



ACCREDITATION CERTIFICATE

LB-CAL-004

Emirates International Accreditation Centre

has accredited

GENERAL CONST. LAB CALIBRATION LLC

Industrial Area # 11

Sharjah | United Arab Emirates

In accordance with the requirements of

ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories

to undertake the calibration in the attached accreditation scope

This Accreditation is invalid without the attached accreditation scope and shall remain in force within the validity period

printed below, subject to continuing compliance with the requirements of the accreditation criteria.

Validity: 23-09-2024 to 24-05-2027

Initial Accreditation Date: 25-05-2009



Amina Ahmed Mohammed
CHIEF EXECUTIVE OFFICER



Accreditation Scope
LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Date: 23-09-2024

Accreditation History			
Scope	Issue No.	Details	Date
Force	14	Renewal of accreditation	23/09/2024
Temperature and Humidity		Renewal of accreditation and modification in: Measured Quantity, Calibration Method and Expanded Measurement Uncertainty values	
Dimensional		Renewal of accreditation and modification in Expanded Measurement Uncertainty values	
Electrical	15	Renewal of accreditation and modification in: Calibration Method, Range and Specification and Expanded Measurement Uncertainty values	
Mass and Balance		Renewal of accreditation	
Volume		Renewal of accreditation and modification in Expanded Measurement Uncertainty values	
Pressure	16	Renewal of accreditation and modification in: Measured Quantity, Range and Specification, and Expanded Measurement Uncertainty values	25/05/2024
Torque	8	Renewal of accreditation	
Temperature and Humidity, Force, Dimensional	13	Certificate validity was extended for 6 months from 25-05-2024 up to 24-11-2024	25/05/2024
Volume, Electrical, Mass and Balance	14		
Pressure	15		
Torque	7		
Temperature and Humidity, Force, Dimensional	12	Modification in the scope's presentation	29-04-2024
Volume, Electrical, Mass and Balance	13		
Torque	6		
Pressure	14		

Accreditation Scope
LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Date: 23-09-2024

Accreditation History			
Scope	Issue No.	Details	Date
Pressure	13	Reissued due to a change in the laboratory's location.	19-02-2024
Volume, Electrical, Mass and Balance	12		
Temperature and Humidity, Force, Dimensional	11		
Torque	5		
Pressure	12	Re-issued due to modification in: Calibration Field, Range & Specification and CMC Values	17/01/2024
Volume	11	Re-issued due to modification in: Range & Specification and CMC Values	
Electrical	11	Re-issued due to modification in CMC Values	22-09-2022
Mass and Balance, Pressure		Re-issued due to minor changes in Measured Quantity/Calibration Instrument and Calibration Method	
Temperature and Humidity, Force, Volume , Electrical, Mass and Balance, Pressure, Dimensional	10	Renewal accreditation and modification in Ranges and CMC Values	25-05-2021
Torque	04		
Temperature and Humidity	09	Re-issued to comply with the new accreditation number format	11-02-2021
Force		Re-issued due to rephrasing the scope by merging some cells and made some alignments in addition to complying with the new accreditation number format	
Volume, Electrical		Re-issued to comply with the new accreditation number format	
Torque	03		

Accreditation Scope
LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Date: 23-09-2024

Accreditation History			
Scope	Issue No.	Details	Date
Mass and Balance	09	Re-issued due to rephrasing the scope by merging some cells and made some alignments in addition to complying with the new accreditation number format	11-02-2021
Pressure		Re-issued due to rephrasing the scope by merging some cells, made some alignments, complying with the new accreditation number format in addition to changing the unites (from bar to Pa, kPa and MPa)	
Dimensional		Re-issued to comply with the new accreditation number format	
Temperature and Humidity, Force, Volume	08	First issuance under the name of EIAC (which was formerly known as DAC)	25/12/2019
Torque	02		
Electrical	08	Extention in the scope, Modification in the CMC values and first issuance under the name of EIAC	
Mass and Balance, Pressure, Dimensional		Modification in in the CMC values and first issuance under the name of EIAC	

Accreditation Scope

Temperature and Humidity Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Liquid-in-glass thermometers	GTS-WP-13 Based on BS 1041-2-1	"-30 °C up to 150 °C	0.16 °C	Laboratory
Direct reading thermometers	GTS-WP-15	"-40 °C up to 160 °C	0.16 °C	Laboratory
		>160 °C up to 500 °C	0.4 °C	
		>500 °C up to 900 °C	1.4 °C	
		>900 °C up to 1200 °C	2.2 °C	
Dial Thermometers	GTS-WP-14 Based on EN 13190	"-30 °C up to 160 °C	0.16 °C	Laboratory
		>160 °C up to 400 °C	1.8 °C	
		>400 °C up to 800 °C	3.2 °C	
Noble Metal Thermocouple without temperature indicator	GTS-WP-12	0°C up to 600°C	0.5 °C	Laboratory
		>600°C up to 900°C	1.5 °C	
		>900°C up to 1200°C	1.7 °C	
Base Metal Thermocouples without temperature indicator	GTS-WP-12	"-40 °C up to 250 °C	0.5 °C	Laboratory
		>250 °C up to 600 °C	0.6 °C	
		>600 °C up to 900 °C	1.7 °C	
		>900 °C up to 1200 °C	2.2 °C	

Accreditation Scope

Temperature and Humidity Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Climatic Temperature Chamber, using 9 sensors	GTS-09 Based on DKD-R-5-7	30°C up to 180°C	0.9 °C	Laboratory/ Client Premises
Liquid Bath / incubators, using 5 sensors	GTS-09 Based on DKD-R-5-7	5°C up to 95°C	0.9 °C	Laboratory/ Client Premises
Freezer / Chiller, using 9 sensors	GTS-154 Based on DKD-R-5-7	-30°C up to 95°C	0.9 °C	Laboratory/ Client Premises
Oven, using 9 sensors and Muffel Furnace using one sensor	GTS-WP-09 Based on DKD-R-5-7	30°C up to 180°C	0.9 °C	Laboratory/ Client Premises
		>180°C up to 300°C	1.1 °C	
		>300°C up to 800°C	2.0 °C	
		>800°C up to 1200°C	4.9 °C	
Autoclave (Temperature), using 5 or 9 sensors	GTS-WP-155 Based on DKD-R-5-7	100°C up to 140°C	0.7 °C	Laboratory/ Client Premises
Refrigerator, using 9 sensors	GTS-WP-176 Based on DKD-R-5-7	- 40°C to 20°C	0.7 °C	Laboratory/ Client Premises
Liquid calibration bath	GTS-WP-182	-35°C to 165°C	0.15 °C	Laboratory/ Client Premises
		>165°C to 300°C	0.18 °C	

Accreditation Scope

Temperature and Humidity Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Dry Block Calibrator	GTS-WP-177	Atmospheric temp. to 250°C	0.2 °C	Laboratory/ Client Premises
		>250 to 400°C	0.6 °C	
		>400 to 650°C	0.7 °C	
		>650°C to 900°C	1.5 °C	
		900°C to 1100°C	1.6 °C	
Hygrometer / Humidity Transmitter	GTS-WP-178	10% RH to 90 % RH	1.0% RH	Laboratory
Resistance thermometer without temperature indicator	GTS-WP-179	"-45°C to 40°C	0.32 °C	Laboratory
		>40°C to 200°C	0.47 °C	
		>200°C to 600°C	0.58 °C	
Infrared Thermometer	GTS-WP - 150	-30°C to 0°C	3.5 °C	Laboratory
		>0°C to 600°C	4.1°C	
Temperature Transducer / Transmitter / Switch	GTS-WP-181	-30 °C to 150°C	0.2 °C	Laboratory/ Client Premises
		>150°C to 660°C	0.5°C	
		>660°C to 850°C	1.6°C	



مركز الإمارات العالمي للاعتماد
Emirates International Accreditation Centre

Accreditation Scope

Temperature and Humidity Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Temperature/Humidity Data Logger	GTS-WP-183	"-10°C to 70°C	0.74 °C	Laboratory
		10% of RH to 90 % of RH	0.9 % of RH	

Accreditation Scope

Force Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Force Verification /Calibration of Compression testing machines	GTS-WP-06 based on BS EN ISO 7500-1	50 kN up to 3000 kN	0.24% of indicating reading using force transducer class 1, ISO 376	Client Premises
Force Verification /Calibration of tensile testing machines	GTS-WP-06A based on BS EN ISO 7500-1	6,2 kN up to 300 kN	0.24 % of reading using force transducer class 1, ISO 376	Client Premises
Proving rings for soil testing apparatus	GTS-WP-08	400 N up to 50 kN	0.7 %	Laboratory
Push-Pull gauge	GTS-WP-08B	45 N up to 50 kN	0,3 %	
Force gauge and load cell with indicator for industrial applications	GTS-WP-08A and GTS- WP-08B	100 N up to 50 kN	1.0 %	

