



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

INCO-LABS
 Plot No. 151, Block No.1
 Street No. 101
 North Subhan, Safat, Kuwait 13071
 Abdulaziz A. Al-Obaidan Phone: 00965-4752330

CALIBRATION

Valid To: December 31, 2017

Certificate Number: 2487.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Dimensional

Parameter	Range	CMC ^{2,4} (±)	Comments
Calipers – Digital Vernier 0.02 mm 0.05 mm	Up to 600 mm	15 µm 15 µm 30 µm	DIN 862-1988, JIS B7515-1993, caliper checker 600 mm, gauge blocks set Grade (0)
Height Gauge – Digital 0.001 mm 0.01 mm Vernier 0.02 mm 0.05 mm	Up to 600 mm	(3 + 10L) µm 15 µm 15 µm 30 µm	JIS 7517-1993, gauge blocks set Grade (0), caliper checker 600 mm
Micrometers – External Depth	Up to 100 mm	1.5 µm 1.5 µm	DIN 863-1999, gauge blocks set Grade (0)

Parameter	Range	CMC ^{2,4} (\pm)	Comments
Dial Indicator	Up to 50 mm	$(1.3 + 22L) \mu\text{m}$	DIN 878-2006, gauge blocks set Grade (0) or dial calibrator
	Up to 100 mm	$(1.3 + 22L) \mu\text{m}$	DIN 878-2006, gauge blocks set Grade (0)
Linear Variable Displacement Transducer (LVDT)	Up to 50 mm	$(1.3 + 22L) \mu\text{m}$	Gauge block set (Grade (0) 8845A DMM
Feeler Gauge	(0.05 to 5) mm	$3 \mu\text{m}$	JIS B7524 -2008, digital micrometer or digital indicator
Test Sieve (Aperture)	(0.06 to 125) mm	$5 \mu\text{m}$	ASTM E11
Profile Projector ³	Up to 200 mm	$3 \mu\text{m}$	JIS 7184-1999, gauge blocks set Grade (0) or standard glass scale
Universal Measuring Machine – Dial Calibrator	Up to 50 mm	$0.6 \mu\text{m}$	In-house method based on instruction manual
Coating Thickness Gauge	Up to 1000 μm	$4 \mu\text{m}$	In house method based on BS EN ISO 2178, 2808 and instruction manual, standard thickness foil set
Steel Rule	Up to 1000 mm	$(15 + 18L) \mu\text{m}$	In-house method based on JIS 7516:2005, profile projector

II. Dimensional Testing/Calibration

Parameter	Range	CMC ^{2,4,7} (±)	Comments
Linear Measurement	Up to 50 mm	1 µm	Universal measuring machine - POLO
	Up to 200 mm	5 µm	Profile projector and hand tools (micrometers, dial indicators)
	Up to 600 mm	30 µm	Hand tools (calipers and height gauge)

III. Electrical – DC/Low Frequency

Parameter	Range	CMC ^{2,5,6} (±)	Comments
DC Voltage – Generate	(0 to 330) mV (0 to 3.3) V (0 to 33) V (30 V to 330) V (100 to 1000) V (1 to 1000) kV	0.024 % + 5 µV 9 µV/V + 3.9 µV 12 µV/V + 24 µV 15 µV/V + 0.17 mV 13 µV/V + 2.1 mV 0.1 % + 0.009 kV	Fluke 5520A (EURAMET cg-15 ver 2.0)
DC Current – Generate	(0 to 330) µA (0 to 3.3) mA (0 to 33) mA (0 to 330) mA (0 to 1.1) A (1.1 to 3) A (0 to 11) A (11 to 20.5) A	0.011 % + 13 nA 75 µA/A + 34 nA 0.10 mA/A + 0.18 µA 0.26 mA/A + 1.9 µA 0.33 mA/A + 31 µA 0.82 mA/A 0.81 mA/A + 1.1 mA 0.60 mA/A + 3.4 mA	Fluke 5520A (EURAMET cg-15 ver 2.0)
DC Power – Generate	10.89 µW to 337 W 10.89 mW to 3.06 kW 99 mW to 20.91 kW	0.03 % + 24 nW 0.07 % + 21 µW 0.08 % + 0.18 mW	Fluke 5520A (OEM user/service manual)

