



# ACCREDITATION CERTIFICATE

Issued under the authority of Bangladesh Accreditation Act, 2006  
by Bangladesh Accreditation Board (BAB), Ministry of Industries to

**ION Engineering (Pvt.) Ltd.**

**1st Floor, House 31259, Road #10, Avenue #02**

**Mirpur DOHS, Dhaka-1216, Bangladesh.**

This is to certify that this  
**Calibration Laboratory**

is accredited in accordance with the international standard  
**ISO/IEC 17025:2017**

in respect of the associated scope, subject to the terms and  
conditions governing the relevant conformity assessment  
body (CAB) accreditation.

Certificate Number : **02.016.22**  
Accreditation Date : **29 November 2022**  
Date of Issuance : **29 November 2022**  
Date of Expiration : **28 November 2025**



  
**Md. Monwarul Islam**  
**Director General**

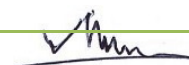
This certificate must be returned on request; reproduction must follow BAB guidelines. For the specific scopes to which this accreditation applies, please refer to the Directory of CABs at BAB website.

## SCOPE OF ACCREDITATION (For Calibration Laboratory)

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216, Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
<b>Field: Thermal</b>				
1	Digital & Analog Thermometers/ PT100/ RTD/ TC with/ without Controller/Indicator, Temperature Sensor/Transmitter/ Switch, Infrared Thermometer, Melting Point Apparatus/Polarimeter/ Iron Machine (In Lab & On Site)	ION.WI-46M	(-40 to 50) °C	± 0.07 °C
			(50 to 150) °C	± 0.11 °C
			(150 °C to 650) °C	± 0.16 °C
<b>Field: Thermal</b>				
2	Glass Type Thermometers, Digital Thermometers, Temperature Gauges/Indicator BOD Sensor (In Lab & On Site)	ION.WI-45M	(-20 to 50) °C	± 0.07 °C
			(50 to 150) °C	± 0.12 °C
			(150 °C to 650) °C	± 0.18 °C
<b>Field: Thermal</b>				
3	Temperature Baths, Incubators, Oven, Autoclave, Muffle Furnace, Refrigerator, Environmental / Climatic Humidity Chamber, Tunnel, Storage Area, (Cold Room,	ION.WI-47M	(-40 to 200) °C	± 0.08 °C
			(300 to 400) °C	± 0.17 °C
			(300 to 1500) °C	± 0.31 °C



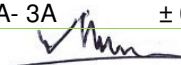
Quality Manager

**SCOPE OF ACCREDITATION**  
**(For Calibration Laboratory)**

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216,  
 Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Warehouse), Washing Machine, Dryer Machine, Well Blocks, Black Body Source/ Hot Surface /Hot Plate, Whirling Hygrometer, Thermal Imager, Molding Machine, COD Reactor, Heat Seal, Fusing Machine, Moisture Analyzer, Washcator, Gyrowash, Tumble Dryer, Water Bath, Sterilizer, Ozone Machine (In Lab & On Site)			
<b>Field: Thermal (Humidity)</b>				
4	Humidity, Data logger, Humidity Chamber, Moisture Meter, Thermo-Hygrograph / Dehumidifier (In Lab)	ION.WI-49M	(5 to 95) %RH	± 0.65% RH
<b>Field: Electro- Technical</b>				
5	AC Voltage (10 Hz to 1 kHz) & DC Voltage (Multi-meter, Clamp Meter, Process Calibrator, Energy Meter)	ION.WI-60M	Upto 300mV 300mV- 3V 3V- 30V 30V-300V 300V-1000V	± 0.001V to 0.002V ± 0.002V to 0.243V ± 0.243V to 0.346V ± 0.346V to 1.777V ± 1.777V to 5.90V
<b>Field: Electro- Technical</b>				
6	AC Current (10 Hz to 1 kHz) & DC Current (Multi-meter, Clamp	ION.WI-60M	Upto 30mA 30mA- 300mA 300mA- 3A	± 0.010A to 0.010A ± 0.010A to 0.013A ± 0.013A to 0.053A