Accreditation Scope

Volume Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Liquid Volume/ Fixed and Variable Volume Micro-pipette	GTS-WP-61A Gravimetric method acc. to ISO 8655-6:2022	5 µl to 50 µl	0.29 µl	Laboratory
		>50 µl to 100 µl	0.30 µl	
		>100 µl to 500 µl	0.63 µl	
		>500 µl to 1000 µl	1.2 µl	
		>1000 µl to 2000 µl	2.4 µl	
		>2000 µl to 5000 µl	6.0 µl	
		> 5000 µl to 10000 µl	14 µl	
Liquid Volume/ Laboratory glassware- Beakers	GTS-WP-61 Gravimetric method according to ISO 4787:2010	50 ml to 5000 ml	0.70%	Laboratory
Liquid Volume/ Laboratory glassware- Graduated cylinders	GTS-WP-61 Gravimetric method according to ISO 4787:2010	5 ml to 250 ml	0.09%	Laboratory
		> 250 ml to 5000 ml	0.04%	
Volumetric Measuring Flask	GTS-WP-61 Gravimetric method according to ISO 4787:2010	> 5 ml to 100 ml	0.10%	Laboratory
		> 100 ml to 5000 ml	0.05%	

Accreditation Scope

Volume Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Liquid Volume/ Laboratory glassware- Specific Gravity Bottle	GTS-WP-61 Gravimetric method according to ISO 4787:2010	5 ml to 100 ml	0.03%	Laboratory
Liquid Volume/ Volumetric prover vessels	GTS-WP-61B Gravimetric method acc. to NIST SP 250-72:2009	5 L to 20 L	0.02%	Laboratory

Accreditation Scope

Torque Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 08

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Torque Hand Torque Tools	GTS-WP-31 based on: ISO 6789-1: 2017 and ISO 6789-2: 2017	0,5 N·m to 2711 N·m	1,0 %	Laboratory
Torque Transducers	GTS-WP-185 based on BS 7882:2017	0.45 N·m to 5.65 N·m	0.50%	
		3.39 N·m to 45.19 N·m	0.40%	
		9.03 N·m to 813,49 N·m	0.30%	
		271 N·m to 2711 N·m	0.80%	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)					
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification		Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments					
AC Voltage	Direct Method using Fluke 5320A U = Measured voltage value	003.001 V to 029.999 V			Laboratory/ Client Premises
		40 Hz to 400 Hz		$7.67 \times 10^{-6} U + 7.03 \text{ mV}$	
		030.000 V to 099.99 V			
		40 Hz to 400 Hz		$9.05 \times 10^{-6} U + 23.04 \text{ mV}$	
		100.0 V to 299.9 V			
		40 Hz to 400 Hz		$9.28 \times 10^{-6} U + 70.17 \text{ mV}$	
		300.0 V to 600 V			
		40 Hz to 400 Hz		$1.04 \times 10^{-5} U + 0.14 \text{ V}$	
AC Voltage	Direct Method using Fluke 5522A <i>U = Measured voltage value</i>	1.0 mV to 32.999 mV			Laboratory/ Client Premises
		10 Hz to 45 Hz		$0.62 \times 10^{-3} U + 4.8 \text{ }\mu\text{V}$	
		>45 Hz to 10 kHz		$0.13 \times 10^{-3} U + 4.8 \text{ }\mu\text{V}$	
		>10 kHz to 20 kHz		$0.17 \times 10^{-3} U + 4.8 \text{ }\mu\text{V}$	
		>20 kHz to 50 kHz		$0.78 \times 10^{-3} U + 4.8 \text{ }\mu\text{V}$	
		>50 kHz to 100 kHz		$2.7 \times 10^{-3} U + 9.4 \text{ }\mu\text{V}$	
		>100 kHz to 500 kHz		$6.3 \times 10^{-3} U + 39 \text{ }\mu\text{V}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Voltage	Direct Method using Fluke 5522A <i>U = Measured voltage value</i>	33 mV to 329.999 mV		Laboratory/ Client Premises
		10 Hz to 45 Hz	$0.24 \times 10^{-3} \text{ } U + 6.1 \text{ }\mu\text{V}$	
		>45 Hz to 10 kHz	$0.13 \times 10^{-3} \text{ } U + 6.0 \text{ }\mu\text{V}$	
		>10 kHz to 20 kHz	$0.14 \times 10^{-3} \text{ } U + 6.0 \text{ }\mu\text{V}$	
		>20 kHz to 50 kHz	$0.28 \times 10^{-3} \text{ } U + 6.0 \text{ }\mu\text{V}$	
		>50 kHz to 100 kHz	$0.63 \times 10^{-3} \text{ } U + 25 \text{ }\mu\text{V}$	
		>100 kHz to 500 kHz	$1.7 \times 10^{-3} \text{ } U + 53 \text{ }\mu\text{V}$	
		0.33 V to 3.29999 V		
		10 Hz to 45 Hz	$0.48 \times 10^{-3} \text{ } U + 80 \text{ }\mu\text{V}$	
		>45 Hz to 10 kHz	$0.13 \times 10^{-3} \text{ } U + 45 \text{ }\mu\text{V}$	
		>10 kHz to 20 kHz	$0.16 \times 10^{-3} \text{ } U + 45 \text{ }\mu\text{V}$	
		>20 kHz to 50 kHz	$0.24 \times 10^{-3} \text{ } U + 38 \text{ }\mu\text{V}$	
		>50 kHz to 100 kHz	$0.55 \times 10^{-3} \text{ } U + 97 \text{ }\mu\text{V}$	
		>100 kHz to 500 kHz	$1.9 \times 10^{-3} \text{ } U + 0.46 \text{ mV}$	