Parameter/Range	Frequency	CMC ^{2,6} (±)	Comments
AC Voltage – Generate			
(1.0 to 33) mV	(10 to 45) Hz 45 Hz to 20 kHz (20 to 50) kHz (50 to 100) kHz	0.05 % + 9 μV 0.01 % + 9.1 μV 0.12 % + 8 μV 0.14 % + 7.8 μV	Fluke 5520A (EURAMET cg-15 ver 2.0)
(33 to 330) mV	10 Hz to 20 kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz	0.02 % + 8 μV 0.13 % 0.14 % 0.15 %	
(0.33 to 3.3) V	(10 to 45) Hz 45 Hz to 20 kHz (20 to 100) kHz (100 to 500) kHz	0.03 % + 29 μV 0.02 % + 29 μV 0.14 % 0.15 %	
(3.3 to 33) V	(10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 100) kHz	0.03 % + 0.33 mV 0.02 % + 0.54 mV 0.14 % + 0.58 mV 0.14 %	
(33 to 330) V	45 Hz to 10 kHz (10 to 50) kHz (50 to 100) kHz	0.14 % 0.02 % + 4.2 mV 0.04 %	
(330 to 1020) V	45 Hz to 1 kHz (1 to 10) kHz	0.13 % + 37 mV 0.13 % + 25 mV	
(1 to 1000) kV	Up to 1 kHz	0.1 % + 0.009 kV	

Parameter/Range	Frequency	CMC ^{2,6} (±)	Comments
AC Current – Generate			
(29 to 330) µA	(10 to 45) Hz 45 Hz to 5 kHz (5 to 10) kHz (10 to 30) kHz	0.14 % + 60 nA 0.13 % + 64 nA 0.18 % + 0.24 µA 0.54 % + 0.13 µA	Fluke 5520A (EURAMET cg-15 ver 2.0)
(0.33 to 3.3) mA	(10 to 45) Hz 45 Hz to 5 kHz (5 to 10) kHz (10 to 30) kHz	0.13 % + 24 nA 0.12 % + 61 nA 0.17 % + 0.11 µA 0.31 % + 1.6 µA	
(3.3 to 33) mA	10 Hz to 5 kHz (5 to 10) kHz (10 to 30) kHz	0.11 % + 0.6 µA 0.12 % + 0.8 µA 0.16 % + 6.9 µA	
(33 to 330) mA	10 Hz to 5 kHz (5 to 10) kHz (10 to 30) kHz	0.14 % 0.17 % + 9.4 µA 0.17 % + 0.17 mA	
(0.33 to 1.1) A	10 Hz to 5 kHz (5 to 10) kHz	0.07 % + 0.32 mA 0.41 % + 0.71 mA	
(1.1 to 3) A	(10 to 45) Hz 45 Hz to 5 kHz (5 to 10) kHz	0.24 % 0.21 % 0.42 % + 0.54 mA	
(3 to 11) A	(45 to 100) Hz 100 Hz to 5 kHz	0.1 % + 2.5 mA 0.02 % + 4.8 mA	
(11 to 20.5) A	(45 to 100) Hz 100 Hz to 5 kHz	0.15 % 0.05 % + 9.5 mA	

