Calibration Laboratory.

Accreditation Scope of Mirage Rebuild Factory (MRF), PMEL, PAC, Kamra, Pakistan.

Permanent laboratory premises [X]

Field Of Measurement:			
Measured Quantity	**Range**	**Best Measurement Uncertainty expressed as an uncertainty (±)**	**Equipment Used**
		Physical	
Temperature	-50 ºC -115 ºC	1.2 ºC	Temperature Bath Model MR-1 ID No 505-19
Pressure	5 psi -500 psi	2.0 psi	Dead Weight Tester Model 5001 ID NO 505-34
	500 psi -2000 psi	3.0 psi	
	2000 psi -5000 psi	4.0 psi	
Torque	10 inch lbs -200 inch lbs	1.5 inch lbs	Torque Wrench Tester Model TQTPR216 ID No 505-17 & Torque Wrench Tester Model TQPC650 ID NO 505-22
	200 inch lbs -600 in lbs	12 inch lbs	
	1 Nm —20 Nm	0.24 Nm	
	20 Nm -270 Nm	2 Nm	
	10 ft lbs -200 ft lbs	3.4 ft lbs	
	200 ft lbs -600 ft lbs	10 ft lbs	
	0.4 kgm -6 kgm	0.25 kgm	
	6 kgm -75 kgm	0.6 kgm	

Date

Director

Measured Quantity	Range	Best Measurement Uncertainty expressed as an uncertainty (±)	Equipment Used
Dimensional			
DTI	0 mm - 10 mm	0.001 mm	DTI Tester Model 865E ID No 505-13
Weight	1 g -200 g	0.01 g	Digital Weighing Scale Model GF-8K ID No 505-205 & Weight Set ID No 505-10
Gauge block set	0.5 mm - 100 mm	0.08 µm	Gauge Block Testing Unit Model 826E & Gauge Block Set 00 grade 505-7
Outside Micrometer	0 mm - 25 mm	0.001 mm	Gauge Block Sets Grade 0(Mahr) ID No 505-184 Gauge Block Set 00 grade 505-7 (Mitutoyo)
Feeler gauge	0 mm – 1 mm	0.002 mm	Digital Micrometer ID No 505-99
Ring gauge	10 mm - 80 mm	0.001 mm	Measuring Machine Model 314B ID No 505-65

Measured Quantity	Range	Best Measurement Uncertainty expressed as an uncertainty (±)	Equipment Used
Electronics / Electrical			
AC Voltage	10 mv – 320 mV	0.0128 mV	Digital Reference Multimeter Model 8505A ID No 505-190 & Universal Calibration system Model 9100 ID No 505-179
	320 mV – 3.2 V	0.00021 V	
	3.2 V – 32 V	0.0015 V	
	32 V – 320 V	0.013 V	
	320 V – 1000 V	0.016 V	
DC Voltage	10 mV – 320 mV	0.001 mV	
	320 mV – 3.2 V	0.00001 V	
	3.2 V – 32 V	0.0001 V	
	32 V – 320 V	0.0081 V	
	320V – 1000V	0.01V	
AC Current	10 mA – 30 mA	.0091mA	
	30 mA – 300 mA	0.810 mA	
	300 mA – 3 A	0.00023 A	
	3 A – 20 A	0.00024 A	
	20 A – 100 A	0.1 A	
	100 A – 200 A	0.1 A	
	200 A – 500 A	0.1 A	
	500 A – 1000 A	0.126 A	
DC Current	10 mA – 30 mA	0.000824 mA	
	30 mA – 300 mA	0.001 mA	
	300 mA – 3 A	0.000068 A	
	3 A – 20 A	0.0001A	
	20 A – 100 A	0.1 A	
	100 A – 200 A	0.11 A	
	200 A – 500 A	0.11 A	
	500 A – 1000 A	0.124 A	
Resistance	1 Ω – 40 Ω	0.000178 Ω	
	40 Ω – 400 Ω	0.001 Ω	
	400 Ω – 4 kΩ	0.000012 kΩ	
	4 kΩ – 40 kΩ	0.0001 kΩ	
	40 kΩ – 400 kΩ	0.001 kΩ	
	400 kΩ – 4 MΩ	0.00001 MΩ	
	4 MΩ – 40 MΩ	0.0001 MΩ	
	40 MΩ – 400 MΩ	0.001 MΩ	

Date

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Measured Quantity	Range	Best Measurement Uncertainty expressed as an uncertainty (±)	Equipment Used
Insulation	1 MΩ – 3 MΩ	0.00001 MΩ	Universal Calibration system Model 9100 ID No 505-179
	3 MΩ – 30 MΩ	0.000068 MΩ	
	30 MΩ – 300 MΩ	0.00078 MΩ	
	300 MΩ – 2 GΩ	0.00001GΩ	
Frequency	1 Hz – 600 MHz	0.00288 KHz	
Conductance	10 nS – 100 nS	0.26 nS	
	101 nS – 250 nS	0.26 nS	
	251 nS – 500 nS	0.16 nS	
	501 nS – 1 µS	0.16 nS	
	1.1 µS – 1.9 µS	0.32 nS	
Capacitance	5 µF – 50 µF	0.12 µF	
	51 µF – 150 µF	0.128 µF	
	151µF – 250 µF	0.136 µF	

Date

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