مركز الإمارات العالمي للاعتماد
Emirates International Accreditation Centre

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Voltage	Direct Method using Fluke 5522A <i>U = Measured voltage value</i>	3.3 V to 32.9999 V		Laboratory/ Client Premises
		10 Hz to 45 Hz	$0.48 \times 10^{-3} \text{ } U + 1.0 \text{ mV}$	
		>45 Hz to 10 kHz	$0.13 \times 10^{-3} \text{ } U + 0.45 \text{ mV}$	
		>10 kHz to 20 kHz	$0.20 \times 10^{-3} \text{ } U + 0.46 \text{ mV}$	
		>20 kHz to 50 kHz	$0.28 \times 10^{-3} \text{ } U + 0.46 \text{ mV}$	
		>50 kHz to 100 kHz	$0.71 \times 10^{-3} \text{ } U + 1.2 \text{ mV}$	
		33 V to 329.9999 V		
		45 Hz to 1 kHz	$0.16 \times 10^{-3} \text{ } U + 1.6 \text{ mV}$	
		>1 kHz to 10 kHz	$0.17 \times 10^{-3} \text{ } U + 4.5 \text{ mV}$	
		>10 kHz to 20 kHz	$0.21 \times 10^{-3} \text{ } U + 4.6 \text{ mV}$	
		>20 kHz to 50 kHz	$0.26 \times 10^{-3} \text{ } U + 4.4 \text{ mV}$	
		>50 kHz to 100 kHz	$1.6 \times 10^{-3} \text{ } U + 39 \text{ mV}$	
		330 V to 1020 V		
		45 Hz to 1 kHz	$0.24 \times 10^{-3} \text{ } U + 8.5 \text{ mV}$	
		>1 kHz to 5 kHz	$0.21 \times 10^{-3} \text{ } U + 8.5 \text{ mV}$	
		>5 kHz to 10 kHz	$0.26 \times 10^{-3} \text{ } U + 8.0 \text{ mV}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
DC Voltage	Direct Method using Fluke 5320A <i>U = Measured Voltage value</i>	003.001 V to 029.999 V	$7.67 \times 10^{-6} U + 7.1 \text{ mV}$	Laboratory/ Client Premises
		030.00 V to 149.9 V	$8.36 \times 10^{-6} U + 35.2 \text{ mV}$	
		150 V to 600 V	$8.7 \times 10^{-6} U + 0.14 \text{ V}$	
		0 V to 329.9999 mV	$56 \times 10^{-6} U + 2 \mu\text{V}$	
		0.33 V to 3.299999 V	$58 \times 10^{-6} U + 0.3 \mu\text{V}$	
		3.3 V to 32.99999 V	$59 \times 10^{-6} U + 3.5 \mu\text{V}$	
		33 V to 329.9999 V	$60 \times 10^{-6} U + 0.035 \text{ mV}$	
		330 to 1020.000 V	$60 \times 10^{-6} U + 0.36 \text{ mV}$	
DC Current	Direct Method using Fluke 5522A <i>I = Measured Current value</i>	0 μA to 329.999 μA	$0.12 \times 10^{-3} + 0.011 \mu\text{A}$	Laboratory/ Client Premises
		0.33 mA to 3.29999 mA	$0.08 \times 10^{-3} + 0.04 \mu\text{A}$	
		3.3 mA to 32.99999 mA	$0.08 \times 10^{-3} + 0.21 \mu\text{A}$	
		33 mA to 329.999 mA	$0.16 \times 10^{-3} + 4.2 \mu\text{A}$	
		0.33 A to 1.09999 A	$0.16 \times 10^{-3} + 0.031 \text{ mA}$	
		1.1 A to 2.99999 A	$0.30 \times 10^{-3} + 0.031 \text{ mA}$	
		3 A to 10.9999 A	$0.41 \times 10^{-3} + 0.38 \text{ mA}$	
		11 A to 20.5 A	$0.85 \times 10^{-3} + 0.54 \text{ mA}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
DC Current	Direct Method using Fluke 5522A and current coil <i>I = Measured Current value</i>	50 turn coil		Laboratory/ Client Premises
		0.2 A to 0.33 A	$4.0 \times 10^{-3} + 16 \text{ mA}$	
		>0.33 A to 2.9999 A	$4.0 \times 10^{-3} + 0.11 \text{ A}$	
		3 A to 20.5 A	$4.0 \times 10^{-3} + 0.39 \text{ A}$	
AC Current	Direct Method using Fluke 5522A <i>I = Measured Current value</i>	29 μA to 329.99 μA		Laboratory/ Client Premises
		10 Hz to 20 Hz	$1.6 \times 10^{-3} + 0.10 \mu\text{A}$	
		>20 Hz to 45 Hz	$1.2 \times 10^{-3} + 0.10 \mu\text{A}$	
		>45 Hz to 1 kHz	$0.97 \times 10^{-3} + 0.10 \mu\text{A}$	
		>1 kHz to 5 kHz	$2.3 \times 10^{-3} + 0.12 \mu\text{A}$	
		29 μA to 329.99 μA		
		>5 kHz to 10 kHz	$6.2 \times 10^{-3} + 0.16 \mu\text{A}$	
		>10 kHz to 30 kHz	$12 \times 10^{-3} + 0.31 \mu\text{A}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Current	Direct Method using Fluke 5522A <i>I = Measured Current value</i>	0.33 mA to 3.29999 mA		Laboratory/ Client Premises
		10 Hz to 20 Hz	1.6 x 10 ⁻³ + 0.12 μA	
		>20 Hz to 45 Hz	0.97 x 10 ⁻³ + 0.12 μA	
		>45 Hz to 1 kHz	0.78 x 10 ⁻³ + 0.12 μA	
		>1 kHz to 5 kHz	1.55 x 10 ⁻³ + 0.16 μA	
		>5 kHz to 10 kHz	3.9 x 10 ⁻³ + 0.23 μA	
		>10 kHz to 30 kHz	7.8 x 10 ⁻³ + 0.46 μA	
		3.3 mA to 32.9999 mA		
		10 Hz to 20 Hz	1.4 x 10 ⁻³ + 1.6 μA	
		>20 Hz to 45 Hz	0.71x 10 ⁻³ + 1.5 μA	
		>45 Hz to 1 kHz	0.35 x 10 ⁻³ + 1.5 μA	
		>1 kHz to 5 kHz	0.69 x 10 ⁻³ + 1.5 μA	
		>5 kHz to 10 kHz	1.6 x 10 ⁻³ + 1.5 μA	
		>10 kHz to 30 kHz	3.1 x 10 ⁻³ + 1.5 μA	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Current	Direct Method using Fluke 5522A <i>I = Measured Current value</i>	33 mA to 329.999 mA		Laboratory/ Client Premises
		10 Hz to 20 Hz	$1.4 \times 10^{-3} + 16 \mu\text{A}$	
		>20 Hz to 45 Hz	$0.70 \times 10^{-3} + 16 \mu\text{A}$	
		>45 Hz to 1 kHz	$0.32 \times 10^{-3} + 15 \mu\text{A}$	
		>1 kHz to 5 kHz	$0.78 \times 10^{-3} + 39 \mu\text{A}$	
		>5 kHz to 10 kHz	$1.6 \times 10^{-3} + 78 \mu\text{A}$	
		>10 kHz to 30 kHz	$3.1 \times 10^{-3} + 0.16 \text{ mA}$	
		0.33 A to 1.09999 A		
		10 Hz to 45 Hz	$1.4 \times 10^{-3} + 76 \mu\text{A}$	
		>45 Hz to 1 kHz	$0.41 \times 10^{-3} + 76 \mu\text{A}$	
		>1 kHz to 5 kHz	$4.7 \times 10^{-3} + 0.77 \text{ mA}$	
		>5 kHz to 10 kHz	$19 \times 10^{-3} + 3.9 \text{ mA}$	
		1.11 A to 2.99999 A		
		10 Hz to 45 Hz	$1.4 \times 10^{-3} + 77 \mu\text{A}$	
		>45 Hz to 1 kHz	$0.48 \times 10^{-3} + 76 \mu\text{A}$	
		>1 kHz to 5 kHz	$4.7 \times 10^{-3} + 0.77 \text{ mA}$	
		>5 kHz to 10 kHz	$19 \times 10^{-3} + 3.9 \text{ mA}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Current	Direct Method using Fluke 5522A <i>I = Measured Current value</i>	3 A to 10.9999 A		Laboratory/ Client Premises
		45Hz to 100 Hz	$0.48 \times 10^{-3} + 1.5 \text{ mA}$	
		>100 Hz to 1 kHz	$0.79 \times 10^{-3} + 1.5 \text{ mA}$	
		>1 kHz to 5 kHz	$23 \times 10^{-3} + 1.6 \text{ mA}$	
		11 A to 20.5 A		
		45 Hz to 100 Hz	$0.95 \times 10^{-3} + 3.8 \text{ mA}$	
		>100 Hz to 1 kHz	$1.2 \times 10^{-3} + 3.8 \text{ mA}$	
		>1 kHz to 5 kHz	$23 \times 10^{-3} + 3.9 \text{ mA}$	
	Direct Method using Fluke 5522A and current coil <i>I = Measured Current value</i>	Magnitude (50 turn)	Amp-turn	Laboratory/ Client Premises
		0.2 A to 0.33 A/45 Hz to 65 Hz		
		10 to 16.4999A	$3.3 \times 10^{-3} + 1.6 \text{ mA}$	
		> 0.33 A to 2.9999 A/45 Hz to 65 Hz		
		16.5 to 149.999 A	$3.3 \times 10^{-3} + 1.5 \text{ mA}$	
		3.0 A to 20.5 A/45 Hz to 65 Hz		
		150 to 1025 A	$3.4 \times 10^{-3} + 47 \text{ mA}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Current	Direct Method using Fluke 5522A and current coil <i>I = Measured Current value</i>	0.2 A to 0.33 A/65 Hz to 440 Hz		Laboratory/ Client Premises
		10 to 16.4999 A	$6.6 \times 10^{-3} + 2.2 \text{ mA}$	
		> 0.33 A to 2.9999 A/65 Hz to 440 Hz		
		16.5 to 149.999 A	$6.6 \times 10^{-3} + 20 \text{ mA}$	
		3.0 A to 20.5 A/65 Hz to 440 Hz		
		150 to 1025 A	$6.7 \times 10^{-3} + 72 \text{ mA}$	
Resistance	Direct Method using Fluke 5320A R = Measured Resistance value	0.1 Ω to 5.00 Ω	$1.1 \times 10^{-6} \text{ R} + 7.9 \text{ m}\Omega$	Laboratory/ Client Premises
		5.00 Ω to 29.0 Ω	$4.15 \times 10^{-6} \text{ R} + 14 \text{ m}\Omega$	
		30.0 Ω to 200.0 Ω	$3.31 \times 10^{-6} \text{ R} + 0.12 \Omega$	
		200 Ω to 499.9 Ω	$1.01 \times 10^{-6} \text{ R} + 1.2 \Omega$	
		0.500 kΩ to 1.999 kΩ	$3.6 \times 10^{-6} \text{ R} + 1.2 \Omega$	
		2.00 kΩ to 5.00 kΩ	$1.01 \times 10^{-6} \text{ R} + 11.6 \Omega$	
		5.00 kΩ to 10.00 kΩ	$2.17 \times 10^{-6} \text{ R} + 12 \Omega$	
		10.001 kΩ to 39.99 kΩ	$4.31 \times 10^{-5} \text{ R} + 0.9 \Omega$	
		40.00 kΩ to 99.99 kΩ	$1.89 \times 10^{-5} \text{ R} + 11 \Omega$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Resistance	Direct Method using Fluke 5320A <i>R = Measured Resistance value</i>	100.00 kΩ to 199.99 kΩ	$3.42 \times 10^{-5} R + 9.5 \Omega$	Laboratory/ Client Premises
		200.00 kΩ to 999.9 kΩ	$1.63 \times 10^{-5} R + 0.12 k\Omega$	
		1.0000 MΩ to 9.999 MΩ	$5.11 \times 10^{-5} R + 0.078 k\Omega$	
		10.000 MΩ to 999.9 MΩ	$5.71 \times 10^{-5} R + 0.73 k\Omega$	
		1.0000 GΩ to 10.000 GΩ	$5.11 \times 10^{-5} R + 0.078 M\Omega$	
	Direct Method using Fluke 5522A <i>R = Measured Resistance value</i>	0 Ω to 10.9999 Ω	$31 \times 10^{-6} R + 7.8 m\Omega$	
		11 Ω to 32.9999 Ω	$23 \times 10^{-6} R + 12 m\Omega$	
		33 Ω to 109.9999 Ω	$22 \times 10^{-6} R + 12 m\Omega$	
		110 Ω to 329.9999 Ω	$22 \times 10^{-6} R + 16 m\Omega$	
		330 Ω to 1.099999 kΩ	$22 \times 10^{-6} R + 15 m\Omega$	
		1.1 kΩ to 3.299999 kΩ	$22 \times 10^{-6} R + 0.15 \Omega$	
		3.3 kΩ to 10.99999 kΩ	$22 \times 10^{-6} R + 0.077 \Omega$	
		11 kΩ to 32.99999 kΩ	$22 \times 10^{-6} R + 0.77 \Omega$	
		33 kΩ to 109.9999 kΩ	$22 \times 10^{-6} R + 0.77 \Omega$	
		110 kΩ to 329.99999 kΩ	$25 \times 10^{-6} R + 7.7 \Omega$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Resistance	Direct Method using Fluke 5522A <i>R = Measured Resistance value</i>	330 kΩ to 1.099999 MΩ	$26 \times 10^{-6} R + 7.7 \Omega$	Laboratory/ Client Premises
		1.1 MΩ to 3.299999 MΩ	$48 \times 10^{-6} R + 0.12 \text{ k}\Omega$	
		3.3 MΩ to 10.999999 MΩ	$0.10 \times 10^{-3} R + 0.19 \text{ k}\Omega$	
		11 MΩ to 32.999999 MΩ	$0.21 \times 10^{-3} R + 1.9 \text{ k}\Omega$	
		33 MΩ to 109.9999 MΩ	$0.44 \times 10^{-3} R + 2.1 \text{ k}\Omega$	
		110 MΩ to 329.9999 MΩ	$2.3 \times 10^{-3} R + 0.077 \text{ M}\Omega$	
		330 MΩ to 1100 MΩ	$12 \times 10^{-3} R + 0.39 \text{ M}\Omega$	
Capacitance	Direct Method using Fluke 5522A <i>C = Measured Capacitance value</i>	220 pF to 399.9 pF	$8.6 \times 10^{-3} C + 7.2 \text{ pF}$	Laboratory/ Client Premises
		0.4 nF to 1.0999 nF	$4.5 \times 10^{-3} C + 7.6 \text{ pF}$	
		1.1 nF to 3.2999 nF	$4.1 \times 10^{-3} C + 7.6 \text{ pF}$	
		3.3 nF to 10.9999 nF	$2.1 \times 10^{-3} C + 7.6 \text{ pF}$	
		11 nF to 32.9999 nF	$2.0 \times 10^{-3} C + 77 \text{ pF}$	
		33 nF to 109.999 nF	$2.1 \times 10^{-3} C + 76 \text{ pF}$	
		110 nF to 329.999 nF	$2.1 \times 10^{-3} C + 0.23 \text{ nF}$	
		0.33 μF to 1.09999 μF	$2.1 \times 10^{-3} C + 0.76 \text{ nF}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Capacitance	Direct Method using Fluke 5522A <i>C = Measured Capacitance value</i>	1.1 μ F to 3.29999 μ F	$2.1 \times 10^{-3} C + 2.3 \text{ nF}$	Laboratory/ Client Premises
		3.3 μ F to 10.9999 μ F	$2.1 \times 10^{-3} C + 7.6 \text{ nF}$	
		11 μ F to 32.9999 μ F	$3.2 \times 10^{-3} C + 23 \text{ nF}$	
		33 μ F to 109.999 μ F	$3.7 \times 10^{-3} C + 75 \text{ nF}$	
		110 μ F to 329.999 μ F	$3.7 \times 10^{-3} C + 0.22 \text{ } \mu$ F	
		0.33 mF - 1.09999 mF	$5.4 \times 10^{-3} C + 0.75 \text{ } \mu$ F	
		1.1 mF to 3.29999 mF	$5.4 \times 10^{-3} C + 2.2 \text{ } \mu$ F	
		3.3 mF to 10.9999 mF	$5.4 \times 10^{-3} C + 7.5 \text{ } \mu$ F	
		11 mF to 32.9999 mF	$8.8 \times 10^{-3} C + 23 \text{ } \mu$ F	
		33 mF to 110 mF	$13 \times 10^{-3} C + 77 \text{ } \mu$ F	
Frequency	Direct Method using Fluke 5320A <i>f = Measured Frequency value</i>	0.0 Hz to 400.0 MHz	$4.27 \times 10^{-5} f + 7.1 \text{ mHz}$	Laboratory/ Client Premises