Parameter	Range	CMC ^{2, 5, 6} (\pm)	Comments
Resistance – Generate	(50 to 200) $\mu\Omega$ (0.5 to 2) m Ω (5 to 20) m Ω (50 to 200) m Ω (0.5 to 2) Ω (0 to 11) Ω (11 to 33) Ω (33 to 110) Ω (110 to 330) Ω 330 Ω to 1.1 k Ω (1.1 to 3.3) k Ω (3.3 to 11) k Ω (11 to 33) k Ω (33 to 110) k Ω (110 to 330) k Ω 330 k Ω to 1.1 M Ω (1.1 to 3.3) M Ω (3.3 to 11) M Ω (11 to 33) M Ω (33 to 110) M Ω	0.9 % + 54 n Ω 0.58 % 0.23 % + 0.67 n Ω 0.12 % + 2 x10 ⁻⁸ p Ω 0.12 % + 0.66 $\mu\Omega$ 8.2 m Ω 14 $\mu\Omega/\Omega$ + 11 m Ω 19 $\mu\Omega/\Omega$ + 10 m Ω 20 $\mu\Omega/\Omega$ + 14 m Ω 21 $\mu\Omega/\Omega$ + 13 m Ω 20 $\mu\Omega/\Omega$ + 140 m Ω 20 $\mu\Omega/\Omega$ + 67 m Ω 20 $\mu\Omega/\Omega$ + 660 m Ω 20 $\mu\Omega/\Omega$ + 680 m Ω 24 $\mu\Omega/\Omega$ + 6.7 Ω 29 $\mu\Omega/\Omega$ + 5.6 Ω 69 $\mu\Omega/\Omega$ + 74 Ω 89 $\mu\Omega/\Omega$ + 0.2 k Ω 0.017 % + 2 k Ω 0.61 m Ω/Ω	Time Electronics 5070 (EURAMET cg-15 ver 2.0) Fluke 5520A (EURAMET cg-15 ver 2.0)
Capacitance – Generate	(0.19 to 0.4) nF (0.4 to 1.1) nF (1.1 to 3.3) nF (3.3 to 11) nF (11 to 33) nF (33 to 110) nF (110 to 330) nF (0.33 to 1.1) μ F (1.1 to 3.3) μ F (3.3 to 11) μ F (11 to 33) μ F (33 to 110) μ F (110 to 330) μ F (0.33 to 1.1) mF	7.8 pF 9.8 pF 15 pF 27 pF 0.11 nF 0.27 nF 0.78 nF 6.2 nF 0.21 % + 4.8 nF 0.22 % + 17 nF 0.29 % + 47 nF 0.41 % + 0.14 μ F 0.36 % + 0.6 μ F 0.63 % + 95 nF	Fluke 5520A (OEM User/Service Manual)

Parameter/Range	Frequency	CMC ^{2,6} (±)	Comments
AC Power – Generate 108.9 μW to 99 W 108.9 μW to 20.5 kW 1.089 mW to 3 kW 108.9 mW to 20.5 kW 10.89 mW to 20.5 kW	(10 to 45) Hz (45 to 65) Hz (65 to 500) Hz (65 to 500) Hz 500 Hz to 1 kHz	0.27 % 0.16 % + 11 nW 0.23 % 0.2 % 0.21 %	Fluke 5520A (OEM User/Service Manual)

Parameter	Range	CMC ^{2,6} (±)	Comments
Phase – Generate	0° to 180°	6.7 % + 0.03°	Fluke 5520A (OEM user/service manual)
DC Voltage – Measure	(100 to 200) mV 200 mV to 2 V (2 to 20) V (20 to 200) V (200 to 1000) V	1.4 μV/V + 3.5 μV 4 μV/V + 1 μV 4.1 μV/V + 8 μV 6.4 μV/V + 0.11 mV 6.3 μV/V + 0.73 mV	Fluke 8508A/01 Fluke 8845A (OEM user/service manual)
DC High Voltage – Measure	(1 to 40) kV	0.06 kV	Fluke 8845A Fluke 80K-40 (OEM user/service manual)

Parameter/Range	Frequency	CMC ^{2, 5, 6} (\pm)	Comments
AC Voltage – Measure			
(100 to 200) mV	(20 to 40) Hz 40 Hz to 2 kHz (2 to 30) kHz (30 to 100) kHz	0.12 mV/V + 8 μ V 0.11 mV/V + 7 μ V 0.14 mV/V + 8 μ V 0.8 mV/V + 23 μ V	Fluke 8508A/01 Fluke 8845A (OEM user/service manual)
200 mV to 2 V	(20 to 40) Hz 40 Hz to 2 kHz (2 to 10) kHz (10 to 30) kHz (30 to 100) kHz (100 to 300) kHz 300 kHz to 1 MHz	0.10 mV/V + 26 μ V 84 μ V/V + 26 μ V 0.13 mV/V + 26 μ V 0.24 mV/V + 51 μ V 0.61 mV/V + 0.23 mV 60 μ V/V + 0.23 mV 0.35 mV	
(2 to 20) V	(20 to 40) Hz 40 Hz to 2 kHz (2 to 10) kHz (10 to 30) kHz (30 to 100) kHz 100 kHz to 1 MHz	0.10 mV/V + 0.26 mV 83 μ V/V + 0.26 mV 0.13 mV/V + 0.26 mV 0.13 mV/V + 0.28 mV 0.61 mV/V + 2.3 mV 61 μ V/V + 2.3 mV	
(20 to 200) V	(20 to 40) Hz (40 to 100) Hz 100 Hz to 10 kHz (10 to 30) kHz (30 to 100) kHz	97 μ V/V + 4 mV 100 μ V/V + 3.3 mV 0.12 mV/V + 3.3 mV 0.12 mV/V + 3.4 mV 0.61 mV/V + 23 mV	
(200 to 1000) V	45 Hz to 10 kHz (10 to 30) kHz	1.3 mV/V + 31 mV 0.27 mV/V + 31 mV	
AC High Voltage – Measure			
(1 to 25) kV	(50 to 60) Hz	0.06 kV	Fluke 8845A Fluke 80K-40 (OEM user/service manual)

