National Measurement Office Certification

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

OIML Certificate No
R61/2004-GB1-12.01
Revision 1

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement Office**

Person responsible: **Paul Dixon – Director, Certification Services**

Applicant: **Premier Tech**
1 Avenue Premier
Rivière-du-Loup
Québec
G5R 6C1
Canada

Manufacturer: **The applicant**

Identification of the certified pattern: **SpeedAC NXT**

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 61 - Edition 2004(E) for **Reference accuracy class 0.2**

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: **25 April 2014**
Reference No: **TS0104/0002**

Signatory: **G Stones**

National Measurement Office | Stanton Avenue | Teddington | TW11 0JZ | United Kingdom
Tel +44 (0)20 8943 7272 | Fax +44 (0)20 8943 7270 | Web www.bis.gov.uk/nmo

UKAS PRODUCT CERTIFICATION 0135

National Measurement Office

The conformity was established by tests and examination described in the associated pattern evaluation report P00742 which includes 11 pages.

Characteristics of the instrument:

Main features:

This pattern of an automatic gravimetric filling instrument for dispensing predetermined loads of powdered or granular materials consists of a feeding device, a weighing unit, and a SpeedAC NXT controller incorporating a microprocessor. The instrument may be used for Gross or Net weighing.

The feeding device may be any one of the following:

- Gravity Feeder
- Gravity Feeder with Agitator
- Screw Feeder
- Belt Feeder
- Vibratory Feeder
- Cone Feeder

Any other type of feeding device may also be used.

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 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 at the time of verification.
- The load cell transmission conforms to a standard type.

The SpeedAC NXT controller housing is fabricated from stainless steel plate. The controller can be provided in a universal, wall, panel or desk-top mount configuration. The front panel has a backlit LCD panel and a twenty-seven key keyboard, five of the twenty seven keys are programmable software keys. The LCD panel displays the weight and user information.

The indicator can be fitted with a two-card expansion board (six-card on the wall mount model), and may be fitted with any of the following optional cards:

- Analogue output card
- Dual channel serial expansion card
- 24 channel digital I/O card
- Profibus DP card

The air cylinder(s) which operate the bag clamp(s), feed cut-off gate(s) and the product flow control system are double acting type used in conjunction with directional control valves having solenoid-pilot actuators and spring or pilot air return actuators. The operating pressure is 1-6 bar. Over pressures are prevented by pressure regulator.

Devices:

- Semi-automatic zero setting device (4% of Max).
- Automatic zero setting device (4% of Max) with selectable interval corresponding to the number of weighing operations (Max: 100) or time (Max: 30 min).
- Automatic subtractive tare device (gross weighers only). This facility is set at machine level such that the operation of the machine (gross or net) cannot be altered.
- Automatic material in-flight correction with selectable interval corresponding to the number of weighing operations (Max: 50) or time (Max: 15 minutes).
- Automatic dosing time regulator (capacity regulator) to optimally set the medium and/or full flow switch-off point.
- Weight evaluation (target weight checking device).
- Pre-selection counter (pre-selection of number of weighing operations).
- Memory for storing parameters associated with filling material and/or target weight, dribble/medium and/or full flow switch-off points and limiting value for weight evaluation.

Technical characteristics:

Reference accuracy class	Ref(x) $\geq$ 0.2
Power supply	115 V AC or 230 V AC
Maximum tare (gross weigher only)	-100% Max
Maximum capacity	$\geq$ 10 kg
Minimum load	$\geq$ 2 kg
Scale interval	$\geq$ 0.001 kg
Maximum number of scale intervals	10000
Load cell excitation voltage	$\pm$ 5 V DC (10 V DC)
Minimum load cell impedance	21.875 Ω
Maximum load cell impedance	2000 Ω
Minimum input voltage per scale interval	1 μV
Measuring range minimum voltage	-10 mV
Measuring range maximum voltage	70 mV
Fraction of maximum permissible error	P_{ind} = 0.5
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	Cable size			Unit of length
	0.2 mm²	0.5 mm²	1.0 mm²	
22 Ω	14	33	71	Metres
44 Ω	28	66	142	Metres
87 Ω	56	133	283	Metres
350 Ω	224	535	1134	Metres

Software:

The legally relevant part of the firmware may have the following version numbers: LR 1.00 or LR V1.01.

Interfaces:

The instrument may have the following interface type:

- RS232
- RS485
- Analogue output
- 24 channel digital I/O
- Profibus DP

Certificate History

ISSUE NO.	DATE	DESCRIPTION
R61/2006-GB1-12.01	19 September 2012	Certificate first issued
R61/2006-GB1-12.01 Revision 1	25 April 2014	Wording modified to allow more flexible configurations