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Frequency	Direct Method using Fluke 5522A <i>f = Measured Frequency value</i>	0.01 Hz to 119.99 Hz	$1.9 \times 10^{-6} f + 12 \mu\text{Hz}$	Laboratory/ Client Premises
		120 Hz to 1199.9 Hz	$2.0 \times 10^{-6} f + 32 \mu\text{Hz}$	
		1.200 kHz to 11.999 kHz	$2.0 \times 10^{-6} f + 0.29 \text{ mHz}$	
		12.00 kHz to 119.99 kHz	$2.0 \times 10^{-6} f + 2.9 \text{ mHz}$	
		120.00 kHz to 1199.9 kHz	$2.0 \times 10^{-6} f + 29 \text{ mHz}$	
		1.200 MHz to 2.000 MHz	$1.9 \times 10^{-6} f + 0.42 \text{ Hz}$	
RTD - simulation	Simulation Method using Fluke 5522A	-200 °C to -80 °C RTD-pt385, 100Ω	0.04 °C	Laboratory/ Client Premises
		> -80 °C to 0.003 °C RTD-pt385, 100Ω	0.04 °C	
		0.03 °C to 100 °C RTD-pt385, 100Ω	0.06 °C	
		>100 °C to 300 °C RTD-pt385, 100Ω	0.07 °C	
		>300 °C to 400 °C RTD-pt385, 100Ω	0.08 °C	
		>400 °C to 630 °C RTD-pt385, 100Ω	0.09 °C	
		>630 °C to 800 °C RTD-pt385, 100Ω	0.18 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
RTD - simulation	Simulation Method using Fluke 5522A	-200 °C to -80 °C RTD-pt3926, 100Ω	0.04 °C	Laboratory/ Client Premises
		>-80 °C to 0.003 °C RTD-pt3926, 100Ω	0.06 °C	
		0.03 °C to 100 °C / RTD-pt3926, 100Ω	0.07 °C	
		>100 °C to 300 °C RTD-pt3926, 100Ω	0.08 °C	
		>300 °C to 400 °C RTD-pt3926, 100Ω	0.09 °C	
		>400 °C to 630 °C RTD-pt3926, 100Ω	0.18 °C	
		-200 °C to -190 °C RTD-pt3916, 100Ω	0.19 °C	
		>-190 °C to -80 °C RTD-pt3916, 100Ω	0.03 °C	
		>-80 °C to 0.003 °C RTD-pt3916, 100Ω	0.04 °C	
		0.03 °C to 100 °C RTD-pt3916, 100Ω	0.05 °C	
		>100 °C to 260 °C RTD-pt3916, 100Ω	0.06 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
RTD - simulation	Simulation Method using Fluke 5522A	>260 °C to 300 °C RTD-pt3916, 100Ω	0.06 °C	Laboratory/ Client Premises
		>300 °C to 400 °C RTD-pt3916, 100Ω	0.07 °C	
		>400 °C to 600 °C RTD-pt3916, 100Ω	0.08 °C	
		>600 °C to 630 °C RTD-pt3916, 100Ω	0.18 °C	
		-200 °C to -80 °C RTD-pt385, 200Ω	0.03 °C	
		>-80 °C to 0.003 °C RTD-pt385, 200Ω	0.03 °C	
		0.03 °C to 100 °C RTD-pt385, 200Ω	0.03 °C	
		>100 °C to 260 °C RTD-pt385, 200Ω	0.04 °C	
		>260 °C to 300 °C RTD-pt385, 200Ω	0.09 °C	
		>300 °C to 400 °C RTD-pt385, 200Ω	0.10 °C	
		>400 °C to 600 °C RTD-pt385, 200Ω	0.11 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
RTD - simulation	Simulation Method using Fluke 5522A	>600 °C to 630 °C RTD-pt385, 200Ω	0.12 °C	Laboratory/ Client Premises
		-200 °C to -80 °C RTD-pt385, 500Ω	0.03 °C	
		>-80 °C to 0.003 °C RTD-pt385, 500Ω	0.04 °C	
		0.03 °C to 100 °C RTD-pt385, 500Ω	0.04 °C	
		>100 °C to 260 °C RTD-pt385, 500Ω	0.05 °C	
		>260 °C to 300 °C RTD-pt385, 500Ω	0.06 °C	
		>300 °C to 400 °C RTD-pt385, 500Ω	0.06 °C	
		>400 °C to 600 °C RTD-pt385, 500Ω	0.07 °C	
		>600 °C to 630 °C RTD-pt385, 500Ω	0.09 °C	
		-200 °C to -80 °C RTD-pt385, 1000Ω	0.03 °C	
		> -80 °C to 0.003 °C RTD-pt385, 1000Ω	0.03 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
RTD - simulation	Simulation Method using Fluke 5522A	0.03 °C to 100 °C RTD-pt385, 1000Ω	0.03 °C	Laboratory/ Client Premises
		>100 °C to 260 °C RTD-pt385, 1000Ω	0.04 °C	
		>260 °C to 300 °C RTD-pt385, 1000Ω	0.05 °C	
		>300 °C to 400 °C RTD-pt385, 1000Ω	0.06 °C	
		>400 °C to 600 °C RTD-pt385, 1000Ω	0.06 °C	
		>600 °C to 630 °C RTD-pt385, 1000Ω	0.18 °C	
		-80 °C to 0.003 °C RTD-pt385, 120Ω	0.03 °C	
		0.03 °C to 100 °C RTD-pt385, 120Ω	0.03 °C	
		>100 °C to 260 °C RTD-pt385, 120Ω	0.04 °C	
		-100 °C to 260 °C RTD-Cu427, 10Ω	0.23 °C	



