



INTERNATIONAL  
ACCREDITATION  
SERVICE®

# CERTIFICATE OF ACCREDITATION

*This is to attest*

## **INTERNATIONAL AGENT TRADING COMPANY DBA INTERNATIONAL AGENT GROUP FOR CALIBRATION**

BUILDING NO. 2907, STREET-15, DISTRICT IBN SINA7  
AL KHOBAR, 34627 SAUDI ARABIA

### **Calibration Laboratory CL-170**

has met the requirements of AC204, *IAS Accreditation Criteria for Calibration Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Expiration Date September 1, 2026  
Effective Date January 7, 2026



*International Accreditation Service*  
Issued under the authority of IAS management

Visit [www.iasonline.org](http://www.iasonline.org) for current accreditation information.

# SCOPE OF ACCREDITATION

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## INTERNATIONAL AGENT TRADING COMPANY DBA INTERNATIONAL AGENT GROUP FOR CALIBRATION

**Contact Name** Muhammad Azam

**Contact Phone** +966 50 6746300

*Accredited to ISO/IEC 17025:2017*

*Effective Date January 7, 2026*

### CALIBRATION AND MEASUREMENT CAPABILITY (CMC)\*

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY <sup>1,2</sup> (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
<i>Dimensional</i>			
Calipers – Vernier, Dial & Electronic (External and Internal Jaws)	Up to 300 mm Up to 600 mm Up to 1000 mm	8 µm 10 µm 42 µm	Using Gauge Block, Length bars & Caliper Checker by Direct method IS:16491
External Micrometers	Up to 75 mm 100 mm to 500 mm 500 mm to 1000 mm	0.7 µm 1.1 µm 6.6 µm	Using Gauge Block by Direct Method IS:2967
Dial Indicator/Gauges Plunger/Lever/transducer/Bore Dial Gauge	0 mm to 10 mm 10 mm to 50 mm 50 mm to 100 mm	0.59 µm 0.67 µm 5.8 µm	Using Dial gauge calibrator by Direct Method IS: 2092
Feeler Gage	Up to 1.00 mm	10 µm	Using Digital Micrometer by Comparison Method IS: 3179
Height Gage	0 mm to 600 mm	9 µm	Using Gauge Blocks & Caliper Checker by Direct Method IS:2921
HI-LO Gage/ Taper bore gage	Up to 45 mm	67 µm	Using Gauge block by Direct Method. D-LCP-029
Cam Gage/ V-Wac Gage	Cam Scale - Up to 45 mm Linear Scale - Up to 60 mm Throat Scale - Up to 20 mm	570 µm 570 µm 570 µm	Using Gauge block by Direct Method D-LCP-029
Length Bar	0 mm to 25 mm 25 mm 50 mm 50 mm to 100 mm 100 mm to 500 mm	5.9 µm 6.0 µm 6.2 µm 7.0 µm	Using Gauge Block / ULM 600 By Comparison method ASME B89.1.6
Laser Distance Meter	0.5 mm to 20 m	0.0018 m	Using Laser Distance meter, Length Bar, Measuring Tape

\* If information in this CMC is presented in non-SI units, the conversion factors stated in NIST Special Publication 811 "Guide for the Use of the International System of Units (SI)" apply.



