

Alternatives:

Having the "Heavy Range" variant, similar in construction to the Lightweight and Mid-Range variants, with technical characteristics as follows:

Maximum capacity (Max):	12 kg
Minimum capacity (Min):	500 g
Scale interval (e =):	2 g
Tare:	T ≤ -1.2 kg
Load cell model	Tedea Huntleigh 240 C3
Load cell E _{max}	30 kg
Climatic environment	0°C to +40 °C
	Non-condensing (closed)
Electromagnetic environments	E1 and E2
Power supply	100 - 240 Va.c. 50 Hz
Accuracy class	XIII(1)
Speed range	As per Mid-Range variant

Having the multi-interval “Super Heavy Range” variant, technical characteristics as follows:

Maximum capacity (Max):	10/20/50 kg
Minimum capacity (Min):	3 kg
Scale interval (e =):	5/10/20 g
Tare:	T ≤ -5 kg
Load cell model	Tedea Huntleigh 1265 C3
Load cell E _{max}	150 kg
Climatic environment	0°C to +40 °C
	Non-condensing (closed)
Electromagnetic environments	E1 and E2
Power supply	100 - 240 Va.c. 50 Hz
Accuracy class	XIII(1)
Operating speed	50 m/min

Having the “Ultra Light weight Range” variant, technical characteristics as follows:

Maximum capacity (Max):	400 g
Minimum capacity (Min):	15 g
Scale interval (e =):	0.5 g
Tare (Preset):	T ≤ 10% Net for 15 g ≤ Net ≤ 50 g T ≤ 40 g for Net > 50 g
Load cell model	Vishay Type 240 C3
Load cell E _{max}	5 kg
Climatic environment	0°C to +40 °C
	Non-condensing (closed)
Electromagnetic environments	E1 and E2
Power supply	100 - 240 Va.c. 50 Hz
Accuracy class	XIII(1)
Operating speed	60 m/min

The Vishay Tedea Huntleigh 240 C3 load cell may be replaced by a Utilcell type 240 load cell (approved under Certificate E-99.02.C01) of identical capacity. This load cell cannot be used on the “Heavy Range” variant.

Having the “CW³s Range” variant, technical characteristics as follows:

Maximum capacity (Max):	3000 g
Minimum capacity (Min):	200 g
Scale interval (e =):	1 g
Tare (Preset):	T ≤ -10% Max
Load cell model	Utilcell Type 240
Load cell E _{max}	20 kg
Climatic environment	0°C to +40 °C
	Non-condensing (closed)
Electromagnetic environments	E1 and E2
Power supply	100 – 240 Va.c. 50 Hz
Accuracy class	XIII(1)
Operating speed	As per table on page 2

Having a PPC70 PC console manufactured by B&R, and housing a 5.7-inch colour touch screen, in place of the PP420 or PP520 described under Display (CW³s Range).

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R51/2006-GB1-08.01	4 July 2008	Certificate first issued
R51/2006-GB1-08.01 rev 1	16 September 2008	6000 division variant added to the certificate. Maximum belt speed table added .
R51/2006-GB1-08.01 rev 2	11 December 2008	Transport system designated "Drag Link" added.
R51/2006-GB1-08.01 rev 3	07 October 2010	Heavy Range and Super Heavy Range variants added.
R51/2006-GB1-08.01 rev 4	22 December 2011	Ultra Light weight Range" variant added.
R51/2006-GB1-08.01 rev 5	06 March 2012	Excitation voltage corrected to 5.5 VDC Certificate history added.
R51/2006-GB1-08.01 rev 6	25 March 2013	Alternative load cell added. Max tare weight changed to $T \leq 10\%$ Gross for the "Ultra Light weight Range".
R51/2006-GB1-08.01 rev 7	21 May 2013	Max tare weight changed, for the "Ultra Light weight Range", to $T \leq 10\%$ Net for $15 \text{ g} \leq \text{Net} \leq 50 \text{ g}$ $T \leq 40 \text{ g}$ for $\text{Net} > 50 \text{ g}$
R51/2006-GB1-08.01 rev 8	06 September 2013	E_{\max} value corrected to 150 kg in "Super Heavy Range" technical data table.
R51/2006-GB1-08.01 Rev 9	30 April 2014	$e = 0.5 \text{ g}$ added to the certificate (Lightweight and Midrange variants) Software and display sections added. TRACS system added.
R51/2006-GB1-08.01 Rev 10	03 July 2014	125 g changed to 200 g in Lightweight and Mid-range tables (specifications and speed) Min to 200 g: $e \geq 0.5 \text{ g}$ 200 g to Max: $e \geq 1 \text{ g}$
R51/2006-GB1-08.01 Rev 11	22 June 2015	Corrections to software identification.
R51/2006-GB1-08.01 Rev 12	10 November 2016	General load cell acceptance criteria of load cells added. "CW ³ s Range" (with PPC70 PC console) variant added.