مركز الإمارات العالمي للاعتماد
Emirates International Accreditation Centre

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Thermocouple B	Simulation Method using Fluke 5522A	600 °C to 800 °C	0.34 °C	Laboratory/ Client Premises
		>800 °C to 1000 °C	0.26 °C	
		>1000 °C to 1550 °C	0.23 °C	
		>1550 °C to 1820 °C	0.26 °C	
Thermocouple C	Simulation Method using Fluke 5522A	0.01 °C to 150 °C	0.23 °C	Laboratory/ Client Premises
		>150 °C to 650 °C	0.20 °C	
		>650 °C to 1000 °C	0.24 °C	
		>1000 °C to 1800°C	0.39 °C	
		>1800 °C to 2316°C	0.65 °C	
Thermocouple E	Simulation Method using Fluke 5522A	-250 °C to -100 °C	0.39 °C	Laboratory/ Client Premises
		>-100 °C to -25 °C	0.12 °C	
		>-25 °C to 350 °C	0.11 °C	
		>350 °C to 650°C	0.12 °C	
		>650 °C to 1000°C	0.16 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Thermocouple J	Simulation Method using Fluke 5522A	-210 °C to -100 °C	0.21 °C	Laboratory/ Client Premises
		>-100 °C to -35 °C	0.12 °C	
		>-30 °C to 150 °C	0.11 °C	
		>150 °C to 760°C	0.13 °C	Laboratory/ Client Premises
		>760 °C to 1200°C	0.18 °C	
Thermocouple K	Simulation Method using Fluke 5522A	-200 °C to -100 °C	0.26 °C	Laboratory/ Client Premises
		>-100 °C to -25 °C	0.14 °C	
		>-25 °C to 120 °C	0.12 °C	
		>120 °C to 1000 °C	0.20 °C	
		>1000 °C to 1372 °C	0.31 °C	
Thermocouple L	Simulation Method using Fluke 5522A	-200 °C to -100 °C	0.29 °C	Laboratory/ Client Premises
		>-100 °C to 800 °C	0.20 °C	
		>800°C to 900 °C	0.13 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Thermocouple N	Simulation Method using Fluke 5522A	-200 °C to -100 °C	0.31 °C	Laboratory/ Client Premises
		>-100 °C to -25 °C	0.17 °C	
		>-25 °C to 120 °C	0.15 °C	
		>120 °C to 410 °C	0.14 °C	
		>410 °C to 1300 °C	0.21 °C	
Thermocouple R	Simulation Method using Fluke 5522A	0.01 °C to 250 °C	0.44 °C	Laboratory/ Client Premises
		>250 °C to 400 °C	0.27 °C	
		>400 °C to 1000 °C	0.26 °C	
		>1000 °C to 1767°C	0.31 °C	
Thermocouple S	Simulation Method using Fluke 5522A	0.01 °C to 250 °C	0.36 °C	Laboratory/ Client Premises
		>250 °C to 1000 °C	0.28 °C	
		>1000 °C to 1400 °C	0.29 °C	
		>1400 °C to 1767°C	0.36 °C	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Thermocouple T	Simulation Method using Fluke 5522A	-250 °C to -150 °C	0.49 °C	Laboratory/ Client Premises
		> -150 °C to 0.003 °C	0.19 °C	
		0.01 °C to 120 °C	0.12 °C	
		>120 °C to 400°C	0.11 °C	
Thermocouple U	Simulation Method using Fluke 5522A	-200 °C to 0.01 °C	0.43 °C	Laboratory/ Client Premises
		>0.01 °C to 600 °C	0.21 °C	
DC Power	Direct Method using Fluke 5522A with PQ Option	33 mV/0.33mA	$0.29 \times 10^{-3} P$	Laboratory/ Client Premises
		33 mV/329.99 mA	$0.20 \times 10^{-3} P$	
		1020 V/0.33mA	$0.29 \times 10^{-3} P$	
		1020 V/329.99 mA	$0.21 \times 10^{-3} P$	
		33 mV/0.33 A	$0.40 \times 10^{-3} P$	
		33 mV/2.9999 A	$0.48 \times 10^{-3} P$	
		1020 V/0.33 A	$0.41 \times 10^{-3} P$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
DC Power	Direct Method using Fluke 5522A with PQ Option	1020 V/2.9999 A	$0.49 \times 10^{-3} P$	Laboratory/ Client Premises
		33 mV/3 A	$0.84 \times 10^{-3} P$	
		33 mV/20.5 A	$1.3 \times 10^{-3} P$	
		1020 V/3 A	$0.84 \times 10^{-3} P$	
		1020 V/20.5 A	$1.3 \times 10^{-3} P$	
AC Power	Direct Method using Fluke 5522A with PQ Option	45 Hz to 65 Hz		Laboratory/ Client Premises
		PF=1		
		33 mV/3.3mA	$1.4 \times 10^{-3} P$	
		33 mV/8.999 mA	$1.0 \times 10^{-3} P$	
		33 mV/9 mA	$0.93 \times 10^{-3} P$	
		33 mV/32.999 mA	$0.79 \times 10^{-3} P$	
		33 mV/33 mA	$1.4 \times 10^{-3} P$	
		33 mV/89.99 mA	$0.99 \times 10^{-3} P$	
33 mV/90 mA	$0.92 \times 10^{-3} P$			

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Power	Direct Method using Fluke 5522A with PQ Option	33 mV/329.99 mA	$0.78 \times 10^{-3} P$	Laboratory/ Client Premises
		329.99 mV/3.3 mA	$1.4 \times 10^{-3} P$	
		329.99 mV/8.999 mA	$0.94 \times 10^{-3} P$	
		329.999 mV/9 mA	$0.87 \times 10^{-3} P$	
		329.999 mV/32.999 mA	$0.71 \times 10^{-3} P$	
		329.999 mV/33 mA	$1.4 \times 10^{-3} P$	
		329.999 mV/89.99 mA	$0.93 \times 10^{-3} P$	
		329.999 mV/90 mA	$0.85 \times 10^{-3} P$	
		329.999 mV/329.99 mA	$0.7 \times 10^{-3} P$	
		330 mV/3.3 mA	$1.4 \times 10^{-3} P$	
		330 mV/8.999 mA	$0.96 \times 10^{-3} P$	
		330 mV/9 mA	$0.9 \times 10^{-3} P$	
		330 mV/32.999 mA	$0.75 \times 10^{-3} P$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Power	Direct Method using Fluke 5522A with PQ Option	330 mV/33 mA	$1.4 \times 10^{-3} P$	Laboratory/ Client Premises
		330 mV/89.99 mA	$0.95 \times 10^{-3} P$	
		330 mV/90 mA	$0.88 \times 10^{-3} P$	
		330 mV/329.99 mA	$0.74 \times 10^{-3} P$	
		1020 V/3.3 mA	$1.4 \times 10^{-3} P$	
		1020 V/8.999 mA	$0.95 \times 10^{-3} P$	
		1020 V/9 mA	$0.89 \times 10^{-3} P$	
		1020 V/32.999 mA	$0.74 \times 10^{-3} P$	
		1020 V/33 mA	$1.4 \times 10^{-3} P$	
		1020 V/89.99 mA	$0.94 \times 10^{-3} P$	
		1020 V/90 mA	$0.87 \times 10^{-3} P$	
		1020 V/329.99 mA	$0.72 \times 10^{-3} P$	
		33 mV/0.33 A	$1.2 \times 10^{-3} P$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Power	Direct Method using Fluke 5522A with PQ Option	33 mV/0.8999 A	$0.96 \times 10^{-3} P$	Laboratory/ Client Premises
		33 mV/0.9 A	$0.92 \times 10^{-3} P$	
		33 mV/2.1999 A	$0.96 \times 10^{-3} P$	
		33 mV/2.2A	$0.99 \times 10^{-3} P$	
		33 mV/4.4999 A	$1.4 \times 10^{-3} P$	
		33 mV/4.5A	$1.4 \times 10^{-3} P$	
		33 mV/20.5 A	$1.8 \times 10^{-3} P$	
		329.999 mV/0.33 A	$1.1 \times 10^{-3} P$	
		329.999 mV/0.8999 A	$0.9 \times 10^{-3} P$	
		329.999 mV/0.9 A	$0.86 \times 10^{-3} P$	
		329.999 mV/2.1999 A	$0.89 \times 10^{-3} P$	
		329.999 mV/2.2 A	$0.93 \times 10^{-3} P$	
		329.999 mV/4.4999 A	$1.4 \times 10^{-3} P$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Power	Direct Method using Fluke 5522A with PQ Option	329.999 mV/4.5 A	$1.4 \times 10^{-3} P$	Laboratory/ Client Premises
		329.999 mV/20.5 A	$1.8 \times 10^{-3} P$	
		330 mV/0.33 A	$1.1 \times 10^{-3} P$	
		330 mV/0.8999 A	$0.92 \times 10^{-3} P$	
		330 mV/0.9 A	$0.89 \times 10^{-3} P$	
		330 mV/2.1999 A	$0.92 \times 10^{-3} P$	
		330 mV/2.2 A	$0.97 \times 10^{-3} P$	
		330 mV/4.4999 A	$1.4 \times 10^{-3} P$	
		330 mV/4.5 A	$1.4 \times 10^{-3} P$	
		330 mV/20.5 A	$1.8 \times 10^{-3} P$	
		1020 V/0.33 A	$1.1 \times 10^{-3} P$	
		1020 V/0.8999 A	$0.91 \times 10^{-3} P$	
		1020 V/0.9A	$0.88 \times 10^{-3} P$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
AC Power	Direct Method using Fluke 5522A with PQ Option	1020 V/2.1999 A	$0.91 \times 10^{-3} P$	Laboratory/ Client Premises
		1020 V/2.2 A	$0.96 \times 10^{-3} P$	
		1020 V/4.4999 A	$1.4 \times 10^{-3} P$	
		1020 V/4.5 A	$1.4 \times 10^{-3} P$	
		1020 V/20.5 A	$1.8 \times 10^{-3} P$	
Oscilloscope	Direct Method using Fluke 5522A with SC1100 Option:			Laboratory/ Client Premises
	Relative Deviation Δy of the vertical Axis (measurement range):	2.5 mV to 6.6 V/ 50 Ω load, and 110 mV to 130 V/ 1 M Ω load at 1 kHz	$2.8 \times 10^{-3} U$	
	Oscilloscope Band Width	10 Hz to 1.1 GHz	$14 \times 10^{-3} f$	