Parameter/Range	Frequency	CMC ^{2, 6} (±)	Comments
AC High Current – Measure (20 to 200) A	50 Hz to 1 kHz	2.5 % + 86 mA	Fluke 8508A/01, Time Electronics 5070 (OEM user/service manual)

Parameter	Range	CMC ^{2, 5, 6} (±)	Comments
DC Current – Measure	(100 to 200) µA 200 µA to 2 mA (2 to 20) mA (20 to 200) mA 200 mA to 2 A (2 to 10) A	16 µA/A + 0.38 nA 16 µA/A + 4 nA 18 µA/A + 38 nA 57 µA/A + 0.76 µA 0.21 mA/A + 15 µA 0.47 mA/A + 0.38 mA	Fluke 8508A/01, Fluke 8845A, (OEM user/service manual)
DC High Current – Measure	(20 to 200) A	0.23 % + 0.53 A	Fluke 8508A/01, Time Electronics 5070 (OEM user/service manual)
Resistance – Measure, Fixed Points	2 Ω 20 Ω 200 Ω 2 kΩ 20 kΩ 200 kΩ 2 MΩ 20 MΩ 200 MΩ	20 µΩ/Ω + 5 µΩ 11 µΩ/Ω + 17 µΩ 9.7 µΩ/Ω + 57 µΩ 9.5 µΩ/Ω + 1 mΩ 9.7 µΩ/Ω + 6 mΩ 9.6 µΩ/Ω + 79 mΩ 12 µΩ/Ω + 1.5 Ω 24 µΩ/Ω + 120 Ω 0.14 mΩ/Ω + 11 kΩ	Fluke 8508A/01 Fluke 8845A (OEM user/service manual)
DC Clamp – Generate			
Toroidal-Types	(10 to 16.5) A (16.5 to 150) A (150 to 1025) A	0.31 % + 19 mA 0.32 % + 17 mA 0.29 % + 71 mA	Fluke 5520A and Fluke 5500 coil (EURAMET cg-15 ver 2.0)
Non-Toroidal Types	(10 to 16.5) A (16.5 to 150) A (150 to 1025) A	0.62 % + 18 mA 0.55 % + 170 mA 0.63 % + 560 mA	

Parameter/Range	Frequency	CMC ^{2,6} (±)	Comments
AC Clamp – Generate			
Toroidal Types			
(10 to 16.5) A (16.5 to 150) A (150 to 1025) A	(45 to 65) Hz	0.31 % + 9.2 mA 0.39 % + 16 mA 0.38 % + 140 mA	Fluke 5520A and Fluke 5500 coil (EURAMET cg-15 ver 2.0)
(10 to 16.5) A (16.5 to 150) A (150 to 1025) A	(65 to 440) Hz	0.92 % + 7.7 mA 0.91 % + 29 mA 0.97 % + 43 mA	
Non-Toroidal Types			
(10 to 16.5) A (16.5 to 150) A (150 to 1025) A	(45 to 65) Hz	0.62 % + 38 mA 0.67 % + 290 mA 0.69 % + 980 mA	
(10 to 16.5) A (16.5 to 150) A (150 to 1025) A	(65 to 440) Hz	1.3 % + 27 mA 1.2 % + 300 mA 1.2 % + 1.1 A	

