



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

ADVANCED TECHNICAL SERVICE COMPANY FOR INDUSTRIAL INSPECTION AND RADIOLOGICAL SERVICES WLL (ATSI)

PLOT 5A BLOCK 31
MINA ABDULLA INDUSTRIAL AREA, STATE OF KUWAIT

Calibration Laboratory CL-261

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.

Effective Date November 7, 2023

Expiration Date May 1, 2025



A handwritten signature in black ink, reading "Raj Nathan".

President

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

ADVANCED TECHNICAL SERVICE COMPANY FOR INDUSTRIAL INSPECTION AND RADIOLOGICAL SERVICES WLL (ATSI)

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Contact Phone +965-98010978

Accredited to ISO/IEC 17025:2017

Effective Date November 7, 2023

CALIBRATION AND MEASUREMENT CAPABILITY (CMC)*

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY ^{1,2} (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
Dimensional			
Calipers	Up to 150 mm	5.8 µm	L3-ATS-CA-M-004 Gauge block set (Grade 0) IS 16491
Micrometers (External)	Up to 25 mm Up to 150 mm	0.61 µm 5.8 µm	L3-ATS-CA-M-005 Gauge block set (Grade 0) BS 870
Dial Gauges	Up to 25 mm	2.4 µm	L3-ATS-CA-M-002 Dial indicator Tester IS 2092
Feeler Gauges	0.04 mm to 5 mm	2.0 µm	L3-ATS-CA-M-001 Digital Micrometer IS 3179
Tapes and Scales	Up to 1000 mm	60 µm	L3-ATS-CA-M-018 Tape and Scale Calibration unit IS 1481
Ultrasonic Thickness Gauge	2 mm to 20 mm	58 µm	L3-ATS-CA-M-014 Ultrasonic Test Sample BS EN 15317
Mechanical			
Pressure Measuring Equipment	-1 bar to 0 bar 0.03 bar to 2 bar 2 bar to 20 bar 20 bar to 35 bar	0.21 mbar 0.42 mbar 2.8 mbar 4.7 mbar	L3-ATS-CA-M-009 Dead Weight Testers Fluke P3023 mbar-P, P3032 or P3830 DKD R6-1

* 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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Pressure Measuring Equipment (continued)	35 bar to 100 bar 100 bar to 140 bar 140 bar to 350 bar 350 bar to 2000 bar	19 mbar 22 mbar 0.08 bar 0.40 bar	L3-ATS-CA-M-009 Dead Weight Testers Fluke P3023 mbar-P, P3032 or P3830 DKD R6-1
Weighing Balances	Up to 4000 g Up to 30 kg	6.0 mg 0.06 g	L3-ATS-CA-M-012 Standard OIML E1 Class Weight set OIML R-76
Thermal			
Temperature – Measure ⁴	-35 °C to 120 °C 120 °C to 660 °C 660 °C to 1200 °C	0.06 °C 0.11 °C 0.75 °C	L3-ATS-CA-T-009 Precision Thermometer Millik With SPRT and S type T/C probe EURAMET CG-11
Temperature – Generate ³	-35 °C to 120 °C 120 °C to 600 °C 600 °C to 1200 °C	0.01 °C 0.09 °C 0.75 °C	L3-ATS-CA-T-004 Precision Thermometer Millik With SPRT and S type T/C probe EURAMET CG-11
Infrared Thermometer	-15 °C to 0 °C 0 °C to 40 °C 40 °C to 120 °C	0.53 °C 0.62 °C 0.75 °C	L3-ATS-CA-T-005 Fluke 4180 IR Calibrator ASTM E 2847-14
Electrical – DC/LF			
DC Voltage - Generate ³	10 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V	0.003 % 0.002 % 0.002 % 0.004 % 0.003 %	L3-ATS-CA-E-002 Multifunction Calibrator 5025C EURAMET CG-15
AC Voltage - Generate ³ (40 Hz to 1 kHz)	10 mV to 200 mV 200 mV to 2 V 2 V to 20 V 20 V to 200 V 200 V to 1000 V	0.10 % 0.086 % 0.091 % 0.036 % 0.066 %	L3-ATS-CA-E-002 Multifunction Calibrator 5025C EURAMET CG-15
DC Resistance - Generate ³	1 Ω to 200 Ω 200 Ω to 2 kΩ 2 kΩ to 20 kΩ 20 kΩ to 200 kΩ 200 kΩ to 2 MΩ 2 MΩ to 20 MΩ 20 MΩ to 100 MΩ	0.013 % 0.020 % 0.015 % 0.015 % 0.024 % 0.10 % 0.10 %	L3-ATS-CA-E-002 Multifunction Calibrator 5025C EURAMET CG-15
Insulation DC Resistance - Generate ³	100 kΩ to 1 MΩ 1 MΩ to 10 MΩ	0.09 % 0.10 %	L3-ATS-CA-E-006 Insulation Tester Calibrator