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			by Comparison method. ISO 16331
Digital Depth Gauge	0 mm to 300 mm	9.4 µm	Using Gauge block by Direct Method D/LCP-002
Straight Edge	Length 300 mm Beveled Thickness 3 mm Width 30 mm Flatness +/- 21 µm (max)	0.9 µm 0.9 µm 0.9 µm	Using ULM 600 by comparison method ASTM D1557
Thread Profile gauge	Thread Angle up to 75° Pitch 10 mm max	0.06° 62 µm	Using Optical Glass Scale / Microscope by comparison method API 5B and API 7-A
Radius Gauge	Up to 25 mm	1.7 µm	Using Microscope by comparison method. ISO 10360
Go /No Go Ring Gauge	Internal Diameter Up to 300 mm 300 mm to 600 mm	22 µm 80 µm	Using ULM, Digital Caliper by comparison method IS:3455
Measuring Tape	10000 mm	80 µm	Using Digital tape & Microscope by comparison method IS:1269
Ultrasonic Thickness Gage	1 mm to 300 mm	86 µm	Using Gauge Blocks by Direct method IS: 2967
Coating thickness Gage	Up to 2000 µm 2000 µm to 7594 µm	6 µm	Using Thickness foil by Direct method IS:1103
Coating thickness (dry Film) Foils	Up to 2000 µm 2000 µm to 7594 µm	2 µm 1.3 µm	Using Digital Micrometer by comparison method IS:1103
Angle Meter	0° to 360°	6'	Using Ref Angle Meter by comparison method BS:1685
Inside Micrometer	Up to 600 mm	15 µm	Using ULM, Gauge Blocks by Direct method IS:2966
Measuring Rule	Up to 1 m	100 µm	Using Microscope & Length bar by comparison method ITTC-7.6-02-01
Cylinder Mold/ CBR mold/ Proctor Standard mold/ Proctor modified mold/ Marshall mold/ CBR mold/ Grout mold/Cube mold/ Temping rod with Cone/ Sand Cone/Abraham Funnel Cone/Los Angeles machine/ Relative Density Soil ap-	Diameter (Inside / Outside) 15 mm to 300 mm 300 mm to 600 mm Height / Depth: 40 mm to 300 mm Weight: 300 g to 500g	60 µm 60 µm 60 µm 1 g	Using Digital Caliper and Weighing Balance by Direct Method ASTM C131



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paratus/Riffle Box (Split-ter)				
Test Sieve	0.075 mm to 4.75 mm 4.75 mm to 125 mm	12 µm 60 µm	Using Digital caliper, Microscope, glass scale by direct method ASTM E11	
Thread Height Standard	Up to 25.4 mm	20 µm	Using Caliper, Microscope by Direct method. ISO 10360-7	
Penetrometer	Weight of Piece: 20 g, 50 g, 100 g (Fixed)  Diameter of Needle: 1 mm to 1.02 mm (Fixed)  Length of Needle (Fixed) 45 mm  Penetrometer Dial Reading 0 mm to 36 mm	0.58 g  6 µm  10 µm  13 µm	Using Balance, caliper, Gage block by direct method. ASTM D937	
Flakiness & Elongation	6.30 mm to 63 mm	12 µm	Using Digital Caliper by comparison method IS 2386 and BS 812-105.2	
Liquid Limit Device	Cup Thickness Cup Depth Cup Worn Spot Base Thickness Base Length Base Width Base Worn Spot Height of Cup	2 mm 27 mm 10 mm 50 mm 150 mm 125 mm 10 mm 10 mm	23 µm 23 µm 46 µm 10 µm 20 µm 20 µm 15 µm 15 µm	Using Caliper, depth caliper, gauge block, Microscope. By Direct Method (ASTM D4318)
MRP Setting Standard	Up to 600 mm	58 µm	Using ULM by Direct method ISO 10360-7	
Lead Setting Standard	12.7 mm to 101.6 mm	220 µm	Using Caliper, microscope by Direct Method ISO 10360-7	
Vibration table	Up to 20 mm/s	21 µm/s	Using Vibration meter by direct method. (Based on ISO 16063-8)	
Drift Rod (Metal, Teflon)	Up to 200 mm	20 µm	Using ULM & Digital Caliper by Direct method API 5CT	



