

Accreditation Certificate

Maha Ireland Ltd

629 Jordanstown Avenue, Greenogue Business Park, Rathcoole, Co. Dublin

Calibration Laboratory

Registration number: 287C

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 2nd Edition**

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


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

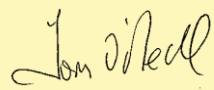
Date of award of accreditation: **31:05:2011**

Date of last renewal of accreditation: **01:12:2015**

Expiry date of this certificate of accreditation: **01:12:2020**

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: 
Mr Tom O'Neill

Issued on 01 December 2015

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)

Site calibration using portable
test equipment:
Category *D*

MAHA IRELAND LTD

Calibration of Vehicle Safety Testing Devices

Initial Accreditation Date : 31-May-2011
Postal Address: 629 Jordanstown Avenue
Greenogue Business Park
Rathcoole
Co. Dublin
Ireland
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E-mail: sales@mahaireland.ie
Contact Name: John Mallon
Facilities: Public calibration service

Schedule of Accreditation



Site calibration using portable test equipment: **Category D**

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 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
- portable test equipment
 - a site laboratory
 - a mobile laboratory or
 - 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



Maha Ireland Ltd

Site Calibration using portable test equipment: **Category D**

Calibration of Vehicle Safety Testing Devices

(Nominal temperature for calibration work: 5 to 45 °C)

INAB Classification number (P9) Instrument	Range of measurement	Calibration and measurement capability expressed as an uncertainty *	Method and remarks
775 Emission tester for petrol power motor vehicle .01 Calibration of Petrol emission tester	CO (Carbon monoxide) Range: 0 - 3.7 Vol % CO2 (Carbon Dioxide) Range: 0 - 14.4 Vol % Propane HC (Hydrocarbons) Range: 0 - 2050 ppm Vol	± 2.1% ± 1.3% ± 1.2%	In house documented method MICP 04-02
775 Emission tester for diesel powered motor vehicles .99 Calibration of Diesel Emission Tester	Light Absorption Coefficient Units 'K' values 0 - 3.5 m-1	± 0.070 m-1	In house documented method MICP 03

*** Notes:**

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

Scope of Accreditation



Maha Ireland Ltd

Site calibration using portable test equipment: **Category D**

Calibration of Vehicle Safety Testing Devices

INAB Classification number (P9) Instrument	Range of measurement	Calibration and measurement capability expressed as an uncertainty *	Method and remarks
111 Headlight tester for motor vehicles .07	Inclination by laser beam Ranges: 0 on X axis & 0 on Y axis 0 on X axis & -3.5% on Y axis +3.5% on X axis & 0 on Y axis	 ± 0.25% ± 0.25% ±0.25%	In house documented method MICP 01

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2. CMC's expressed as an uncertainty (±) to be reported in compliance with EA-4/02, "Expression of the Uncertainty of Measurement in Calibration".

Scope of Accreditation



Maha Ireland Ltd

Site calibration using portable test equipment: **Category D**

Calibration of Vehicle Safety Testing Devices

INAB Classification number (P9) Instrument	Range of measurement	Calibration and measurement capability expressed as an uncertainty *	Method and remarks
1150 Roller brake testers for motor vehicles .99	Calibration bar, masses and Circometer		In house documented method MICP 02
	Force		
	0.5 kN - 1.5 kN	± 0.080 kN	
	1.5 kN - 2.5 kN	± 0.080 kN	
	2.5 kN - 3.5 kN	± 0.080 kN	
	3.5 kN - 4.5 kN	± 0.090 kN	
	4.5 kN - 5.5 kN	± 0.10 kN	
	5.5 kN - 6.5 kN	± 0.10 kN	
	6.5 kN - 7.5 kN	± 0.10 kN	
	7.5 kN - 8.5 kN	± 0.12 kN	
	8.5 kN - 10.5 kN	± 0.14 kN	
	10.5 kN - 12.5 kN	± 0.16 kN	
	Brake tester with maximum break force up to 40.5 kN		
	0.5 kN - 1.5 kN	± 0.19 kN	
	1.5 kN - 3.5 kN	± 0.19 kN	
	3.5 kN - 7.5 kN	± 0.21 kN	
	7.5 kN - 11.5 kN	± 0.27 kN	
	11.5 kN - 20.5 kN	± 0.37 kN	
	20.5 kN - 30.5 kN	± 0.49 kN	
30.5 kN - 40.5 kN	± 0.63 kN		

Scope of Accreditation



Maha Ireland Ltd

Site calibration using portable test equipment: **Category D**

Calibration of Vehicle Safety Testing Devices

INAB Classification number (P9) Instrument	Range of measurement	Calibration and measurement capability expressed as an uncertainty *	Method and remarks
1151 .99 Suspension tester for motor vehicles	Static displacement from 0 to 30mm across four verticle points, includes zero.	± 0.31mm	In house documented method MICP 06
1149 .49 Suspension tester for motor vehicles	Weight of vehicle axle at 400kg, 800kg, 1200kg	± 8.5 Kg ± 13 Kg ± 15 Kg	In house documented method MICP 06
1151 .99 Side slip tester for motor vehicles	Horizontal displacement zero to ± 21mm across five points, includes zero.	± 0.22 mm	In house documented method MICP 05

*** Notes:**

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2. CMC's expressed as an uncertainty (±) to be reported in compliance with EA-4/02, "Expression of the Uncertainty of Measurement in Calibration".