

# Accreditation Certificate

## Calibration Technology Ltd

Innovation Works, National Technology Park, Limerick.

### Calibration Laboratory

Registration number: **186C**

is accredited by the Irish National Accreditation Board (INAB) to undertake calibration as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard **ISO/IEC 17025:2005 2<sup>nd</sup> Edition**

*“General Requirements for the Competence of Testing and Calibration Laboratories”*

*(This Certificate must be read in conjunction with the annexed Schedule of Accreditation)*

---

Date of award of accreditation: **02:10:2007**

Date of last renewal of accreditation: **20:07:2017**

Expiry date of this certificate of accreditation: **20:07:2022**

---

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: \_\_\_\_\_



Dr Adrienne Duff

Chairperson: \_\_\_\_\_



Ms Ita Kinahan

Issued on 20<sup>th</sup> July 2017

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

# Schedule of Accreditation



(Annex to Accreditation Certificate)

Permanent/Site Laboratory:  
Category A, B

## CALIBRATION TECHNOLOGY LTD

### Balance and Volumetric Calibration Laboratory

**Initial Accreditation Date :** 02-October-2007  
**Postal Address:** Innovation Works, National Technology Park, Limerick  
**Telephone:** +353 (61) 503132  
**Fax:** +353 (61) 338065  
**E-mail:** service@calibrationtech.ie  
**Contact Name:** Michelle Brennan  
**Facilities:** Public calibration service

# Schedule of Accreditation



Permanent/Site Laboratory:  
**Category A, B**

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

## Calibration Categories:

- Category A:** Permanent calibration laboratory where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration that is performed on site by individuals and organisations that do not have a permanent calibration laboratory. Calibration may be performed using
- (a) portable test equipment
  - (b) a site laboratory
  - (c) a mobile laboratory or
  - (d) equipment from a mobile or site laboratory

## Standard Specification or Calibration Procedure Used:

The standard specification or calibration procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

## Glossary of Terms

### Facilities:

- Public calibration service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration:** Unavailable for public calibration more often than not.

Laboratory users wishing to obtain assurance that calibration results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate. Users should contact the laboratory directly to ensure that this schedule of accreditation is current. INAB will on request verify the status and scope.

# Scope of Accreditation



## Calibration Technology Ltd

Permanent Laboratory:  
Category A

## Balance and Volumetric Calibration Laboratory

(Nominal temperature for calibration work: 20±2 °C)

INAB Classification number (P9) Measured quantity	Range of measurement	Calibration & Measurement Capability expressed as an uncertainty *	Method and remarks
<b>130 Volumetric Equipment</b> Laboratory pipettes and dispensing Equipment:- - <i>Single Channel pipettes</i> 0.2µl - 10,000 µl - <i>Multi Channel Pipettes</i> 0.5µl to 1,250 µl - <i>Piston Burettes</i> 1ml to 10ml - <i>Dilutors</i> 1ml to 5ml - <i>Dispensers</i> 1 µl to 10,000 µl	0.2 - 10 µL 10 - 20 µL 20 - 100 µL 100 - 200 µL 200 - 500 µL 500 - 1,000 µL 1,000 - 2,000 µL 2,000 - 5,000 µL 5,000 - 10,000 µL	±0.1 µL ±0.2 µL ±0.3 µL ±0.8 µL ±2.6 µL ±5.0 µL ±13 µL ±22 µL ±60 µL	Method EN/ISO. 8655: 2002: 1 to 6 Volume of liquids For water delivered from piston and / or plunger operated volumetric apparatus.

**\* Notes:**

1. In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.
2. Calibration and measurement capability expressed as an uncertainty (±) to be reported in compliance with EA-4/02, "Expression of the Uncertainty of Measurement in Calibration".

# Scope of Accreditation



## Calibration Technology Ltd

Permanent Laboratory:  
Category A

## Balance and Volumetric Calibration Laboratory

(Nominal temperature for calibration work:  $20 \pm 2^\circ \text{C}$ )

INAB Classification number (P9) Measured quantity	Range of measurement	Calibration & Measurement Capability expressed as an uncertainty *	Method and remarks
<b>121 Weighing Devices</b> .01 Precision laboratory single and dual ranges balances	0.001g - 5g 5g - 200g 200g - 1kg 1kg - 6kg	$\pm 0.050\text{mg}$ $\pm 0.20\text{mg}$ $\pm 1\text{mg}$ $\pm 40\text{mg}$	Documented in house method 6.10 :- Weights available in OIML Class E2 from 1mg to 5kg.

**\* Notes:**

1. In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.
2. Calibration and measurement capability expressed as an uncertainty ( $\pm$ ) to be reported in compliance with EA-4/02, "Expression of the Uncertainty of Measurement in Calibration".

# Scope of Accreditation



## Calibration Technology Ltd

Site Laboratory:

Category B

## Balance and Volumetric Calibration Laboratory

(Nominal temperature for calibration work: 23±5 °C)

INAB Classification number (P9) Measured quantity	Range of measurement	Calibration & Measurement Capability expressed as an uncertainty *	Method and remarks
<b>130 Volumetric Equipment</b> Laboratory pipettes and dispensing Equipment:- - <i>Single Channel pipettes</i> 0.2µl - 10,000 µl - <i>Multi Channel Pipettes</i> 0.5µl to 1,250 µl - <i>Piston Burettes</i> 1ml to 10ml - <i>Dilutors</i> 1ml to 5ml - <i>Dispensers</i> 1 µl to 10,000 µl	0.2 - 10 µL 10 - 20 µL 20 - 100 µL 100 - 200 µL 200 - 500 µL 500 - 1,000 µL 1,000 - 2,000 µL 2,000 - 5,000 µL 5,000 - 10,000 µL	±0.1 µL ±0.2 µL ±0.3 µL ±0.8 µL ±2.6 µL ±5.0 µL ±13 µL ±22 µL ±60 µL	Method: EN/ISO 8655: 2002: 1 to 6 Volume of liquids For water delivered from piston and / or plunger operated volumetric apparatus.

**\* Notes:**

1. In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.
2. Calibration and measurement capability expressed as an uncertainty (±) to be reported in compliance with EA-4/02, "Expression of the Uncertainty of Measurement in Calibration".

# Scope of Accreditation



## Calibration Technology Ltd

Site Laboratory:

Category B

## Balance and Volumetric Calibration Laboratory

(Nominal temperature for calibration work:  $23 \pm 5^\circ \text{C}$ )

INAB Classification number (P9) Measured quantity	Range of measurement	Calibration & Measurement Capability expressed as an uncertainty *	Method and remarks
<b>121 Weighing Devices</b>	0.001g - 5g	$\pm 0.050\text{mg}$	Documented in house method 6.10 :- Weights available in OIML Class E2 from 1mg to 5kg (3 Sets).
.01 Precision laboratory	5g - 200g	$\pm 0.20\text{mg}$	
Single and Dual Range	200g - 1kg	$\pm 1\text{mg}$	
Balances	1kg - 6kg	$\pm 40\text{mg}$	

**\* Notes:**

1. In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.
2. Calibration and measurement capability expressed as an uncertainty ( $\pm$ ) to be reported in compliance with EA-4/02, "Expression of the Uncertainty of Measurement".