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Insulation DC Resistance - Generate ³ (continued)	10 MΩ to 100 MΩ 100 MΩ to 1 GΩ 1 GΩ to 10 GΩ 10 GΩ to 20 GΩ 20 GΩ to 40 GΩ 40 GΩ to 60 GΩ 60 GΩ to 80 GΩ 80 GΩ to 100 GΩ	1.2 % 0.10 % 0.58 % 1.1 % 2.3 % 3.5 % 4.6 % 5.8 %	EURAMET CG-15 L3-ATS-CA-E-006 Insulation Tester Calibrator EURAMET CG-15
DC Current - Generate ³	1 μA to 200 μA 200 μA to 2 mA 2 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A 2 A to 10 A	0.015 % 0.008 % 0.007 % 0.007 % 0.011 % 0.029 %	L3-ATS-CA-E-002 Multifunction Calibrator 5025C EURAMET CG-15
AC Current - Generate ³ (40 Hz to 500 Hz)	1 mA to 20 mA 20 mA to 200 mA 200 mA to 2 A 2 A to 10 A	0.11 % 0.12 % 0.11 % 0.13 %	L3-ATS-CA-E-002 Multifunction Calibrator 5025C EURAMET CG-15
DC Voltage – Measure ⁴	1 mV to 300 mV 300 mV to 3 V 3 V to 10 V 10 V to 30 V 30 V to 100 V 100 V to 300 V 300 V to 1000 V	0.006 % 0.004 % 0.002 % 0.005 % 0.003 % 0.009 % 0.004 %	L3-ATS-CA-E-001 5075 precision Multimeter Comparison method by using 8½ digit Digital Multimeter
DC High Voltage - Measure ⁴	2 kV to 40 kV	2.4 %	L3-ATS-CA-E-008 HV Probe (Fluke 80k-40) 5075 Precision Multimeter Direct measurement using HV Probe Fluke 80k-40 and Digital Multimeter
AC Voltage – Measure ⁴ (40 Hz to 20 kHz)	1 mV to 300 mV 300 mV to 3 V 3 V to 30 V 30 V to 300 V 300 V to 3 kV	0.09 % 0.19 % 0.19 % 0.23 % 0.10 %	L3-ATS-CA-E-001 5075 precision Multimeter Comparison method by using 8½ digit Digital Multimeter
AC High Voltage - Measure ⁴	1 kV to 20 kV	6.3 %	L3-ATS-CA-E-008 HV Probe (Fluke 80k-40) 5075 precision Multimeter Direct measurement using HV Probe Fluke 80k-40 and Digital Multimeter
DC Current – Measure ⁴	1 μA to 100 μA 100 μA to 300 μA 300 μA to 1 mA 1 mA to 10 mA	0.010 % 0.013 % 0.010 % 0.013 %	L3-ATS-CA-E-001 5075 precision Multimeter Comparison method by using 8½ digit Digital Multimeter

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MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY ^{1,2} (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
DC Current – Measure ⁴ (continued)	10 mA to 30 mA 30 mA to 100 mA 100 mA to 300 mA 300 mA to 1 A 1 A to 3 A 3 A to 10 A 10 A to 30 A	0.013 % 0.011 % 0.023 % 0.019 % 0.079 % 0.076 % 0.056 %	L3-ATS-CA-E-001 5075 precision Multimeter Comparison method by using 8½ digit Digital Multimeter
AC Current - Measure ⁴	(40 Hz to 1 kHz) 10 µA to 300 µA 300 µA to 3 mA 3 mA to 30 mA 30 mA to 300 mA (40 Hz to 400 Hz) 300 mA to 3 A 3 A to 30 A	0.25 % 0.023 % 0.23 % 0.23 % 0.23 % 0.17 %	L3-ATS-CA-E-001 5075 precision Multimeter Comparison method by using 8½ digit Digital Multimeter
DC Resistance - Measure ⁴	0.1 Ω to 1 Ω 1 Ω to 10 Ω 10 Ω to 100 Ω 100 Ω 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	0.007 % 0.005 % 0.004 % 0.004 % 0.004 % 0.005 % 0.009 % 0.015 % 0.10 %	L3-ATS-CA-E-001 5075 precision Multimeter Comparison method by using 8½ digit Digital Multimeter
DC Current Clamp	20 A to 600 A 600 A to 1000 A	0.55 % 0.53 %	L3-ATS-CA-E-002 Multifunction Calibrator
AC Current Clamp (@ 50 Hz)	20 A to 600 A 600 A to 1000 A	0.69 % 0.65 %	5025C By Direct Method using Multifunction Calibrator and Current Coil
Electrical Simulation of Thermocouples and RTDs			L3-ATS-CA-E-005 Multifunction Calibrator 5025C By Direct method by using Multifunction Calibrator 5025C
TC Type-K	-190 °C to 1200 °C	0.33 °C	
TC Type-J	-180 °C to 1000 °C	0.73 °C	
TC Type-R	0 °C to 1000 °C	2.1 °C	
TC Type-T	-180 °C to 350 °C	0.11 °C	
RTD (PT-100)	-180 °C to 800 °C	0.23 °C	

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Time and Frequency			
Tachometer (Non-contact type)	60 rpm to 600 rpm 600 rpm to 6000 rpm 6000 rpm to 30000 rpm 30000 rpm to 90000 rpm	0.07 rpm 0.60 rpm 0.83 rpm 3.7 rpm	L3-ATS-CA-E-004 Multifunction Calibrator 5025C SANAS TR-45 Direct method by using Multifunction Calibrator 5025C.
Chemical/Gas			
Gas Monitors and Detectors			L3-ATS-CA-G-001 Direct method by using standard Reference Gases
Hydrogen Sulfide (H ₂ S)	25 parts in 10 ⁶	2 %	
Carbon Monoxide (CO)	50 parts in 10 ⁶	2 %	
Methane (CH ₄)	50 % LEL	2 %	
Oxygen (O ₂)	18 %	2 %	

¹The 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.

²When 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.

³Capability is suitable for the calibration of measuring devices in the stated ranges.

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

⁵LEL= Lower explosive limit