Accreditation No: LAB 175

Awarded to

QARSHI RESEARCH INTERNATIONAL Pvt. Ltd.
Hattar Industrial Estate, Haripur, KPK, 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 **29-05-2022.**

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

11-09-2020
Date

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Director General

Calibration Laboratory.

Accreditation Scope of Accreditation Scope of QARSHI RESEARCH INTERNATIONAL Pvt. Ltd. Hattar Industrial Estate, Haripur, KPK, Pakistan.

Permanent laboratory premises X

Field of measurement: In house

Measured quantity	Range	*Expanded Uncertainty (±)	Technique, Reference Standard, Equipment
Mass **(1 mg to 200 g)** **F1 Class and below** **(500 g to 20 g)** **F2 Class and below**	1 mg to 500 mg 1 g to 50 g 100 g 200 g 500 g 1000 g 2000 g 5 Kg 10 Kg 20 Kg	0.10 mg 0.00020 g 0.00040 g 0.00020 g 0.010 g 0.010 g 0.020 g 0.00010 Kg 0.00010 Kg 0.00010 Kg	**TEC-CAL-SCM -02** **(ABBA Method)** i)E_2 & F_1 Class Standard Weight ii) Analytical Balance, iii) Top loading Balance, iv) Platform balance.
Micropipette **(10 µL-5000 µL)**	10 µL to 50µL 51 µL to 99µL 100 µL to 200µL 201 µL to 499µL 500 µL to 999µL 1000 µL to 2999µL 3000 µL to 5000µL	0.10 µL 0.10 µL to 0.20 µL 0.20 µL 0.20 µL to 0.40 µL 0.40 µL to 0.80 µL 0.80 µL to 2.30 µL 2.30 µL to 3.80 µL	**TEC-CAL-SCM-01** **Gravimetric Method** Three precision electronic balances used.
Glass wares **(1 mL-5000 mL)**	1 mL-5 L	0.10 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	

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Director

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) 0.74 ˚C to 0.78 ˚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) ii. SATURN FURNACE (ISOTECH 877) v. IR Calibrator (ISOTECH GEMNI (R 550/700) v. PRT with Readout (FLUKE) vi. S& R Type Thermocouple (FLUKE) ii. 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

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Field of measurement: On-Site			
Measured quantity	**Range**	***Expanded Uncertainty (±)**	**Technique, Reference Standard, Equipment**
Weighing (Balances) (2 mg-120 Kg)	2 mg to 220 g 221g to 500 g 501g to 6000 g 6001g to 120 Kg	0.20 mg to 0.40 mg 0.01 g to 0.20 g 0.20g to 0.40 g 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 ^{0}C to 1450 ^{0}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)
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

* **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.

11-09-2020
Date

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Director