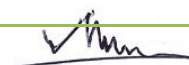
Quality Manager

**SCOPE OF ACCREDITATION**  
**(For Calibration Laboratory)**

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216, Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Meter, Process Calibrator, Energy Meter)		3A- 10A	± 0.053A to 0.174A
<b>Field: Electro- Technical</b>				
7	Resistance, Insulation Resistance Tester, Earth Tester. (Ohms)	ION.WI-60M	Upto 400 Ω 400 Ω to 4 kΩ 4 to 40 kΩ 40 to 400 kΩ 400 kΩ to 4 MΩ 4 to 40 MΩ	± 2.365Ω ± 2.365Ω to 0.239Ω ± 0.239Ω to 0.523Ω ± 0.523Ω to 2.363Ω ± 2.363Ω to 0.484Ω ± 0.484Ω to 0.535Ω
<b>Field: Electro- Technical</b>				
8	Frequency Capacitance Inductance Watt	ION.WI-60M	Up to 100 kHz 1 nF – 1000 μF 100 μH-100 mH Voltage 0 to 600 V Current 0 to 1000 A	± 5.910 Hz to 6.13Hz ± 0.11% ± 0.11% ±0.22% ± 0.22%
<b>Field: Mechanical (Pressure)</b>				
9	Analog/Digital Pressure /Vacuum Gauge, Pressure/ Vacuum Transmitter/Switch/Sen sor/SafetyValve/Float Valve/ Pressure Measuring Equipment/ Dead Weight Tester (Pneumatic/Hydraulic)/ Hydrotest/ Pressue / Vacuum Pump/ Snap Button Tester/Bursting Strength Tester	ION.WI-31M ION.WI-30M	(-0.95 to 0) bar (0 to 30) bar (0 to 450) bar (0 to 700) bar (0 to 1000) bar	± 0.006 bar ± 0.008 bar ± 0.012 bar ± 0.036 bar ± 0.036 bar



Quality Manager

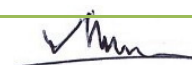
## SCOPE OF ACCREDITATION

### (For Calibration Laboratory)

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216,  
 Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Manometer/ Differential Pressure Gauge / Transmitter/ Barometer (Both Lab & Onsite)	ION.WI-32M	-1000 to 2000 mbar 300 hPa to 1100 hPa	± 0.012 to 0.018 mbar ± 1.9 hPa
<b>Field: Mechanical (Weight)</b>				
10	Mass Weights (In Lab & On Site)	ION.WI-01M	1mg 2mg 5mg 10mg 20mg 50mg 100mg 200mg 500mg 1g 2g 5g 10g 20g 50g 100g 200g 500g 1kg 2kg 5kg 10Kg 20kg 50 kg	±0.006mg ±0.006mg ±0.006mg ±0.008mg ±0.01 mg ±0.012mg ±0.016mg ±0.02mg ±0.025mg ±0.03mg ±0.04mg ±0.05mg ±0.06mg ±0.08mg ±0.1mg ±0.16mg ±0.3mg ±2.5mg ±5mg ±10mg ±25mg ±50mg ±100mg ±200 mg
<b>Field: Mechanical (Weight)</b>				
11	Digital Balance / Scale Semi-Micro Balances Analytical Balances/Electronic Balance/Bond Tester / Truck	ION.WI-02M	1 mg to 220 g Up to 6 kg Up to 100 kg Up to 500 kg Up to 2000 kg Up to 5000 kg	±0.12 mg ± 0.4 g ± 1.2 g ± 1.2 g ± 4.5 g ± 6.8 g



Quality Manager



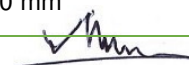
## SCOPE OF ACCREDITATION

### (For Calibration Laboratory)

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216, Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Scale/Lift/Crane /P respirometer (In Lab & On Site)			
<b>Field: Mechanical (volume)</b>				
12	Micro Pipette / Multichannel Micropipette / Auto Pipette / Micro Syringe / Auto Dispenser / Glass Pipette / Burette / Volumetric Flask / Measuring Cylinder / Beaker / Jars/ Pycnometer/Karl Fisher/Conical Flask (In Lab & On Site)	ION.WI-03M	1 µl to 100 µl 100 µl to 500 µl 500 µl to 1000 µl 1 ml to 5 ml 5 ml to 10 ml 10 ml to 50 ml 50 ml to 100 ml 100 ml to 500 ml 500 ml to 1000 ml 1000 ml to 5000 ml 5000 ml to 20000 ml	± 0.1 µl ± 0.22 µl ± 0.32 µl ± 2 µl ± 4 µl ± 5 µl ± 6 µl ± 0.2 ml ± 0.5 ml ± 0.8 ml ± 1.2 ml
<b>Field: Mechanical (Dimension)</b>				
13	Digital Caliper / Vernier Caliper Steel Scale/ Measuring Tape Shrinkage template & Ruler (External/ Inside/ Outside/ Depth) Micrometer Height Gauge	ION.WI-11M ION.WI-12M ION.WI-13M ION.WI-14M	0-300 mm 0-1000 mm 0-1000 mm Up to 50 mtr 0-25 mm 0-1000 mm	±10 µm ±0.75 µm ±200(√L/1000) µm (L is in mm) ±1 µm ±15 µm
	Digital Thickness Gauge / Ultrasonic	ION.WI-18M	0-25 mm 0-100 mm	±7 µm ±9 µm