مركز الإمارات العالمي للاعتماد
Emirates International Accreditation Centre

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Resistance Meters $\mu\Omega$; m Ω ; Ω ; k Ω ; M Ω	Direct Method using Decade Resistance Boxes: 50 $\mu\Omega$ to 2.0 Ω using Ductor Cal 5070 5.0 Ω to 3.0 M Ω using High Power Resistance Substituter HPRS-C-6-1	50 $\mu\Omega$	$4.4 \times 10^{-3} R$	Laboratory/ Client Premises
		100 $\mu\Omega$	$2.5 \times 10^{-3} R$	
		150 $\mu\Omega$	$1.5 \times 10^{-3} R$	
		200 $\mu\Omega$	$1.5 \times 10^{-3} R$	
		0.5 m Ω	$12 \times 10^{-3} R$	
		1.0 m Ω	$5.9 \times 10^{-3} R$	
		1.5 m Ω	$4.0 \times 10^{-3} R$	
		2.0 m Ω	$3.0 \times 10^{-3} R$	
		5.0 m Ω	$1.2 \times 10^{-3} R$	
		10 m Ω	$0.72 \times 10^{-3} R$	
		15 m Ω	$0.58 \times 10^{-3} R$	
		20 m Ω	$0.61 \times 10^{-3} R$	
		50 m Ω	$0.16 \times 10^{-3} R$	



مركز الإمارات العالمي للاعتماد
Emirates International Accreditation Centre

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Resistance Meters $\mu\Omega$; m Ω ; Ω ; k Ω ; M Ω	Direct Method using Decade Resistance Boxes: 50 $\mu\Omega$ to 2.0 Ω using Ductor Cal 5070 5.0 Ω to 3.0 M Ω using High Power Resistance Substituter HPRS-C-6-1	100 m Ω	$0.13 \times 10^{-3} R$	Laboratory/ Client Premises
		150 m Ω	$0.12 \times 10^{-3} R$	
		200 m Ω	$0.13 \times 10^{-3} R$	
		0.5 Ω	$1.8 \times 10^{-3} R$	
		1.0 Ω	$0.9 \times 10^{-3} R$	
		1.5 Ω	$0.61 \times 10^{-3} R$	
		2.0 Ω	$0.46 \times 10^{-3} R$	
		5 Ω to 9 Ω	$2.0 \times 10^{-3} R$	
		10 Ω to 90 Ω	$2.0 \times 10^{-3} R$	
		100 Ω to 900 Ω	$2.0 \times 10^{-3} R$	
		1 k Ω to 9 k Ω	$2.0 \times 10^{-3} R$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of instruments				
Resistance Meters $\mu\Omega$; m Ω ; Ω ; k Ω ; M Ω	Direct Method using Decade Resistance Boxes: 50 $\mu\Omega$ to 2.0 Ω using Ductor Cal 5070 5.0 Ω to 3.0 M Ω using High Power Resistance Substituter HPRS-C-6-1	100 Ω to 90 k Ω	$2.0 \times 10^{-3} R$	Laboratory/ Client Premises
		100 k Ω to 900 k Ω	$2.0 \times 10^{-3} R$	
		1.0 M Ω	$18 \times 10^{-3} R$	
		2.0 M Ω	$18 \times 10^{-3} R$	
		3.0 M Ω	$12 \times 10^{-3} R$	
Insulation Resistance Tester	Direct Method using Decade Meg Ohm Box	0.1 M Ω to 9.99 M Ω	$2.4 \times 10^{-3} R$	Laboratory/ Client Premises
		10 M Ω to 99.9 M Ω	$8.5 \times 10^{-3} R$	
		100 M Ω to 1000 M Ω	$12 \times 10^{-3} R$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Calibration of calibrators				
DC Voltage	Direct Method using DMM6500 Multimeter <i>U = Measured Voltage value</i>	0 to 100 mV	$3.6 \times 10^{-5} \, U + 2.8 \, \mu\text{V}$	Laboratory/ Client Premises
		>100mV to 1 V	$5.6 \times 10^{-5} \, U + 2 \, \mu\text{V}$	
		>1V to 10 V	$5.7 \times 10^{-5} \, U + 14 \, \mu\text{V}$	
		>10V to 100V	$5.6 \times 10^{-5} \, U + 0.2 \, \text{mV}$	
		>100V to 1000V	$5.6 \times 10^{-5} \, U + 1.9 \, \text{mV}$	
AC Voltage	Direct Method using DMM6500 Multimeter <i>U = Measured Voltage value</i>	0 to 100 mV		Laboratory/ Client Premises
		5Hz-10Hz	$6.9 \times 10^{-6} \, U + 24 \, \mu\text{V}$	
		>10Hz-20kHz	$6.9 \times 10^{-6} \, U + 24 \, \mu\text{V}$	
		>20kHz-50kHz	$4.2 \times 10^{-6} \, U + 39 \, \mu\text{V}$	
		>50kHz-100kHz	$2.7 \times 10^{-6} \, U + 63 \, \mu\text{V}$	
		>100 mV to 1 V		
		5Hz-10Hz	$7.7 \times 10^{-6} \, U + 0.24 \, \text{mV}$	
		>10Hz-20kHz	$7.7 \times 10^{-6} \, U + 0.24 \, \text{mV}$	
		>20kHz-50kHz	$4.6 \times 10^{-6} \, U + 0.39 \, \text{mV}$	
		>50kHz-100kHz	$2.9 \times 10^{-6} \, U + 0.63 \, \text{mV}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
AC Voltage	Direct Method using DMM6500 Multimeter <i>U = Measured Voltage value</i>	>1V to 10 V		Laboratory/ Client Premises
		5 Hz to 10 Hz	$7.7 \times 10^{-6} U + 2.4 \text{ mV}$	
		10 Hz to 20 kHz	$7.7 \times 10^{-6} U + 2.4 \text{ mV}$	
		20 kHz to 50 kHz	$4.6 \times 10^{-6} U + 3.9 \text{ mV}$	
		50 kHz to 100 kHz	$2.9 \times 10^{-6} U + 6.3 \text{ mV}$	
		>10 V to 100 V		
		5 Hz to 10 Hz	$7.7 \times 10^{-6} U + 24 \text{ mV}$	
		10 Hz to 20 kHz	$7.7 \times 10^{-6} U + 24 \text{ mV}$	
		20 kHz to 50 kHz	$4.6 \times 10^{-6} U + 39 \text{ mV}$	
		50 kHz to 100 kHz	$2.9 \times 10^{-6} U + 63 \text{ mV}$	
		>100 V to 750 V		
		5 Hz to 10 Hz	$7.9 \times 10^{-6} U + 0.18 \text{ V}$	
		10 Hz to 20 kHz	$7.9 \times 10^{-6} U + 0.18 \text{ V}$	
		20 kHz to 50 kHz	$4.8 \times 10^{-6} U + 0.30 \text{ V}$	
		50 kHz to 100 kHz	$3.2 \times 10^{-6} U + 0.47 \text{ V}$	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
DC Current	Direct Method using DMM6500 Multimeter <i>A = Measured Current Value</i>	0 to 10 μ A	3.1×10^{-5} / + 0.4 nA	Laboratory/ Client Premises
		>10 to 100 μ A	3.6×10^{-5} / + 3.6 A	
		>100 μ A to 1 mA	3.6×10^{-5} / + 0.04 μ A	
		>1 mA to 10 mA	3.1×10^{-5} / + 0.40 μ A	
		>10 mA to 100 mA	3.6×10^{-5} / + 3.6 μ A	
		>100 mA to 1 A	3.6×10^{-5} / + 37 μ A	
		> 1 A to 3 A	4.3×10^{-5} / + 67 μ A	
		> 3 A to 10 A	1.1×10^{-5} / + 2.0 mA	
AC Current	Direct Method using DMM6500 Multimeter <i>I = Measured Current value</i>	0 to 100 μ A 3 Hz to 1 kHz	2.1×10^{-6} / + 5.5 nA	Laboratory/ Client Premises
		>100 μ A to 1 mA 3 Hz to 5 kHz	5.3×10^{-6} / + 0.31 μ A	
		>1 mA to 10 mA 3 Hz to 5 kHz	5.8×10^{-6} / + 3.1 μ A	
		>10 mA to 100 mA 3 Hz to 5 kHz	5.8×10^{-6} / + 31 μ A	
		>100 mA to 1 A 3 Hz to 5 kHz	5.8×10^{-6} / + 0.31 mA	

