SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	1 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Permanent Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50 Hz)	Using Precision Current Clamp with Digital Multimeter by Comparison method	20 A to 1000 A	0.6 % to 3.7 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	100 µA to 100 mA	0.058 % to 0.053 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	30 µA to 100 µA	0.26 % to 0.058 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 10 kHz	Using Reference Digital Multimeter by Direct method	1 A to 20 A	0.094 % to 0.30 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 2 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 10 kHz	Using Reference Digital Multimeter by Direct method	100 mA to 1 A	0.058 % to 0.11 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage (50Hz)	Using High Voltage Divider Probe with Multimeter by comparison method	1 kV to 28 kV	6.8 % to 1.98 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 1 kHz to 10 kHz	Using Reference Digital Multimeter by Direct method	1 mV to 100 mV	0.50 % to 0.018 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 1 kHz to 10 kHz	Using Reference Digital Multimeter by Direct method	100 mV to 100 V	0.018 % to 0.015 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 1 kHz to 10 kHz	Using Reference Digital Multimeter by Direct method	100 V to 1000 V	0.015 % to 0.031 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 3 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 10 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	1 mV to 100 mV	1.64 % to 0.034 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 10 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	100 mV to 100 V	0.031 % to 0.015 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 50 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	100 V to 1000 V	0.017 % to 0.041 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	DC Capacitance	Using Reference Digital Multimeter by Direct method	1 nF to 1 mF	16.74 % to 5.08 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT (30 µA @ 1kHz) (100 mA @1kHz to 5kHz)	Using Multiproduct Calibrator by Direct method	30 µA to 100 mA	0.92 % to 0.18 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 4 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 1 kHz to 5 kHz	Using Multiproduct Calibrator by Direct method	1 A to 20 A	0.81 % to 3.49 %
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 1 kHz to 5 kHz	Using Multiproduct Calibrator by Direct method	100 mA to 1 A	0.18 % to 0.81 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	1 A to 20 A	0.076 % to 0.21 %
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	100 mA to 1 A	0.48 % to 0.076 %
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	30 µA to 100 mA	0.56 % to 0.48 %
20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 50 Hz	Using Multiproduct Calibrator with Toroidal Coil by Direct method	10 A to 1000 A	0.80 % to 0.81 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 5 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power, Single Phase, 50Hz @ UPF, 0.1 V to 1000 V, 0.01 A to 20 A	Using Multiproduct Calibrator by Direct method	10 mW to 20 kW	0.23 % to 3.30 %
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power,Single Phase, 50Hz @ UPF, 0.1 V to 1000 V, 0.01 A to 20 A	Using Multiproduct Calibrator with Toroidal Coil by Direct method	0.05 kW to 1 MW	0.81 % to 3.30 %
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	1 V to 1000 V	0.025 % to 0.038 %
24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	1 mV to 3 mV	0.83 % to 0.26 %
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	100 mV to 1 V	0.031 % to 0.041 %
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	3 mV to 100 mV	0.26 % to 0.44 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 6 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100Hz	Using Multiproduct Calibrator by Direct method	0.109 mF to 1 mF	0.64 % to 1.4 %
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100Hz	Using Multiproduct Calibrator by Direct method	1 µF to 109 µF	0.42 % to 0.64 %
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1kHz	Using Multiproduct Calibrator by Direct method	10 nF to 200 nF	0.42 % to 0.47 %
30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1kHz	Using Multiproduct Calibrator by Direct method	200 nF to 1 µF	0.35 % to 0.43 %
31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1kHz	Using Multiproduct Calibrator by Direct method	220 pF to 10 nF	5.84 % to 0.43 %
32	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1kHz	Using Decade Inductance Box by Direct method	1 mH to 100 mH	2.89%

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 7 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
33	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1kHz	Using Decade Inductance Box by direct method	100 µH to 1 mH	3.24 % to 2.89 %
34	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor/Phase angle @ 50Hz	Using Multiproduct Calibrator by Direct method	0.200 lag to 1.000	1.23 % to 0.08 %
35	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor/Phase angle @ 50Hz	Using Multiproduct Calibrator by Direct method	0.200 lead to 1.000	1.23 % to 0.08 %
