

OIML Member State
The Netherlands

Number R76/2006-A-NL1-20.07
Project number 2213320
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Issuing authority
NMI Certin B.V.
Person responsible: M. Boudewijns

Applicant and
Manufacturer
Cascade Corporation
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United States of America

Identification of the
certified type
A Non-automatic weighing instrument
Type
: 23C-WFx-2A-yyyyy
28C-WFx-3A-yyyyy
50C-WFx-3A-yyyyy
where x = E, R or G, y = 0-9

Characteristics
See next page

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 76 - Edition 2006 for accuracy class (III) or (III)

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified. This Certificate does not bestow any form of legal international approval.

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Issuing Authority
NMI Certin B.V., OIML Issuing Authority NL1
19 February 2020

Certification Board

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The conformity was established by the results of tests and examinations provided in the associated OIML Reports:

For the Terminal and ADPD:

- No. NMI-2213320-03 dated 19 February 2020 that includes 46 pages;

For the load cell:

- No. NMI-1902432-01 dated 11 September 2018 that includes 51 pages.
- No. NMI-2232947-01 dated 11 October 2018 that includes 46 pages.

For the non-automatic weighing instrument:

- No. NMI-2213320-01 dated 19 February 2020 that includes 11 pages;
- No. NMI-2213320-02 dated 19 February 2020 that includes 11 pages.

Characteristics of the non-automatic weighing instrument:

Accuracy class	III or IIII
Maximum capacity	$1000 \text{ kg} \leq \text{Max} \leq 4500 \text{ kg}$
Verification scale interval	$e \geq 1 \text{ kg}$
Weighing ranges	Single interval Multi-interval
Maximum number of scale intervals	$n \leq 2500$
Maximum number of partial weighing ranges	3
Tare	$T \leq -\text{Max} \%$ for instruments with one weighing range $T \leq -\text{Max}_1$ for multi-interval instruments

Characteristics of Terminal:

Configuration	Terminal with ADPD
Weighing range(s)	Single interval Multi-interval
Maximum number of partial weighing ranges	3
Fraction of the maximum permissible error	0
Maximum number of load platforms	1
Temperature range	-10 °C / +40 °C
Power supply voltage	6 V DC (supplied by 4x AA battery) 12 - 72 V DC (suitable for a road vehicle power supply)
Software identification	Version number: 19.xxxx (xxxx is a number between 0000 and 9999)

Characteristics of the Analog Data Processing Device (ADPD):

Configuration	Analog load cells
Accuracy class	III or IIII
Maximum number of scale intervals	$n \leq 3000$
Load cell excitation voltage	3,3 V DC
Minimum signal input voltage	$U_{\min} = 0$ mV
Minimum input voltage per verification scale interval	0,5 μ V
Minimum load cell resistance	87 Ω
Maximum load cell resistance	1050 Ω
Fraction of the maximum permissible error	0,5
Load cell connection	4 wire
Maximum value of the cable length per cross wire section between the analog data processing device and load cells	In case a 4-wire connection is used the load cells are connected directly without junction box
Temperature range	-10 °C / +40 °C
Power supply voltage	7,4 V DC (supplied by battery)
Software version number	CA19.10

Characteristics of the load cell:

Maximum capacity (E_{max})	1000 kg up to and including 5000 kg	
Minimum dead load	0 kg	
Accuracy Class	C	
Rated Output	2 mV/V	3 mV/V
Maximum number of load cell intervals (n) ⁽¹⁾	3000	
Ratio of minimum LC Verification interval ⁽¹⁾ $Y = E_{max} / V_{min}$	10000	
Ratio of minimum dead load output return ⁽¹⁾ $Z = E_{max} / (2 * DR)$	3000	
Input impedance	$387 \Omega \pm 20 \Omega$	
Temperature range	-10 °C / + 40 °C	
Fraction p_{LC}	0,7	
Humidity Class	CH	
Safe overload	150 % of E_{max}	
Output impedance	$350 \Omega \pm 5 \Omega$	
Recommended excitation	10 V AC / DC	
Excitation maximum	15 V AC / DC	
Transducer material	Alloy steel or stainless steel	
Atmospheric protection	Silicon rubber	