

	ACCREDITATION DOCUMENT	F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 175
---	-----------------------------------	---

Accreditation No: LAB 175

Awarded to

**(Calibration Laboratory)
Qarshi Research International Pvt. Ltd.,
56/1-4, Phase 3, Industrial Estate,
Hattar, Haripur, Pakistan**

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **30-05-2019** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of **ISO/IEC 17025:2017**

The accreditation requires regular surveillance, and is valid until **29-05-2025**.

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

PAKISTAN NATIONAL ACCREDITATION COUNCIL

02-06-2022

Date

SD

Director General

	ACCREDITATION DOCUMENT	F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 175
---	-----------------------------------	---

Calibration Laboratory.

Accreditation Scope of Accreditation of Calibration Laboratory, M/s QARSHI RESEARCH INTERNATIONAL Pvt. Ltd. Hattar Industrial Estate, Haripur, KPK, Pakistan.

Permanent laboratory premises

Field of measurement: In house			
Measured quantity	Range	*Expanded Uncertainty (\pm)	Technique, Reference Standard, Equipment
Mass (1 mg-20 Kg) F₁ and below class weights	1 mg	0.001 mg	TEC-CAL-SCM -02 (ABBA Method) i) E ₂ & F ₁ Class Standard Weight ii) Microbalance iii) Analytical Balance, iv) Mass Comparator v) Top loading Balance, vi) Platform balance.
	2 mg	0.002 mg	
	5 mg	0.003 mg	
	10 mg	0.002 mg	
	20 mg	0.002 mg	
	50 mg	0.003 mg	
	100 mg	0.061 mg	
	200 mg	0.010 mg	
	500 mg	0.070 mg	
	1g to10 g	0.0000010 g	
	20 g to 50 g	0.00020 g	
	100 g	0.00040 g	
	200 g	0.00020 g	
	500 g	0.0010 g	
	1000 g	0.0010 g	
	2000 g	0.0020 g	
5 Kg	0.0000020 Kg		
10 Kg	0.0000020 Kg		
20 Kg	0.0000080 Kg		
Micropipette (10 µL-5000 µL)	10 µL to 50µL	0.030 µL to 0.044 µL	TEC-CAL-SCM-01 Gravimetric Method Four electronic balances used.
	51 µL to 99µL	0.044 µL to 0.088 µL	
	100 µL to 200µL	0.088 µL to 0.18 µL	
	201 µL to 499µL	0.18 µL to 0.40 µL	
	500 µL to 999µL	0.40 µL to 0.80 µL	
	1000 µL to 2999µL	0.80 µL to 2.30 µL	
	3000 µL to 5000µL	2.30 µL to 3.80 µL	
Glass wares (1 mL-5000 mL)	1 mL-5 L	0.0006 mL-0.290 L	
Metallic (20 mL-20 L)	20 mL-20 L	0.29 mL-0.292 L	
Plastic (1 mL-20 L)	1 mL-20 L	0.29 mL-0.584 L	

02-06-2022

Date

SD

Director

	ACCREDITATION DOCUMENT	F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 175
---	-----------------------------------	---

Temperature i) Liquid in Glass ii) Probes (PRT) iii) Probes (Thermocouples) iv) IR Thermometers	i) - 40 °C to 125 °C ii) - 40 °C to 420 °C iii) - 30 °C to 1300°C iv) 30 °C to 550 °C	i) 0.070 °C to 0.29 °C ii) 0.25 °C to 1.37 °C iii) 0.23 °C to 0.57 °C iv) 0.40 °C to 0.50 °C	TEC-CAL-SCM-04 Comparison Method Equipment used i. Heating bath (ISOTECH LIBRA 785 M) ii. DUAL Blocks (Fluke 9011 & 9009) iii. SATURN FURNACE (ISOTECH 877) iv. IR Calibrator (ISOTECH GEMNI (R 550/700)) v. PRT with Readout (FLUKE) vi. S & R Type Thermocouple (FLUKE) vii. Type K J Thermometer (Dwyer TC20)
Pressure (-10-10,000) Psi	-10 psi to 300 psi 301 psi to 1000 psi 1001psi to 6000 psi 6001psi to 10000 psi	0.080 psi to 0.22 psi 0.8 psi to 0.9 psi 0.9 psi to 1.4 psi 1.5 psi to 1.7 psi	TEC-CAL-SCM -06 (DKD-R61) Comparison Method i) Pneumatic Test pump with reference gauge ii) Hydraulic Test pump with reference gauge