Accreditation Scope

Electrical Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
AC Current	Direct Method using DMM6500 Multimeter <i>I = Measured Current value</i>	>1 A to 3 A 3 Hz to 5 kHz	$4.7 \times 10^{-6} / + 1.4 \text{ mA}$	Laboratory/ Client Premises
		>3 A to 10 A 3 Hz to 5 kHz	$4.6 \times 10^{-6} / + 4.7 \text{ mA}$	
Resistance	Direct Method using DMM6500 Multimeter <i>R = Measured Resistance value</i>	0 Ω to 1.0 Ω	$1.1 \times 10^{-5} R + 0.16 \text{ m}\Omega$	Laboratory/ Client Premises
		>1 Ω to 100 Ω	$4.8 \times 10^{-5} R + 0.12 \text{ m}\Omega$	
		>100 Ω to 1 k Ω	$4.8 \times 10^{-5} R + 1.2 \text{ m}\Omega$	
		>1 k Ω to 10 k Ω	$5.6 \times 10^{-5} R + 2 \text{ m}\Omega$	
		>10 k Ω to 100 k Ω	$5.4 \times 10^{-5} R + 0.45 \text{ }\Omega$	
		>100 k Ω to 1 M Ω	$5.6 \times 10^{-5} R + 1.9 \text{ }\Omega$	
		>1 M Ω to 10 M Ω	$5.4 \times 10^{-5} R + 44 \text{ }\Omega$	
		>10 M Ω to 100 M Ω	$4.2 \times 10^{-5} R + 2 \text{ k}\Omega$	

Accreditation Scope

Mass and Balance Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Conventional Mass/ Weights	Comparison weighing in air, acc. OIML R 111- 1:2004, OIML-D28:2004, PTB-Guide MA-40 SOP: GTS-WP-17	1 mg	0.02 mg	Laboratory
		2 mg	0.02 mg	
		5 mg	0.02 mg	
		10 mg	0.02 mg	
		20 mg	0.02 mg	
		50 mg	0.02 mg	
		100 mg	0.017 mg	
		200 mg	0.02 mg	
		500 mg	0.02 mg	
		1 g	0.02 mg	
		2 g	0.02 mg	
		5 g	0.03 mg	
Conventional Mass/ Weights	Comparison weighing in air, acc. OIML R 111- 1:2004, OIML-D28:2004, PTB-Guide MA-40 SOP: GTS-WP-17	10 g	0.03 mg	Laboratory
		20 g	0.05 mg	
		50 g	0.09 mg	

Accreditation Scope

Mass and Balance Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Conventional Mass/ Weights	Comparison weighing in air, acc. OIML R 111- 1:2004, OIML-D28:2004, PTB-Guide MA-40 SOP: GTS-WP-17	100 g	0.19 mg	Laboratory
		200 g	0.35 mg	
		500 g	0.81 mg	
		1 kg	1.6 mg	
		2 kg	8.7 mg	
		5 kg	8.4 mg	
		10 kg	0.16 g	
		20 kg	0.17 g	
Mass/ Electronic top loading direct reading balance	Use of Mass Standards, acc. to ASTM E 898-20 SOP: GTS-WP-01	0 to 100 g	0.1 mg	Laboratory/ Client Premises
		> 100 - 210 g	0.2 mg	
		> 210 - 500 g	0.6 mg	
		> 0.5 - 1 kg	1.0 mg	
		> 1 - 5 kg	9.0 mg	
		> 5 - 10 kg	13 mg	
		> 10 - 30 kg	0.23 g	

Accreditation Scope

Mass and Balance Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 15

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Mass/ Electronic top loading direct reading balance	Use of Mass Standards, acc. to ASTM E 898-20 SOP: GTS-WP-01	> 30 - 100 kg	0.45 g	Laboratory/ Client Premises
		> 100 - 500 kg	2.3 g	
		> 500 - 1000 kg	0.46 kg	
		> 1000 - 2000 kg	0.69 kg	
Mass/ concrete and asphalt batching plants (Hopper Scale)	Use of Mass Standards, acc. to ASTM C94/C94M & NIST Handbook 44	0 Up to 5000 kg	0.05%	Client Premises

Accreditation Scope

Pressure Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 16

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Pneumatic Pressure (gauge)/ Digital & Analogue Indicating devices	Comparison method, acc. to DKD R 6-1:2014 SOP: GTS-WP-02	0 to 2 MPa	0.02 % f.s.	Laboratory/ Client Premises
Pneumatic Pressure (gauge)/ Devices with Electrical Output	Comparison method, acc. to DKD R 6-1:2014 SOP: GTS-WP-02	0 to 10 MPa	0.12 % f.s.	Laboratory/ Client Premises
Vacuum pressure (negative gauge)/ Analogue & Digital Indicating Devices	Comparison method, acc. to DKD R 6-1:2014 SOP: GTS-WP-03	- 0.09 MPa to 0	0.1 % f.s.	Laboratory/ Client Premises
Hydraulic Pressure (gauge)/ Digital & Analogue Pressure indicating devices	Comparison method, acc. to DKD R 6-1:2014 SOP: GTS-WP-02	0.069 MPa to 120 MPa	0.02 % f.s.	Laboratory
Hydraulic Pressure (gauge)/ Devices with Electrical Output	Comparison method, acc. to DKD R 6-1:2014 SOP: GTS-WP-02	0.069 MPa to 120 Mpa	0.11 % f.s.	Laboratory

Accreditation Scope

Pressure Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 16

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Hydraulic-pressure balance	Comparison method, acc. to OIML R 110: 1994 and EURAMET cg 3 v1 (2011) SOP: GTS-WP-143	0.069 MPa to 140 MPa	0.01 % rdg.	Laboratory
Pneumatic pressure balance	Comparison method, acc. to OIML R 110: 1994 and EURAMET cg 3 v1 (2011) SOP: GTS-WP-143	0.05 MPa to 2.5 MPa	0.01 % rdg.	Laboratory
Pneumatic pressure (gauge)/ Non-invasive non-automated Sphygmomanometers	Comparison method, acc. to OIML R 148- 1:2020 SOP: GTS-WP-184	0 to 40 kPa (0 to 300 mmHg)	0.58 % f.s.	Laboratory/ Client Premises

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Caliper Digital (Resolution:0.01 mm)	GTS-WP-22 Based on BS EN ISO 13385-1: 2019 For determining error of indicated size Comparison with gauge blocks / calliper checker	0 mm to 300mm	15 μ m	Laboratory/ Client Premises (Std. room/ Metrology)
		>300 mm to 600 mm	20 μ m	
		>600 mm to 1000 mm	34 μ m	
		>1000 mm to 1500 mm	45 μ m	
		>1500 mm to 2000 mm	60 μ m	
Caliper Dial/Vernier (Resolution:0.02 mm)	GTS-WP-22 Based on BS EN ISO 13385-1: 2019 For determining error of indicated size Comparison with gauge blocks / calliper checker	0 – 200 mm	25 μ m	Laboratory/ Client Premises (Std. room/ Metrology)
		>200mm to 300mm	27 μ m	
		>300 mm to 600 mm	28 μ m	
		>600 mm to 1000 mm	36 μ m	
		>1000 mm to 1500 mm	48 μ m	
		>1500 mm to 2000 mm	62 μ m	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Vernier Caliper (Resolution: 0.05 mm)	GTS-WP-22 Based on BS EN ISO 13385-1: 2019 For determining error of indicated size Comparison with gauge blocks / calliper checker	0 – 200 mm	41 µm	Laboratory/ Client Premises (Std. room/ Metrology)
		>200mm to 300mm	43 µm	
		>300 mm to 600 mm	45 µm	
		>600 mm to 1000 mm	49 µm	
		>1000 mm to 1500 mm	58 µm	
		>1500 mm to 2000 mm	67 µm	
External Micrometer (Digital) LC: 0.001 mm)	GTS-WP-23 Based on BS EN ISO 3611 & BS 870 (only for limits of error reference) For determining error of indicated size Comparison with gauge blocks	0-25mm (already available)	2.5 µm	Laboratory/ Client Premises (Std. room/ Metrology)
		>25 mm up to 100 mm	4 µm	
		>100 mm up to 500 mm	10 µm	
		>500 mm up to 925 mm	20 µm	
External Micrometer (Analogue LC:0.01 mm)	GTS-WP-23 Based on BS EN ISO 3611 & BS 870 (only for limits of error reference) For determining error of indicated size Comparison with gauge	0 up to 25 mm	3 µm	Laboratory/ Client Premises (Std. room/ Metrology)
		>25mm up to 100mm	4 µm	
		>100mm up to 500mm	10 µm	
		>500mm up to 925mm	20 µm	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Micrometer Setting Standard	GTS-WP-23 Based on BS EN ISO 3611 For determining length using 1D comparator (ULMS)	Up to 100 mm	2 μ m	Laboratory
		>100 up to 600 mm	9 μ m	
Micrometer Setting Standard	GTS-WP-23 Based on BS EN ISO 3611 (using HMS) For determining length using HMS	Upto 100 mm	3 μ m	Laboratory
		>100mm up to 600mm	10 μ m	
		>600 mm up to 900 mm	15 μ m	
Depth Micrometer (Digital/ analogue)	GTS-WP-28 Based on BS EN ISO 6468 For determining error of indicated depth Comparison with gauge blocks	Up to 25mm	3 μ m	Laboratory
		>25 mm up to 100mm	4 μ m	
		>100 mm up to 300 mm	6 μ m	
		Up to 100mm /0.01mm	5.8 μ m	
		>100mm up to 300mm /0.01 mm	12 μ m	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Tubular Micrometer / Inside Micrometer (Digital / Analogue) and extension rods	GTS-WP-24 Based on BS 959: 2008 For determining error of indicated size Comparison with gauge blocks using the apparatus described in BS 959: 2008.	Up to 75 mm	3.7 µm	Laboratory
		75 to 150 mm	4.5 µm	
		150 to 300 mm	7.2 µm	
Tubular Micrometer / Inside Micrometer (Digital / Analogue) and extension rods	GTS-WP-24 Based on BS 959: 2008 For determining error of indicated size Comparison with gauge blocks and scale of the universal length measuring machine (ULMS).	Up to 75 mm	3.5 µm	Laboratory
		75 to 150 mm	4.2 µm	
		150 to 300 mm	7.0 µm	
		300 to 450 mm	12 µm	
		450 to 680 mm	13 µm	
Inside Micrometer (Caliper Type)	GTS-WP-24 Based on BS EN ISO 959 For determining error of indicated size Comparison with gauge blocks, ring gauges and ULMS	up to 50 mm	5.3 µm	Laboratory