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Profile Projector (Only for table travel in X-axis and Y-axis) Angle	Up to 300 mm 0° to 360°	2.3 µm 0.005°	Using Glass Scale / Gauge Block Set by Direct method (JIS B7184)
Microscope (Digital)	Linear 0 mm to 20 mm Angle 0° to 360°	0.0048mm 0.58°	Using Measuring Glass Scale By Direct Method. ISO 10360-7
<b>Mechanical</b>			
Pneumatic Pressure Indicating Devices - Pressure Gauge/ Switch/Transmitter/ Transducer/ Pressure Relief Valve/Recorder	-0.89 bar to 0 bar 0 bar to 30 bar	0.0023 bar 0.0048 bar	Using Pressure Calibrator / Manometer by direct method (DKD-R 6-1)
Hydraulic Pressure Indicating Devices - Pressure Gauge/ Switch/Transmitter/ Transducer/ Pressure Relief Valve/Recorder	Digital and Analog 1 bar to 60 bar 60 bar to 1200 bar 1200 bar to 2500 bar	0.01 bar 0.21 bar 1.2 bar	Using Dead Weight Tester / Pressure Calibrator / Manometer by direct method (DKD-R 6-1)
Weighing Scale and Balances	0 g to 200 g 200 g to 500 g 500 g to 1000 g  1 kg to 20 kg 20 kg to 200 kg 200 kg to 500 kg 500 kg to 1000 kg 1000 kg to 2000 kg	0.0014 g 0.0018 g 0.0060 g  0.0016 kg 0.0098 kg 0.039 kg 0.079 kg 0.12 kg	Using Dead weight by Direct Method. (OIML-R-76)
Batch plant	Up to 6000 kg	1.6 kg	Using Dead weights by Direct Method (ASTM C94M)
Schmidt Hammer	10 kg/cm <sup>2</sup> to 100 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	Using Ref Anvil by Direct Method (ASTM C805)
Force Measuring Device – Compression Mode	50 kN to 600 kN 600 kN to 3000 kN	1.4 kN 2.2 kN	Using Load Cell with indicator by direct method ASTM E4
Sound level meter	94 dB & 114 dB @ 1 kHz	0.9 dB	Using Sound level calibrator by Comparison Method. IEC 61672
Hand Yoke (AC / Permanent Magnet)	4.5 kg 18 kg	0.29 kg 0.38 kg	Using Ref: Dead weight by Direct method. (ASTM E709-95)
Densitometer	0 D to 4 D	0.06 D	Using Density strip / Densitometer by Comparison



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	(D = measured density as per instrument reading)		(D = measured density as per instrument reading)	method. ASTM E1079
Torque Wrenches	5 N·m to 30 N·m 30 N·m to 350 N·m 350 N·m to 1000 N·m 1000 N·m to 1500 N·m		0.61 N·m 1.8 N·m 2.4 N·m 3.7 N·m	Using Torque Tool Tester by Direct Method (BS 7882)
Nuclear Density Gauges	1120 kg/m <sup>3</sup> to 2723 kg/m <sup>3</sup>		8.3 kg/m <sup>3</sup>	Using Nuclear Validator by Direct method (ASTM D7759)
Compactor Rammer (Proctor, Marshall, Soil, Asphalt)	Weight	4.356 kg	15 mg	Using Balance, caliper, tape by direct method. (ASTM D3877)
	Height	457.2 mm	580 µm	
	Diameter	50.8 mm	20 µm	
CBR / Marshall Machine / Proving Ring	0 to 50 kN		0.094 kN	Using Load cell Calibration by comparison method (ASTM D1883 / ASTM D6927)
Universal Testing Machine Compression Mode	12 kN to 1000 kN		740 N	Using Load cell Calibration by comparison method (ASTM E4 / E74)
Hardness Tester (Metal, Rubber)	784 HLD Leeb Hardness  50 HRC Up to 100 HA		9 HLD Leeb Hardness 1 HRC 2 HA	Using Hardness blocks by Direct Method. (ISO 6508)
Standard weights	20 kg 10 kg 5 kg 2 kg 1 kg 500 g 200 g 100 g 50 g 20 g 10 g 5 g 2 g 1 g 500 mg 200 mg 100 mg 50 mg 20 mg 10 mg		1 g 1 g 10 mg 10 mg 10 mg 6 mg 6 mg 6 mg 6 mg 0.9 mg 0.9 mg 0.9 mg 0.9 mg 0.9 mg 0.9 mg 1.1 µg 1.0 µg 1.1 µg 0.73 µg 6 µg 0.92 µg	Using Analytical Balance, Dead weight set, By Direct Method (OIML-R-111)



