

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

OIML Certificate No
R51/2006-GB1-11.02
Revision 2

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement Office**
Person responsible: **Paul Dixon – Director, Product Certification**
Applicant: **NEMESIS srl
Via Giulio Benassi 31
41122 Modena
Italy**
Manufacturer: **The applicant**
Identification of the
certified pattern: **HSC350**

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) and Y(a)

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 earlier versions of the certificate.

Issue Date: 14 November 2014
Reference No: TS0101/0011



Signatory: G Stones

The conformity was established by tests and examination described in the associated pattern evaluation report P01381 which includes 12 pages.

Characteristics of the instrument:

This family of automatic weighing instruments, designated the HSC350, comprises instruments operating as automatic checkweighers (Category X) and/or weigh or weigh-price labellers (Category Y).

Construction:

The instrument is constructed in stainless steel. The framework is a fabricated floor standing stainless steel frame on adjustable feet. On the frame are mounted the modular conveyor and the conveyors type, number, size and shape are not restricted. The conveyor can be equipped with one of a number of reject devices, including a flipper, drop flap, ram or air blast (Category X), and/or thermal label printers (Category Y). The instrument is designed to be permanently installed.

The control cabinet is located behind of the instrument, houses the electrical hardware. A PL30 weighing indicator console, mounted above the control cabinet contains the keyboard and displays. Photocells mounted on frame are used for pack detection. The photocells may also be direct reading, reflex or laser type.

Technical data:

Designation	HSC350/ 03	HSC350/ 06	HSC350/ 15	HSC350/ 30	HSC350/ 60
Maximum capacity (Max) (\leq):	3,000 g	6,000 g	15,000 g	30,000 g	60,000 g
Minimum capacity (Min) (\geq):	42 g	84 g	210 g	420 g	840 g
Scale interval ($e =$) (\geq):	1 g	2 g	5 g	10 g	20 g
Maximum number of scale intervals (n):	3000				
Load cell E_{max} :	7 kg	10 kg	30 kg	50 kg	100 kg
Tare (T):	-450 e				
Belt speed:	≤ 60 m/min				
Climatic environment	0°C to +40 °C				
	Non-condensing (closed)				
Electromagnetic environments	E1 and E2				
Power supply	230 Va.c. 50 Hz				
Accuracy class	XIII(1) and Y(a)				

Interfaces:

- RS 232

Load cell:

The weighing device comprises a strain gauge load cell located below the centre of the weigh conveyor.

The load cell type may be as follows: HBM SP4M C3MR, HBM PW6D C3MR, HBM PW2D C3MR or HBM PW16A C3MR, capacity according to table page 2.

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 (HBM SP4M C3MR, capacity 7 kg)
- The design of the load cells and the material are the same
- No oil damper is used

Devices:

- Automatic zero setting device active during automatic operation (active if no zero has occurred after 22 min)
- Zero tracking
- Semi-automatic zero-setting ($\leq 4\%$ max)
- Initial zero-setting ($\leq 20\%$ max)
- Pre-set tare device (subtractive)
- Static calibration, not accessible to the user
- Belt speed setting, accessible to the user (access password protected level 1)
- Printing of batch results (Category X)
- Screen check at power-up
- High resolution mode (0.1e) for testing purposes
- Parameter to select operation in Category X or Y at initial verification (protected parameter)
- Parameter to select operation in Category X or Y by the user in normal operation if the above parameter is set to X and Y

Alternatives:

1. Having the instrument fitted with a transport system designated "R chain" and consisting of two, $\frac{1}{4}$ inch, plastic chains instead of rollers to support and drive the conveyor belts. The chains slide on two plastic bars held in position by metallic rods fixed to the instrument. Gaps in the plastic bars ensure the central part of the weigh conveyor is only connected to the live part of the instrument supported by the load cell.

2. Having a modified construction: the PL30 indicator is enclosed in the cabinet.
3. Having a multi-lane configuration, each lane being operated a one separate PL30, with a common cabinet.
4. Having the PL30 weighing indicator console fitted with a touch screen display.
The indicator includes a long term data storage device and optional integrated printer.
The instrument may be fitted with the following interfaces: RS232, USB and Ethernet.
5. Having the instrument fitted with a 10.2" touch screen HMI.
6. Having the instrument fitted with a modified AD board (according to drawing A/D board PL555E, rev 1 dated 12/12/2013). The specifications and load cells are as follows:

Designation	HSC350/02	HSC350/04	HSC350/08	HSC350/20	HSC350/40
Max (\leq)	2,000 g	4,000 g	8,000 g	20,000 g	40,000 g
Min (\geq)	15 g	30 g	60 g	150 g	300 g
e = (\geq)	0.5 g	1 g	2 g	5 g	10 g
n_{\max}	4,000				
Load cell type	PW6 C3MR PW6 D3MR SP4M C3MR	PW6 C3MR PW6 D3MR SP4M C3MR	PW6 C3MR PW6 D3MR SP4M C3MR	PW16A C3MR	PW16A C3MR
Load cell E_{\max} :	5 kg	10 kg	20 kg	50 kg	100 kg
Tare (T):	Min – 80e \leq 20% Gross 80e – 500e \leq 65% Gross 500e – Max \leq 90% Gross				
Belt speed:	Min – 500e \leq 30 m/min 500e – Max \leq 40 m/min		Min – 80e \leq 30 m/min 80e – Max \leq 40 m/min		
Climatic environment	0°C to +40 °C		5°C to +40 °C		
Electromagnetic environments	Non-condensing (closed)				
Electromagnetic environments	E1 and E2				
Power supply	230 Va.c. 50 Hz				
Accuracy class	XIII(1) and Y(a)				

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 (HBM PW6 C3MR, capacity 5 kg)
- The design of the load cells and the material are the same
- No oil damper is used

The automatic zero setting device shall be active during automatic operation if no zero has occurred after 22 min.

The instruments may have any of the following interfaces:

- RS232
- USB
- Ethernet

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R51/2006-GB1-11.02	15 December 2011	Type examination certificate first issued.
R51/2006-GB1-11.02 rev 1	27 July 2012	HSC350/ 60 model added. Touch screen configuration added to the alternatives.
R51/2006-GB1-11.02 rev 2	14 November 2014	\geq and \leq added to table page 2 for Max, Min and e =. Alternatives 5 and 6 added.