

Member State of OIML United Kingdom of Great Britain and Northern Ireland OIML Certificate № R134/2006-GB1-13.01

OIML CERTIFICATE OF CONFORMITY

Issuing authority:	National Measurement Office	
Person responsible:	Paul Dixon – Product Certification Manager	
Applicant:	WheelRight Ltd Begbroke CIE Begbroke Science Park Begbroke Hill Woodstock Road Begbroke, OX5 1PF United Kingdom	
Manufacturer:	The applicant	
Identification of the certified pattern:	WheelRight Weight and Pressure in motion WR100 or WheelRight Weight in motion WR120.	

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 134 - Edition 2006(E) for accuracy class: 10

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: Reference№: 23 December 2013 TS0107/0003

Signatory: P R Dixon

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National Measurement Office

Introduction

The WheelRight Weight and Pressure in motion WR100 or WheelRight Weight in motion WR120 system is an instrument used for dynamic axle weighing of road vehicles in motion and can also be used to determine tyre pressures (not covered under this approval). The weighing system shall be installed to manufacturing guidelines in a controlled weighing area where vehicle speed is controlled, and shall adhere to the installation requirements of OIML R134-1:2006 (E) or any later versions. The instrument is to be used for the determination of gross vehicle weight only.

The conformity was established by the tests and examination described in the associated pattern evaluation report P01010/R134 which includes 12 pages.

Accuracy class	10
Maximum number of axles	≤ 6
Maximum capacity	≤ 50 000 kg
Scale interval (d)	50 kg \leq d \leq 200 kg
Minimum capacity	≥ 10 d
Number of scale intervals	≤ 1000
Maximum speed	≤ 16 km/hr
Direction of travel	Single or Dual direction
Compensating axle groups	Yes (Pneumatic)
Operating temperature range	- 10 °C / + 40 °C
Power supply	100-240 V AC (50/60 Hz)
Load cells	Compatible OIML R60

Characteristics of the instrument:

Indicator type and devices:

This instrument utilises the following digital indicating devices designated the WheelRight Sensor Interface Board. The above named indicator has the following features:

- Zero tracking ($\leq 4\%$ Max)
- LCD or LED display
- Printing
- Vehicle Identification System (ANPR or RFID)

Technical characteristics for the indicators:

Maximum number of scale intervals	1000
Load cell excitation voltage	3.3 V DC
Minimum load cell impedance	650 Ω
Maximum load cell impedance	10 kΩ
Minimum input voltage per verification scale interval	33 µV/div
Measuring range minimum voltage	-3.3 mV
Measuring range maximum voltage	6.6 mV
Fraction of maximum permissible error	0.5
Operating temperature range	-10 / + 40 °C
Load cell connection	4 wire
Load cell cable length (junction box to indicator)	5 m

Interfaces:

The instrument may have the following interface type:

- RS-232
- RS-485
- USB
- Ethernet
- Bluetooth
- WiFi

Load cell:

Any compatible load cell(s) 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. A load cell marked NH is allowed only if humidity testing to R134 has been conducted on this load cell.
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation at the time of verification.
- The load cell transmission conforms to a standard type.

Certificate History

Issue №	Date	Description
R134/2006-GB1-13.01	23 December 2013	Certificate first issued.
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