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Pipette / Burette / Volumetric (Pipette, Burette, Cylinder, Flask, Beaker, Pycnometer, Funnels)	100 µL to 500 µL 500 µL to 1000 µL 1 mL to 50 mL 50 mL to 100 mL 100 mL to 500 mL 500 mL to 1000 mL	0.66 µL 0.80 µL 0.88 µL 0.89 mL 1.3 mL 1.9 mL	Using Gravimetric method by Analytical Balance (IS: 4787)
Measuring Cylinder/ Beaker/ Measuring Flask	Up to 500 mL	3.5 mL	Using Gravimetric method by Analytical Balance (IS: 4787)
Hydrometer	1 g/mL to 1.3 g/mL	0.08 g/mL	Using Analytical Balance, Measuring Cylinder by Direct method Procedure: A/LCP-005
Vibration Meter	10 m/s <sup>2</sup> to 20 m/s <sup>2</sup> @ 159.2 Hz	0.92 m/s <sup>2</sup>	Using Reference Vibration Meter by Comparison Method. ISO 16063
<b>Thermal</b>			
RTD/Thermocouple Sensor with Indicators/ Transmitter/ Temperature Gauges/ Mercury Filled Glass Thermometer/Switch	-50 °C to 650 °C 650 °C to 800 °C 800 °C to 1200 °C	0.18 °C 1.1 °C 1.3 °C	Using Dry Block Calibrator by comparison Method. OIML R133 ASTM E2877
Infrared Thermometer / Pyrometer / Thermal Imager	-50°C to 400 °C 400 °C to 500 °C	0.45 °C 2.1 °C	Using Black Body Calibrator by comparison Method. ASTM E2847
Thermo-hygrometer Dew Point meter (Temperature & Humidity Measurement only)	Temperature 10 °C to 60 °C  Humidity 10 %RH to 80 %RH @ 20 °C	0.28 °C  1.6 %RH	Using Temperature Humidity Chamber / Dry Block Calibrator By Comparison Method. ISO19083
Controller/Indicator with Sensor of Water bath/ Oven/ Furnace/ Incubator/ Storage room/ Freezer/ Chiller (Single sensor method)	0 °C to 1000 °C	0.65 °C	Using Temperature Datalogger with Sensor by Comparison method. ASTM E2488
<b>Electrical – DC/LF</b>			
Simulated Temperature (Temperature Indicators / Recorders / Controllers) Thermocouples: Type E Type J Type K Type R	-250 °C to 1000 °C -210 °C to 1200 °C -180 °C to 1300 °C -50 °C to 1750 °C	0.13 °C 0.31 °C 0.1 °C 0.43 °C	Using Multi Process Calibrator by comparison method Euramet CG 11

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Type S	-50 °C to 1750 °C	0.45 °C	
DC Voltage – Source <sup>3</sup>	0 mV to 220 mV 220 mV to 2.2 V 2.2 V to 22 V 22 V to 220 V 220 V to 1100 V	0.002 mV 0.016 mV 0.16 mV 1.6 mV 9.3 mV	Using Multifunction calibrator by comparison method. Euramet CG 15
DC Current – Source <sup>3</sup>	0 µA to 220 µA 220 µA to 2.2 mA 2.2 mA to 22 mA 22 mA to 220 mA 220 mA to 2.2 A	0.001 µA 0.2 µA 1.1 µA 0.53 mA 0.4 mA	Using Multifunction calibrator by comparison method. Euramet CG 15
AC Voltage – Source <sup>3</sup>	0 mV to 2.2 mV (10 Hz to 50 kHz) (50 kHz to 100 kHz) (100 kHz to 300 kHz) (300 kHz to 1 MHz)  2.2 mV to 22 mV (10 Hz to 50 kHz) (50 kHz to 300 kHz) (300 kHz to 500 kHz) (500 kHz to 1 MHz)  22 mV to 220 mV (10 Hz to 20 Hz) (20 Hz to 20 kHz) (20 kHz to 50 kHz) (50 kHz to 100 kHz) (100 kHz to 300 kHz) (300 kHz to 500 kHz) (500 kHz to 1 MHz)  220 mV to 2.2 V (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 20 kHz) (20 kHz to 50 kHz) (50 kHz to 100 kHz) (100 kHz to 300 kHz) (300 kHz to 500 kHz) (500 kHz to 1 MHz)  2.2 V to 22 V (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 20 kHz) (20 kHz to 50 kHz)	0.006 mV 0.01 mV 0.029 mV 0.032 mV  0.013 mV 0.026 mV 0.062 mV 0.1 mV  0.14 mV 0.05 mV 0.08 mV 0.21 mV 0.28 mV 0.39 mV 0.89 mV  1.3 mV 0.38 mV 0.17 mV 0.28 mV 0.62 mV 1.1 mV 2.7 mV 5.7 mV  12 mV 3.8 mV 1.7 mV 2.8 mV	Using Multifunction Calibrator By Comparison method. Euramet CG 15