02-06-2022
Date

SD
Director



**ACCREDITATION
DOCUMENT**

F-06/02
Issue Date: 18/08/2020
Rev. No: 09
LAB 175

Field of measurement: On-Site

Measured quantity	Range	*Expanded Uncertainty (±)	Technique, Reference Standard, Equipment
Weighing (Balances) (2 mg-120 Kg)	2 mg to 100 mg 101 mg to 500 mg 501 mg to 50 g 51 g to 200 g 201 g to 5000 g 5001g to 120 Kg	0.006 mg 0.006 mg to 0.010 mg 0.010 mg to 0.000032 g 0.000032 g to 0.0002 g 0.0002 g to 0.010 g 0.010 g to 0.01 Kg	TEC-CAL-SCM -05 (ABBA Method) i. F ₁ Class Standard Weight ii. E ₂ Class Standard Weight
Temperature i) Probes (PRT) ii) Probes (Thermocouples) iii) IR Thermometers iv) Heat Generating Sources	i) – 30 °C to 420 °C ii) - 30°C to 670 °C iii) 30 °C to 550 °C iv)-80 °C to 1100 °C -196 °C to 1450 °C (Simulated value)	i) 0.26 °C to 1.37 °C ii) 0.32 °C to 0.94 °C iii) 0.40 °C to 0.50 °C iv) 0.69 °C to 0.95 °C	TEC-CAL-SCM-04 TEC-CAL-SCM-05 Comparison Method Equipment used i. DUAL Blocks (Fluke 9011& 9009) ii. IR Calibrator (ISOTECH GEMNI R 550/700) iii. PRT with Readout (FLUKE) iv. S & R Type Thermocouple (FLUKE) v. Type K .J Thermometer (Dwyer TC20) vi. Temperature Recorder (Fluke 2638A) vii. Digital Thermometer with probe (Testo 735)
Volume Onsite i) Micropipette ii) Glassware iii) Metallic iv) Plastic	i) 10 µL to 5000 µL ii) 1 mL to 5 L iii) 20 mL to 20 L iv) 1 mL to 20 L	i) 0.20 µL to 9.2 µL ii) 0.10 mL to 0.290 L iii) 0.29 mL to 0.293 L iv) 0.29 mL to 0.584 L	TEC-CAL-SCM-07 Gravimetric Method Precision electronic balances of customer.

02-06-2022

Date

SD

Director

	ACCREDITATION DOCUMENT	F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 175
---	-----------------------------------	---

pH Meter	(4, 7 & 10) pH	0.020 pH to 0.031 pH	TEC-CAL-SCM-09 NIST Traceable pH buffers sachets. APHA, AWWA, WEF (4-95)
Conductivity Meter	(84 & 1413) $\mu\text{s/cm}$	0.88 $\mu\text{s/cm}$ to 3.30 $\mu\text{s/cm}$	TEC-CAL-SCM-08 NIST Traceable Conductivity standard solution sachets. APHA, AWWA, WEF (2-56)

* **Expanded Uncertainty:**

Expanded Uncertainty is the measurement uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k = 2$. This measurement uncertainty is a value for which the laboratory has been accredited using the procedure that was the subject of assessment. In certificates issued under its accreditation scope an accredited laboratory is not permitted to quote an uncertainty that is smaller than the published uncertainty for respective ranges as given above.

02-06-2022

Date

SD

Director