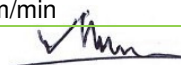
Quality Manager

## SCOPE OF ACCREDITATION (For Calibration Laboratory)

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216,  
 Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Thickness Gauge/ Coating Thickness Gauge/ Dial Indicator/Gauge Block Set/Sharp Point Tester/Depth Gauge/Sharp Edge			
	Bore Gauge /Feeler Gauge /Foil/ Lever Dial Gauge	ION.WI-19M	0-2 mm	±1.5 µm
	Angle Gauge Block / Set Square / T- Square/Triangle Set / Circular Protractor / Bevel Protractor / Angle Protractor	ION.WI-20M	0 to 360 °	0.08' of arc
	Go & No Go Gauge / Slip Gauge Set / Test Sieves/Depth Gauge	ION.WI-21M	0 to 40 mm	±13 µm
	Microscope/Profile Projector	ION.WI-25M	X ruler 1mm/100 1 Div. = 0.01mm	0.35%
	Velocity (Bio-Safety Cabinet, Laminar Air Flow) etc.	ION.WI-26M	(0.4~30) m/s	0.12 m/s
	Metal Detector Machine/ Test Card/Scanner	ION.WI-27M	0.8, 1.0 & 1.2 (Fe Ø) 0.8, 1.0 & 1.2 (Non- FeØ)	0.02%
<b>Field: Mechanical (Speed)</b>				
14	Non-Contact / Contact Tachometer / Travel Speed /	ION.WI-16M	5 RPM to 60000 RPM 0 mm to 2000 mm/min Up to 50 m/min	± 0.5 rpm ± 0.2 to 0.5 m/min



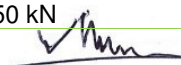
Quality Manager

**SCOPE OF ACCREDITATION**  
**(For Calibration Laboratory)**

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216,  
 Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Surface Speed / Amplitude / Elongation/Shaker /Centrifuge Machine/Martindale & Pilling Tester/Wrap Reel			
<b>Field: Mechanical (Time)</b>				
15	Digital/Analog Timer/ Stop Watches/Time Interval Meter / On-off Timer / Breaker Timer / Relay Timer/ Flammability Tester/Crock master /Spray Rating/Stretch & Recovery Tester	ION.WI-22AM	1 s to 24 hr	± 0.0059 hr
<b>Field: Mechanical (Sound)</b>				
16	Acoustics Sound Level Meter / Sound Level Calibrator (1 kHz)	ION.WI-17M	94 dB, 104 dB & 114 dB	± 0.6 dB
<b>Field: Mechanical (Lux)</b>				
17	UV/Lux Meter / Light Box / Light Source / Pilling Viewer / Pili Scope, Fabric Inspection Machine/ Light Shade/ Gray Scale	ION.WI-23M	10 Lux to 20000 Lux	± 0.72 % of rdg
<b>Field: Mechanical (Force)</b>				
18	Uniaxial Testing	ION.WI-36M	1 cN to 1 kN 1 kN to 50 kN	± 0.02 % ± 0.2 %



Quality Manager



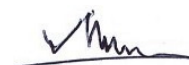
**SCOPE OF ACCREDITATION**  
**(For Calibration Laboratory)**

**CAB Name & Address:** ION Engineering (Pvt.) Ltd.  
 1<sup>st</sup> Floor, House # 1259, Road # 10, Avenue # 2, Mirpur DOHS, Dhaka-1216, Bangladesh.

**Accreditation Standard:** ISO/IEC 17025:2017      **Accreditation Date:** 29 Nov 2022  
**Certificate Number:** 02.016.22      **Issued on:** 16 Jan 2024  
**Last Amended on:** 16 Jan 2024      **Valid until:** 28 Nov 2025  
**Amendment no:** 01

S.N.	Measured quantity Instrument/Gauge	Reference to Method	Measurement range/value	Measurement Capabilities expressed as expanded uncertainty U (k=2)
	Machine (Universal, Tensile, Compression testing machine) & Load Cell with Indicator, Titan 5, Elmatear, Ele Twist		50 kN to 500 kN 500 KN to 2000 kN	± 0.26 % ± 0.30 %
	Push Pull Tester / Force Gauge / Tension Meter	ION.WI-37M	0 to 30 kgf 0 to 50 kgf Up to 500 kgf	± 0.1 to 0.5 gf ± 0.1 to 0.8 gf ± 0.05 to 0.1 gf
	Torque Meter, Torque Analyzer, Torque Driver, Torque Wrench	ION.WI-38M	1.5 – 100 kgf.cm 0.15 - 10 N.m 10 to 3000 N.m	± 0.32 % ± 0.32 % ± 0.21 %
<b>Field: Mechanical (Flow)</b>				
19	Water / Oil / Steam/Ultrasonic/Gas Flow Meter/Transmitter/Sensor/Regulator	ION.WI-41M	(0 to 15000) m <sup>3</sup> /hr	± 0.18 %
<b>Field: Mechanical (Meter)</b>				
20	PH Meter	ION.WI-42M	0 to 14 pH	± 0.34 %
	Conductivity Meter	ION.WI-43P	0 to 1999 µS/cm	± 0.51 %

-----End-----



Quality Manager