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AC Voltage – Source <sup>3</sup> (continued)	(50 kHz to 100 kHz) (100 kHz to 300 kHz) (300 kHz to 500 kHz) (500 kHz to 1 MHz)	5.9 mV 15 mV 36 mV 60 mV	Using Multifunction Calibrator By Comparison method. Euramet CG 15
	22 V to 220 V (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 20 kHz) (20 kHz to 50 kHz) (50 kHz to 100 kHz) (100 kHz to 300 kHz) (300 kHz to 500 kHz) (500 kHz to 1 MHz)	110 mV 35 mV 18 mV 48 mV 55 mV 110 mV 100 mV 250 mV	
AC Current – Source <sup>3</sup>	220 V to 1100 V (15 Hz to 50 Hz) (50 Hz to 1 kHz)	440 mV 88 mV	Using Multifunction Calibrator By Comparison method. Euramet CG 15
	9 µA to 220 µA (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 1 kHz) (1 kHz to 5 kHz) (5 kHz to 10 kHz)	0.06 µA 0.097 µA 0.047 µA 0.17 µA 0.43 µA	
	220 µA to 2.2 mA (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 1 kHz) (1 kHz to 5 kHz) (5 kHz to 10 kHz)	2.1 µA 0.81 µA 0.34 µA 1.7 µA 1.8 µA	
	2.2 mA to 22 mA (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 1 kHz) (1 kHz to 5 kHz) (5 kHz to 10 kHz)	0.6 µA 0.85 µA 1.7 µA 1.7 µA 1.8 µA	
	22 mA to 220 mA (10 Hz to 20 Hz) (20 Hz to 40 Hz) (40 Hz to 1 kHz) (1 kHz to 5 kHz) (5 kHz to 10 kHz)	0.16 mA 0.081 mA 0.065 mA 0.14 mA 0.36 mA	
	220 mA to 2.2 A		



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AC Current – Source <sup>3</sup> (continued)	(20 Hz to 1 kHz) (1 kHz to 5 kHz) (5 kHz to 10 kHz)	0.02 mA 0.22 mA 0.21 mA	
DC Voltage – Measure <sup>4</sup>	0 mV to 100 mV 100 mV to 1 V 1 V to 100 V 100 V to 1000 V	0.005 mV 0.002 V 0.003 V 0.033 V	Using Precision Multimeter by Comparison Method. Euramet CG 15
DC Current – Measure <sup>4</sup>	Up to 100 µA 100 µA to 1 mA 1 mA to 10 mA 10 mA to 100 mA 100 mA to 1 A 1 A to 3 A 3 A to 10 A	26 µA 0.1 µA 2.5 µA 0.01 mA 0.25 mA 1.6 mA 5.3 mA	Using Precision Multimeter by Comparison Method. Euramet CG 15
AC Voltage – Measure <sup>4</sup>	0.22 mV to 100 mV (50 Hz) (60 Hz) (400 Hz)  100 mV to 1 V (50 Hz) (60 Hz) (400 Hz)  1 V to 10 V (50 Hz) (60 Hz) (400 Hz)  10 V to 100 V (50 Hz) (60 Hz) (400 Hz)  100 V to 1000 V (50 Hz) (60 Hz) (400 Hz)	0.006 mV 0.007 mV 0.009 mV  0.004 mV 0.004 mV 0.004 mV  0.005 V 0.005 V 0.005 V  0.054 V 0.052 V 0.051 V  0.057 V 0.052 V 0.050 V	Using Precision Multimeter by Comparison Method. Euramet CG 15
AC Current – Measure <sup>4</sup>	Up to 100 µA (3 Hz to 5 Hz) (5 Hz to 10 Hz) (10 Hz to 5 kHz) (5 kHz to 10 kHz)  100 µA to 1 mA (3 Hz to 5 Hz)	1.1 µA 0.01 µA 0.21 µA 1.1 µA  1.4 µA	Using Precision Multimeter by Comparison Method Euramet CG 15



