

OIML Member State United Kingdom of Great Britain and Northern Ireland	OIML Certificate No. R76/2006-A-GB1-19.09
OIML CERTIFICATE ISSUED UNDER SCHEME A	
OIML Issuing Authority	NMO Stanton Avenue Teddington TW11 0JZ United Kingdom
Person responsible:	Mannie Panesar – Head of Technical Services
Applicant	Flintec Transducers (Pvt) Ltd. P.O. Box 24, Spur Road 2, Phase 1. KEPZ, Katunayake Sri Lanka
Manufacturer	The applicant
Identification of the certified type	NuBorne Infant Warmer 500 <i>(the detailed characteristics are defined in the Descriptive Annex)</i>
<p>This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):</p> <p>OIML R 76, Edition: 2006</p> <p>For accuracy class: III</p>	
<p>Issue date: 14 June 2019</p> <p>The OIML Issuing Authority</p>  <p>Grégory Glas Lead Technical Manager <i>For and on behalf of the Head of Technical Services</i></p>	

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

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

No. P02340 dated 14 June 2019 that includes 17 pages

The technical documentation relating to the identified type is contained in documentation file:

No. P02340-D dated 14 June 2019

OIML Certificate History

Revision No.	Date	Description of the modification
0	14 June 2019	OIML Certificate first issued.
-	-	-

No revisions have been issued.

Important note:

Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

DESCRIPTIVE ANNEX

Characteristics of the instrument:

The Flintec NuBorne Infant Warmer 500 is a class III, mains operated, self-indicating, single-interval, non-automatic weighing instrument designed to be used as an infant weigher and warming bed.

Construction:

- Steel frame on wheels, with electronic height adjustment
- Canopy with a radiating heat lamp
- Plastic bed compartment containing weighing platform and patient mattress
- Weighing platform under patient mattress comprising four load cells, analogue to digital converter, and microcontroller; providing a digital weight signal to the user interface
- Manual, longitudinal tilt adjustment of bed compartment
- Bubble level indicator (longitudinal only)
- User interface with LCD display, push button controls, and 3 x seven-segment displays showing temperature and heat lamp setting.
- Pedals to adjust the height of bed compartment

Devices:

- Subtractive tare balancing device
- Net indicator
- Gravity compensation
- Short term data storage

Operation:

The NuBorne Infant Warmer 500 is primarily used as an infant warmer therefore does not display live weights but indicates the result of the latest weigh function (tare balancing).

To weigh the infant, the scale button is pressed. An icon instructs the operator to lift the infant off the mattress; at least 250 g must be lifted from the mattress. Once the scale is tared, a signal sounds and an icon instructs the operator to replace the infant, the net weight is then displayed.

Previous weights can be displayed by pressing the trend button.

Technical data:

Accuracy Class	III
Max	24 kg
Min	250 g
e =	10 g
T ≤	-16 kg
Operating temperature range	15 °C to +45 °C.
Power supply	110 - 230 V AC, 50/60 Hz

Load cell:

The instrument is fitted with four load cells, type Planar Beam, $E_{\max} = 7.5$ kg, manufactured by Flintec.

Software:

The software is split across three boards, all software is embedded and supplied as compiled executable code. The scale board software designated SB is held on the weigh platform, it handles the main metrological functions and provides a digital weight value to the display board. The display board software designated DB handles the display of legally relevant data and rounding. The control board designated CB handles the communication interface with the scale board and interlocks. No legally relevant parameters can be affected through the user interface.

The software identification is displayed at boot-up and is shown below for verification purposes:

Software module	Version number
SB	1.2
DB	12.x.x
CB	9.x.x

With 'x' reflecting non-legally relevant changes.

The SB software and parameters can only be affected by connecting directly to the PCB.

A CRC32 checksum is calculated over the DB and CB at verification and compared against values calculated upon every boot-up. If the checksum values do not match, the instrument will not continue to boot-up. Any software or parameter change will cause the checksum to change.

Interfaces:

- Skin temperature sensor

Sealing:

Access to the scale board, load cell and A/D converter is prevented by tamper evident labels over the securing screws and communication port of the weighing module.

Matching serial numbers can be found on the data plate and weighing module.

Alternatives:

There are currently no authorised alternatives.