Parameter	Range	CMC ² (±)	Comments
Electrical Simulation of Thermocouples –			
Type B	(600 to 800) °C (800 to 1000) °C (1000 to 1550) °C (1550 to 1820) °C	0.31 °C 0.56 °C 0.29 °C 0.12 °C	Fluke 5520A (EURAMET cg-11 ver 2.0)
Type E	(-250 to -100) °C (-100 to -25) °C (-25 to 350) °C (350 to 1000) °C	0.77 °C 0.68 °C 0.71 °C 0.7 °C	
Type J	(-210 to -100) °C (-100 to -30) °C (-30 to 760) °C (760 to 1200) °C	0.92 °C 0.9 °C 0.91 °C 0.9 °C	
Type K	(-200 to -100) °C (-100 to -25) °C (-25 to 1000) °C (1000 to 1372) °C	0.93 °C 0.9 °C 0.91 °C 0.86 °C	
Type N	(-200 to -100) °C (-100 to -25) °C (-25 to 410) °C (410 to 1300) °C	0.94 °C 0.9 °C 0.91 °C 0.9 °C	
Type R	(0 to 250) °C (250 to 400) °C (400 to 1000) °C (1000 to 1767) °C	0.39 °C 0.62 °C 0.26 °C 0.18 °C	
Type T	(-250 to -150) °C (-150 to 120) °C (120 to 400) °C	0.59 °C 0.45 °C 0.43 °C	
Type U	(-200 to 600) °C	0.38 °C	

IV. Fluid Quantities

Parameter	Range	CMC ^{2, 4, 5} (±)	Comments
Laboratory Volumetric Apparatus	(0.1 to 1) ml (>1 to 5) ml (>5 to 10) ml (>10 to 50) ml (>50 to 100) ml (>100 to 500) ml (>500 to 1000) ml (>1000 to 2000) ml	0.003 ml 0.004 ml 0.005 ml 0.012 ml 0.015 ml 0.075 ml 0.15 ml 0.28 ml	Mass comparators
Piston Operated Volumetric Apparatus	100 µl > (100 to 300) µl > (300 to 500) µl > (500 to 1000) µl > (1000 to 2000) µl	0.5 µl 0.7 µl 0.9 µl 1.5 µl 1.7 µl	Precision balances
Liquid Flow ³	Flow Rate (0.5 to 3) m ³ /h Flow Velocity (0.1 to 25 m/s)	0.87 % 1.8 %	Ultrasonic flow meter

V. Mechanical

Parameter	Range	CMC ^{2, 4, 5} (±)	Comments
Compression ³ – Load Cells Proving Rings	200 N to 3000 kN Up to 50 kN	0.3 % <i>F</i> 0.09 %	ISO 7500-1:2004 Force transfer standard
Tension ³	200 N to 1000 kN	0.3 % <i>F</i>	ISO 7500-1:2004 Force transfer standard

Parameter	Range	CMC ² (±)	Comments
Analytical, Laboratory, and Industrial Balances ³	(1 to 10) mg 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g (5 to 10) g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 20 kg 2000 kg	0.004 mg 0.005 mg 0.007 mg 0.009 mg 0.011 mg 0.014 mg 0.018 mg 0.022 mg 0.028 mg 0.037 mg 0.042 mg 0.07 mg 0.13 mg 0.34 mg 0.7 mg 1.3 mg 3.4 mg 6.9 mg 13 mg 35 000 mg	Hafner standard weights Class E2, F1 & M1.
Weights – Fixed Points	(1 to 50) mg (100 to 200) mg 500 mg to 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 20 kg	0.001 mg 0.002 mg 0.003 mg 0.004 mg 0.005 mg 0.006 mg 0.008 mg 0.01 mg 0.02 mg 0.03 mg 0.08 mg 0.2 mg 1 mg 2.5 mg 5.1 mg 9 mg	Hafner standard weights Class E1, E2 Mettler Toledo mass comparators