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Dial/Digital Indicators	GTS-WP-26 Based on BS EN ISO 463& BS 907 (only for limits of error reference) For determining error of indicated displacement Comparison with ULMS	0.01mm up to 100mm /0.01mm	6 µm	Laboratory
		0.001 mm up to 50 mm /0.001 mm	3 µm	Laboratory
		Comparison with dial gauge calibrator 0.01mm up to 25mm /0.01mm	7 µm	Laboratory/ Client Premises
Bore Gauge(Ordinary/ Digital)	GTS-WP-27 Based on JIS B 7515 For determining error of indicated diameter Comparison with calibration tester and ULMS	Up to 400 mm/0.001mm	9 µm	Laboratory
		Up to 400 mm/0.01mm	10 µm	
LVDT (Ordinary/ Digital)	GTS-WP-168 Based on ASTM F2537 For determining error of indicated displacement Mechanical comparison to calibrated gauge blocks/ULMS	UP to 200mm	2+(0.04*L) µm; L: mm	Laboratory/ Client Premises (Std. room)

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Dial Test Indicator/ Lever Type Dial Gauges	GTS-WP-172 Based on BS EN ISO 463, BS 2795 & IS 11498 For determining error of indicated displacement Comparison with ULMS	Up to 1mm/0.001mm	2 μ m	Laboratory
		Up to 1mm/0.01mm	6 μ m	
Dial Test Indicator/ Lever Type Dial Gauges	Comparison with dial gauge calibrator	Up to 1mm/0.01mm	7 μ m	Laboratory/ Client Premises
Dial/Digital Thickness Gauges	GTS-WP-36 Based on JIS B7503; JIS B7524 For determining error of indicated size Comparison with ULMS / calibrated gauge blocks	Up to 25mm /0.001mm	1.4 μ m	Laboratory
		Up to 25mm /0.01mm	6.5 μ m	
Depth Gauge (Dial / Digital / Vernier)	GTS-WP-29 Based on BS EN ISO 13385-2: 2020 For determining error of indicated depth Comparison with gauge blocks	Up to 300 mm / 0.01 mm	20 μ m	Laboratory
		Up to 450 mm / 0.01 mm	25 μ m	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Height Gauge (Digital / Dial / Analogue)	GTS-WP-25 Based on ISO 13225 : 2012 For determining error of indicated vertical size Comparison with gauge blocks and HMS	Up to 300 mm	11 μ m	Laboratory/ Client Premises (Std. room/ Metrology)
		300 to 600 mm	13 μ m	
		600 to 1000 mm	41 μ m	
Feeler Gauge	GTS-WP-56 Based on BS 957 For determining thickness Comparison method using calibrated digital micrometer	Up to 1mm	3.5 μ m	Laboratory/ Client Premises (Std. room/ Metrology)
Radius Gauge	GTS-WP-81 Based on IS 5273-1969 For determining radius using Profile Projector	Up to 25mm	9 μ m	Laboratory
Thread / Screw Pitch Gauge (Metric/inch)	GTS-WP-126 Based on IS 4211 For determining pitch using Profile Projector	0.4 - 7 mm	6 μ m	Laboratory
		4 - 42 TPI	240 μ in	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Thread Plug gauges (Metric / Unified/BSP (or) G threads)	GTS-WP-70 Based on EURAMET cg-10 For determining Simple Pitch Diameter using ULMS	1mm Up to 100mm	4 μ m	Laboratory
	For determining Simple Pitch Diameter using ULMS	>100 Up to 200mm	5 μ m	
	For determining Simple Pitch Diameter using ULMS Inch - Unified / BSP	1/16" up to 4"	160 μ in	
Thread Plug gauges (Metric / Unified/BSP (or) G threads)	For determining Simple Pitch Diameter using ULMS Inch - Unified / BSP	Above 4" and including 8"	200 μ in	Laboratory
Thread Ring gauges (Metric / Unified/BSP (or) G threads)	GTS-WP-137 Based on EURAMET cg-10 For determining Simple Pitch Diameter using ULMS Metric Threads	3mm up to 14mm	3 μ m	Laboratory
	For determining Simple Pitch Diameter using ULMS	>14mm up to and including 100 mm	4 μ m	
	For determining Simple Pitch Diameter using ULMS	1/8" up to 1/2"	120 μ in	
	Inch – Unified /BSP	1/2"< and including 4"	160 μ in	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Thread Plug/Ring gauge – Taper (NPT/BSPT)	GTS-WP-173 Based on JIS B 0262 & EURAMET cg-10 For determining Simple Pitch Diameter using ULMS	1/8" up to 1/2"	140 µm	
		1/2"< and including 4"	180 µm	
Setting / Plain Plug gauge (Metric/Inch)	GTS-WP-80 Based on ASME B89.1.5 & EURAMET cg-6 For determining diameter Comparison with ULMS scale / gauge block using ULMS	1 mm up to 50 mm	1 µm	Laboratory
		>50 mm up to 100 mm	1.5 µm	
		>100 mm up to 400 mm	5 µm	
Setting / Plain Ring gauge (Metric/Inch)	GTS-WP-106 Based on BS 4064 & EURAMET cg-6 For determining diameter Comparison with reference ring gauge using ULMS	1 to 14mm	1.3 µm	Laboratory
		14< to 100mm	1.5 µm	
		100< to 200mm	3 µm	
		200< to 300mm	4.5 µm	
		300< to 400mm	5 µm	

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Height Measuring System (HMS) / Digital Height Gauge with resolution of 0.001 mm or better.	GTS-WP-169 Based on ISO 13225:2012 For determining error of indicated vertical size Comparison with gauge blocks	Up to 1000 mm	$1+(0.008*L)\mu\text{m}$ L: mm	Laboratory/Client Premises(Std. room/ Metrology)
1-D measuring Machine (Universal Length Measuring System (ULMS))	GTS-WP-139 For determining error of indicated size/displacement Mechanical comparison to gauge blocks	Up to 100mm (absolute) Up to 600mm (differential)	$0.2+(0.006*L)\mu\text{m}$ L: mm	Laboratory / Client Premises (Std. room/ Metrology)
Steel Scale	GTS-WP-171 Based on OIML R035-1- e& BS 4372 Measurement of line spacing using profile projector	Up to 300 mm	0.050 mm	Laboratory

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Profile Projector	GTS-WP-158 Based on JIS B 7184 For determining error of indicated size/displacement/Magni fication Accuracy/angular displacement Comparison to calibrated Glass scale and angular gauge blocks/Cross wire chart	Up to 200mm (0-360)°	5 + (0.015*L) µm L: mm 0.14° (8 arc minutes)	Laboratory/ Client Premises (Std. room/ Metrology)
Cylindrical Standards / Measuring Pins	GTS-WP-170 Based on IS-11103 For determining diameter Comparison with ULMS scale / reference gauge block using ULMS	Up to 12 mm	1 µm	Laboratory

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Thread Measuring Cylinder	GTS-WP-170 Based on BS 3777 & BS 5590 For determining diameter Comparison with ULMS scale / reference gauge block using ULMS	Up to 6.35mm	1 μ m	Laboratory
Caliper Checker	GTS-WP-164 Based on Manufacturer Spec. For determining face spacing Comparison to gauge blocks using precise HMS	Up to 600mm	1 + (0.01*L) μ m L: mm	Laboratory
Depth Micro Checker	GTS-WP-165 and 166 Based on Manufacturer Spec. For determining face spacing Comparison to gauge blocks using precise HMS	Up to 300 mm	6.8 μ m	Laboratory

Accreditation Scope

Dimensional Calibration

LB-CAL-004

General Const. Lab Calibration LLC

Industrial Area # 11 | Sharjah | United Arab Emirates

Issue no.: 14

Date: 23-09-2024

Valid to: 24-05-2027

Calibration and Measurement Capability (CMC)				
Measured Quantity/ Calibration Instrument	Calibration Method	Range and Specification	Expanded Measurement Uncertainty (U @ k=2)	Location
Inside Micro checker	GTS-WP-166 Based on Manufacturer Spec. For determining face spacing Comparison to gauge blocks using precise HMS	Up to 300mm	4.6 μm	Laboratory
		>300mm Up to 600mm	7.0 μm	
Dial Calibration Tester	GTS-WP-167 Based on Manufactured Spec. For determining error of indicated displacement Mechanical comparison to gauge blocks using precise HMS or ULMS	Up to 25mm	2 μm	Laboratory
Test Sieves	GTS-WP-43 Based on ISO 3310-1 For determining aperture size Using Profile Projector	50 μm up to 4.3mm	8 μm	Laboratory
		4.3mm up to 125mm	32 μm	