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AC Current – Measure <sup>4</sup> (continued)	(5 Hz to 10 Hz)	0.7 µA	Using Precision Multimeter by Comparison Method Euramet CG 15
	(10 Hz to 5 kHz)	0.5 µA	
	(5 kHz to 10 kHz)	2.7 µA	
	1 mA to 10 mA		
	(3 Hz to 5 Hz)	0.017 mA	
	(5 Hz to 10 Hz)	0.006 mA	
	(10 Hz to 5 kHz)	0.007 mA	
	(5 kHz to 10 kHz)	0.073 mA	
	10 mA to 100 mA		
	(3 Hz to 5 Hz)	0.14 mA	
	(5 Hz to 10 Hz)	0.07 mA	
	(10 Hz to 5 kHz)	0.05 mA	
	(5 kHz to 10 kHz)	0.27 mA	
	100 mA to 1 A		
	(3 Hz to 5 Hz)	1.4 mA	
	(5 Hz to 10 Hz)	0.7 mA	
	(10 Hz to 5 kHz)	0.5 mA	
	(5 kHz to 10 kHz)	7.4 mA	
	1 A to 3 A		
	(3 Hz to 5 Hz)	13 mA	
	(5 Hz to 10 Hz)	5.3 mA	
	(10 Hz to 5 kHz)	3.3 mA	
	(5 kHz to 10 kHz)	25 mA	
	3 A to 10 A		
(3 Hz to 5 Hz)	39 mA		
(5 Hz to 10 Hz)	17 mA		
(10 Hz to 5 kHz)	11 mA		
(5 kHz to 10 kHz)	81 mA		
DC Resistance 2-Wire – Source <sup>3</sup> (Fixed Value)	1 Ω	0.00011 Ω	Using Multifunction Calibrator by direct method Euramet CG15
	1.9 Ω	0.00011 Ω	
	10 Ω	0.000066 Ω	
	19 Ω	0.00018 Ω	
	100 Ω	0.0011 Ω	
	190 Ω	0.0019 Ω	
	1 kΩ	0.000018 kΩ	
	1.9 kΩ	0.000098 kΩ	
	10 kΩ	0.000037 kΩ	
	19 kΩ	0.000091 kΩ	
	100 kΩ	0.00072 kΩ	
	190 kΩ	0.0015 kΩ	
	1 MΩ	0.00016 MΩ	
	1.9 MΩ	0.000061 MΩ	



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	10 MΩ 19 MΩ 100 MΩ	0.00020 MΩ 0.00054 MΩ 0.0066 MΩ	
DC Resistance 4-Wire Source <sup>(Fixed Value)</sup>	1 Ω 1.9 Ω 10 Ω 19 Ω 100 Ω 190 Ω 1 kΩ 1.9 kΩ 10 kΩ 19 kΩ 100 kΩ 190 kΩ 1 MΩ 1.9 MΩ 10 MΩ 19 MΩ 100 MΩ	0.00011 Ω 0.00011 Ω 0.000070 Ω 0.00018 Ω 0.00069 Ω 0.0013 Ω 0.000019 kΩ 0.000020 kΩ 0.000036 kΩ 0.00010 kΩ 0.00072 kΩ 0.0013 kΩ 0.00016 MΩ 0.000061 MΩ 0.00020 MΩ 0.00054 MΩ 0.0025 MΩ	Using Multifunction calibrator by Comparison Method Euramet CG 15.
Resistance – Measure (2 Wire Method)	0 kΩ to 1 kΩ 1 kΩ to 10 kΩ 10 kΩ to 100 kΩ 100 kΩ to 1 MΩ 1 MΩ to 10 MΩ 10 MΩ to 100 MΩ 100 MΩ to 1000 MΩ	0.00013 kΩ 0.0013 kΩ 0.013 kΩ 0.0011 MΩ 0.047 MΩ 0.94 MΩ 1.5 MΩ	Using Multi Meter by Comparison Method. Euramet CG 15
Resistance – Measure (4 Wire Method)	0 Ω to 10 Ω 10 Ω to 100 Ω 100 Ω to 1 kΩ 1 kΩ to 10 kΩ 10 kΩ to 100 kΩ	0.0047 Ω 0.016 Ω 0.00013 kΩ 0.0013 kΩ 0.013 kΩ	Using Multi Meter by Comparison Method Euramet CG 15
AC High Current – Measure <sup>4</sup> (10 Hz to 100 Hz)	Up to 40 A 40 A to 400 A 400 A to 2000 A	0.6 A 0.9 A 4.2 A	Using Clamp Meter / Load Bank by Comparison Method. Euramet CG 15
DC High Current - Measure <sup>4</sup>	Up to 40 A 40 A to 400 A 400 A to 2000 A	0.5 A 0.7 A 3.8 A	Using Clamp meter / Load bank by Comparison method. Euramet CG 15
DC High Voltage - Measure <sup>4</sup>	Up to 35 kV	1 %	Using High Voltage Probe with Multimeter by Comparison method. Euramet CG 15



