



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

OIML Certificate No
R76/1992-GB1-04.02
Revision 2

OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name: **National Weights and Measures Laboratory**
Address: **Stanton Avenue
Teddington
Middlesex
TW11 0JZ
United Kingdom**

Person responsible:

Paul Dixon
Type Approval Certification Manager

Applicant

Name: **Rice Lake Weighing Systems**
Address: **230 W. Coleman Street
Rice Lake
WI 54868
USA**

Manufacturer of the certified pattern is the Applicant.

Identification of the certified pattern:

Rice Lake Weighing Systems 820i and 920i
Non-automatic weighing instruments
Further characteristics see page 2

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 Organization of Legal Metrology (OIML):

OIML:	R76
Edition:	1992 (E)
Accuracy class:	III, IIII

This revision replaces earlier versions of the certificate.

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.

The conformity was established by tests and examination described in the associated:

NWML Test report:	SN 457	having 46 pages
NWML Test report:	SN 1133	having 9 pages
Pattern evaluation report:	P00196	having 13 pages

The issuing authority

The OIML member



Mr G E Stones



Mr P E Mason

Date: 26 October 2010

Ref: T1128/0207

Characteristics: The instrument is Class III or IIII, mains-operated, self-indicating, single-interval or multi-interval/range, non-automatic weighing instrument.

It consists of a 920i or 820i indicator connected to a weighing platform.

Construction: The indicator housing is fabricated from stainless steel plate. The front panel has a backlit LCD display and a twenty-seven key keyboard, five of the twenty seven keys are programmable software keys.

The 920i family of instruments comprises the following models: Desktop, Universal, Deep Enclosure, Wall Mount & Panel Mount.

The 820i is the same as the 920i Universal and Panel Mount indicators, with the exception that the 820i has a one-card expansion board and can only handle alphanumeric characters.

Load cell:

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. A load cell marked NH is allowed only if humidity testing to R76 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.

Devices:

- Semi-automatic zero setting device ($\leq 4\%$ of Max)
- Zero-tracking device ($\leq 0.5d/s$ within 4% Max)
- Subtractive tare device
- Gross and Net Indicator
- Semi-automatic tare device
- Pre set tare device
- Display test device
- Time and date function
- Software sealing (password+counter)
- Alibi memory
- Multi-interval and multi-range (maximum of three partial ranges)
- Truck modes
- Local/remote operation
- Multi-scale and totalisation (920i: 4 scales, 820i: 2 scales)

Technical characteristics:

Power supply	115 VAC or 230 VAC / 10-60 VDC	
Maximum number of scale intervals	10,000	6,000
Fraction of maximum permissible error	$P_{ind} = 0.75$	$P_{ind} = 0.50$
Load cell excitation voltage	± 5 VDC (10 VDC)	
Minimum load cell impedance	21.875 Ω	
Maximum load cell impedance	2000 Ω	
Minimum input voltage per verification scale interval	1 micro volt	
Measuring range minimum voltage	-10 mV	
Measuring range maximum voltage	70 mV	
Operating temperature range	-10°C to +40°C	
Load cell cable	6 cores around PVC filler in centre, tinned copper braid, flexible PVC overall jacket. Maximum length = 100 m for 4-wire operation	

Maximum cable length for 6-wire operation				
Load Cell Impedance ¹	Cable size			Unit of length
	0.2 mm ²	0.5 mm ²	1.0 mm ²	
22 Ω	14	33	71	Metres
44 Ω	28	66	142	Metres
87 Ω	56	133	283	Metres
350 Ω	224	535	1134	Metres

¹ calculated by dividing the single load cell impedance by the number of load cells

The indicator can be fitted with a two-card expansion board, and may be fitted with any of the following optional cards:

- Single or dual channel A/D card
- Analogue output card
- Dual channel serial expansion card
- 24 channel digital I/O card
- Memory expansion card
- Pulse input card
- Bus interface card

The instrument has the following protected interfaces:

- RS232
- RS485
- Analogue output
- 20 mA current loop
- 24 channel digital I/O
- Pulse input interface
- Bus interface

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.