Parameter	Range	CMC ² (±)	Comments	
Pressure Gauges, Transducers and Calibrators –	Pneumatic	(-1 to 0) bar	0.0013 bar	Fluke PPC4
		(0 to 7) bar	0.0031 bar	
	Hydraulic	(0 to 20) bar	0.0035 bar	Fluke PPCH
		(20 to 70) bar	0.018 bar	
	Pneumatic ³	(7 to 70) bar	0.031 bar	Digital pressure gauges
Hydraulic ³	Up to 2000 bar	4.4 bar		

VI. Thermodynamics

Parameter	Range	CMC ² (±)	Comments
Digital/Dial Thermometers ³	(-60 to 50) °C (50 to 300) °C (300 to 650) °C (650 to 1100) °C	0.2 °C 0.5 °C 1.2 °C 1.6 °C	Pt-100, thermocouples S, T and K with indicator Fluke 1529A, Fluke Hydra, Time Electronics 1090
Ovens, Incubators, Autoclave, Climatic Chambers, Freezers Refrigerators (Profiling at Multiple Internal Chamber Locations) ³	(-60 to 300) °C (300 to 1100) °C	0.5 °C 1.6 °C	Thermocouples T and K with indicator Fluke Hydra, Time Electronics 1090
Digital/Dial Hygrometers and Chart Recorders	(10 to 95) % RH (10 to 70) °C	1.7 % RH 0.7 °C	Votsch humidity chamber and reference hygrometers sensor
Humidity Climatic Chamber ³	(10 to 95) % RH (10 to 70) °C	1.7 % RH 1 °C	Reference hygrometers sensor

Parameter	Range	CMC ^{2,6} (\pm)	Comments
Digital/Dial Thermometers ³ (cont)			
Liquid-in-Glass Thermometers	(-60 to 50) °C (-60 to 300) °C	0.2 °C 0.5 °C	Pt-100, Type T thermocouple with indicators Fluke 1529A, Time Electronics 1090

VI. Time & Frequency

Parameter	Range	CMC ^{2,5,6} (\pm)	Comments
Frequency – Measuring Equipment	(0.01 to 120) Hz (120 to 1200) Hz (1.2 to 12) kHz (12 to 120) kHz	58 mHz 0.28 μ Hz/Hz + 58 Hz 5.8 Hz 0.28 μ Hz/Hz + 5.8 Hz	Fluke 5520A (OEM user/service manual)
Frequency – Measure	1 Hz to 350 MHz 3 Hz to 1 MHz	0.075 μ Hz/Hz + 60 μ Hz 0.007 % + 5.6 mHz	Agilent 53230A Fluke 8845A (OEM user/service manual)
Time – Measure	(60 to 86 400) s (60 to 86 400) s	0.01 % + 0.51 s 0.001 % + 0.4 s	Radio Shack 63-249 (direct comparison) Fluke 5520A Agilent 53230A (totalize method) NIST SP 960-12
Rotational Speed – Optical Mechanical	 (10 to 99 000) rpm (10 to 19 999) rpm	 0.02 % + 0.02 rpm 0.07 % + 0.08 rpm	 Amprobe TACH20 (OEM user/service manual)

¹ This laboratory offers commercial calibration service, field calibration, and dimensional testing.

- ² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.
- ³ Field calibration service is available for this calibration and this laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.
- ⁴ In the statement of CMC, L is the numerical value of the nominal length of the device measured in meter and F is the numerical value of the force measured in Newtons.
- ⁵ In the statement of CMC, percentages are to be read as percent of reading unless otherwise noted.
- ⁶ The stated measured values are stated using the indicated instrument (see Comments). This capability is suitable for the calibration of the devices intended to measure or generate the measured value in the ranges indicated. CMC's are expressed as either a specific value that covers the full range or as a percent of the reading plus a fixed floor specification.
- ⁷ This laboratory meets R205 – *Specific Requirements: Calibration Laboratory Accreditation Program* for the types of dimensional tests listed above and is considered equivalent to that of a calibration.



Accredited Laboratory

A2LA has accredited

INCO-LABS

Safat, KUWAIT

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets any additional program requirements in the field of calibration. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 13th day of January 2016.

A handwritten signature in blue ink, appearing to read "J. C. Bennett".

Senior Director of Quality & Communications
For the Accreditation Council
Certificate Number 2487.03
Valid to December 31, 2017

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.