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MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY <sup>1,2</sup> (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
<b>Time and Frequency</b>			
Frequency – Measure <sup>4</sup>	3 Hz to 10 Hz 10 Hz to 500 Hz 500 Hz to 1 GHz	0.012 Hz 0.006 Hz 0.6 Hz	Fluke 8846 Precision Multi-meter Calibration by Direct method Euramet CG 15
Frequency – Source <sup>3</sup>	10 Hz to 1 MHz	0.6 kHz	Fluke 5700A Calibrator Calibration by Direct method Euramet CG 15
Tachometer (Non-contact type)	30 rpm to 10000 rpm 12000 rpm 99000 rpm	1.2 rpm 3 rpm 3.7 rpm	Using Tachometer & Stroboscope by comparison method. ASTM F2046
Stopwatches and Timers	1 min to 5 min 5 min to 1 h	1 s 2 s	Stopwatch Calibration by comparison method NIST SOP-24
<b>RF/Microwave and Electromagnetics</b>			
Gauss Meter/flux, pie gauge	0 to 20 kGs	1.5 Gs	Using Gauss meter calibration by comparison method ASTM E1444
<b>Chemical/Gas</b>			
Multi Gas Detectors:	H <sub>2</sub> S: 25 ppm CH <sub>4</sub> : 2.5 % (50 % LEL) O <sub>2</sub> : 18 % CO: 100 ppm N <sub>2</sub> : 25 %	1.4 µmol/mol 1.6 % LEL 0.4 % O <sub>2</sub> 5.6 µmol/mol 2.6 %	Using Standard Gas cylinder by Direct Method. ASTM D5287
pH Meter (fixed values)	4 pH 7 pH 10 pH	0.0017 pH 0.0023 pH 0.0014 pH	Using Buffer solutions by Direct Method. ASTM D1293
TDS Meter (fixed value)	100 ppm 500 ppm 1000 ppm	0.52 µmol/mol 1.2 µmol/mol 2.9 µmol/mol	Using Buffer solutions by Direct Method. ASTM D1125
Conductivity Meter (fixed value)	100 µS/cm 500 µS/cm 1500 µS/cm	0.72 µS/cm 3.0 µS/cm 8.8 µS/cm	Using Buffer solutions by Direct Method. ASTM D1125

<sup>1</sup>The uncertainty covered by the Calibration and Measurement Capability (CMC) is expressed as the expanded uncertainty having a coverage probability of approximately 95 %. It is the smallest measurement uncertainty that a laboratory can achieve within its scope of accreditation when performing calibrations of a best existing device. The measurement uncertainty reported on a calibration certificate may be greater than that provided in the CMC due to the behavior of the calibration item and other factors that may contribute to the uncertainty of a specific calibration.

<sup>2</sup>When uncertainty is stated in relative terms (such as percent, a multiplier expressed as a decimal fraction or in scientific notation), it is in relation to instrument reading or instrument output, as appropriate, unless otherwise indicated.



# SCOPE OF ACCREDITATION

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<sup>3</sup>Capability is suitable for the calibration of measuring devices in the stated ranges.

<sup>4</sup>Capability is suitable for the calibration of devices intended to generate the indicated quantity in the stated ranges.

