Schedule of Accreditation

Organisation Name
Flow Meter Systems Ireland Ltd

Trading As

INAB Reg No
77C

Contact Name
Sinead Ferris

Address
IDA Industrial Estate, Quartertown, Mallow, Cork, P51 CC62

Contact Phone No
02250111

Email
sinead.ferris@flowmeter.ie

Website
http://www.flowmeter.ie

Accreditation Standard
ISO 17025 C

Date Initially Awarded
23/12/2002

Scope Classification
Metrology

Services available to the public¹
Yes

¹ Refer to document on interpreting INAB Scopes of Accreditation

Sites from which accredited services are delivered

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Head Office</td>
<td>IDA Industrial Estate, Quartertown, Mallow, Cork, P51 CC62</td>
</tr>
</tbody>
</table>
# Scope of Accreditation

**Head Office**

**Metrology**

<table>
<thead>
<tr>
<th>Metrology field - Calibrated Device Type</th>
<th>Measured quantity</th>
<th>Calibration range</th>
<th>Calibration and measurement capability (CMC)</th>
<th>Std. ref/SOP</th>
<th>Products</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>105 Flow - .04 Gas Meters</td>
<td>Flow Rate (Gas Mass Meters)</td>
<td>5 ml/min to 500 ml/min 50 ml/min to 5 l/min 1 l/min to 100 l/min 6 l/min to 1500 l/min</td>
<td>0.43% 0.43% 0.52% 0.57%</td>
<td>QT008 Calibration of Mass Flowmeters</td>
<td>Gas Mass Meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flow Rate (Gas Volume Meters)</td>
<td></td>
<td>0.52% 0.52% 0.59% 0.75%</td>
<td>QT008 Calibration of Volume Flowmeters</td>
<td>Gas Volume Meters</td>
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<tr>
<td>105 Flow - .11 Liquid Meters</td>
<td>Flow Rate (Liquid Flowmeters)</td>
<td>0.1 l/sec to 30 l/sec</td>
<td>0.15%</td>
<td>QT002 Calibration of Flowmeter (Volume) Balance Test Line 1500 Kg.</td>
<td>Liquid Flowmeters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.2 l/min to 50 l/min</td>
<td></td>
<td>0.12%</td>
<td>QT005 Calibration of Flowmeters (Volume). Balance Test Line 150Kg. Standing Start &amp; Stop</td>
<td>Liquid Flowmeters</td>
<td>Standing Start &amp; Stop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.15%</td>
<td>QT005 Calibration of Flowmeters (Volume). Balance Test Line 150Kg.</td>
<td>Liquid Flowmeters</td>
<td>Flying Start &amp; Stop, Flowrate Indicator.</td>
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<tr>
<td>Flow Rate (Mass Flowmeters)</td>
<td>0.1 kg/sec to 30 kg/sec</td>
<td>0.15%</td>
<td>QT002 Calibration of Flowmeter (Mass). Balance Test Line 1500 Kg.</td>
<td>Mass Flowmeters</td>
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<td>0.13%</td>
<td>QT005 Calibration of Flowmeters (Mass). Balance Test Line 150 Kg. Flying Start &amp; Stop, Flowrate Indicator.</td>
<td>Mass Flowmeters</td>
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*Notes:*
1. All calibrations must be carried out in accordance with procedures agreed by INAB.
2. In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.
3. Volume calibration can be undertaken using Water or Milk as the Calibration Medium.
4. Mass calibration can be undertaken using any suitable liquid.
5. Calibration and Measurement Capability Expressed as an Uncertainty (±) to be reported in compliance to clause 6.3 of EA-4/02 “Expression of the Uncertainty of Measurement in calibration”.
6. For meters calibrated using a mA output, uncertainty to be added with 0.1%
7. Excluding ultrasonic portable “clamp on” flow measuring devices

Please note the Calibration Measurement Capability (CMC) is expressed in terms of the following parameters:
- Measurand or reference material
- Calibration or measurement method
- Measurement range
- Measurement uncertainty
## Metrology

### Category: B

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<tr>
<td>105 Flow - .11 Liquid meters</td>
<td>Flow Rate</td>
<td>160 l/min to 400 l/min</td>
<td>0.10%</td>
<td>QT001 Flowmeters on Road Tankers</td>
<td>Flow meters on road tankers</td>
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<tr>
<td></td>
<td>Flow Rate (Liquid Flowmeters)</td>
<td>0.003 l/sec to 16.7 l/sec</td>
<td>0.25%</td>
<td>QT003/QT004 using mobile Test Rig (Volume)</td>
<td>Liquid Flowmeters</td>
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<tr>
<td></td>
<td>Flow Rate (Mass Flowmeters)</td>
<td>0.003 kg/sec to 16.7 kg/sec</td>
<td>0.20%</td>
<td>QT003/QT004 using mobile test rig (mass)</td>
<td>Mass Flowmeters</td>
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*Notes:*
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2. In accordance with INAB policy, uncertainties are calculated for an estimated confidence level of not less than 95%.
3. Volume calibration can be undertaken using Water or Milk as the Calibration Medium.
4. Mass calibration can be undertaken using any suitable liquid.
5. Calibration and Measurement Capability Expressed as an Uncertainty (±) to be reported in compliance to clause 6.3 of EA-4/02 “Expression of the Uncertainty of Measurement in calibration”.
6. For meters calibrated using a mA output, uncertainty to be added with 0.1%.

*Please note the Calibration Measurement Capability (CMC) is expressed in terms of the following parameters:*
- Measurand or reference material
- Calibration or measurement method
- Measurement range
- Measurement uncertainty