36	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Reference Digital Multimeter by Direct method	1 A to 10 A	0.026 % to 0.058 %
37	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Reference Digital Multimeter by Direct method	10 µA to 100 µA	0.072 % to 0.0028 %
38	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Reference Digital Multimeter by Direct method	10 A to 20 A	0.058 % to 0.047 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 8 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Reference Digital Multimeter by Direct method	10 mA to 100 mA	0.0028 % to 0.0063 %
40	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Reference Digital Multimeter by Direct method	100 µA to 10 mA	0.0028%
41	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using Reference Digital Multimeter by Direct method	100 mA to 1 A	0.063 % to 0.026 %
42	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using High Voltage Divider Probe with Digital Multimeter by Direct method	1 kV to 25 kV	6.70 % to 2.9 %
43	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2-wire)	Using Reference Digital Multimeter by Direct method	1 Gohm to 10 Gohm	0.22%
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2-wire)	Using Reference Digital Multimeter by Direct method	10 Mohm to 1 Gohm	0.0039 % to 0.22 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 9 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (4-Wire)	Using Reference Digital Multimeter by Direct method	1 mohm to 10 mohm	0.48 % to 0.05 %
46	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (4-Wire)	Using Reference Digital Multimeter by Direct method	10 mohm to 10 Ohm	0.05 % to 0.0016 %
47	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (4-wire)	Using Reference Digital Multimeter by Direct method	10 Ohm to 100 kohm	0.001%
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (4-wire)	Using Multiproduct Calibrator by Direct method	100 kohm to 10 Mohm	0.0012 % to 0.0039 %
49	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Reference Digital Multimeter by Direct method	0.1 mV to 1 mV	0.13 % to 0.013 %
50	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Reference Digital Multimeter by Direct method	1 mV to 100 mV	0.013 % to 0.001 %

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	10 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
51	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Reference Digital Multimeter by Direct method	1 V to 10 V	0.0006%
52	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Reference Digital Multimeter by Direct method	10 µV to 0.1 mV	1.31 % to 0.13 %
53	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Reference Digital Multimeter by Direct method	10 V to 1000 V	0.00056 % to 0.00074 %
54	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using Reference Digital Multimeter by Direct method	100 mV to 1 V	0.001 % to 0.0006 %
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct method	1 A to 10 A	0.028 % to 0.064 %
56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct method	1 mA to 100 mA	0.017 % to 0.015 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 11 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct method	10 µA to 190 µA	0.25 % to 0.03 %
58	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator with Toroidal Coil by Direct method	10 A to 1000 A	0.88 % to 0.86 %
59	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct method	10 A to 20 A	0.064 % to 0.12 %
60	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct method	100 mA to 1 A	0.015 % to 0.028 %
61	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct method	190 µA to 1 mA	0.03 % to 0.017 %
62	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC POWER 3mW to 20kW (0.1V to 1000V, 0.03A to 20A)	Using Multiproduct Calibrator by Direct method	3 mW to 20 kW	0.28 % to 0.12 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 12 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
63	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2-wire)	Using Multiproduct Calibrator by Direct method	10 Mohm to 300 Mohm	0.018 % to 0.63 %
64	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2-wire)	Using Multiproduct Calibrator by Direct method	100 kohm to 10 Mohm	0.005 % to 0.018 %
65	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2-wire)	Using Multiproduct Calibrator by Direct method	300 Mohm to 1 Gohm	0.63 % to 1.80 %
66	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4-wire)	Using Multiproduct Calibrator by Direct method	0.2 Ohm to 2 Ohm	5.78 % to 0.58 %
67	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4-wire)	Using Multiproduct Calibrator by Direct method	10 Ohm to 100 Ohm	0.12 % to 0.021 %
68	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4-wire)	Using Multiproduct Calibrator by Direct method	100 Ohm to 100 kohm	0.021 % to 0.005 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 13 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
69	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4-wire)	Using Multiproduct Calibrator by Direct method	2 Ohm to 10 Ohm	0.58 % to 0.12 %
70	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct method	0.03 mV to 1 mV	4.11 % to 0.12 %
71	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct method	1 mV to 100 mV	0.12 % to 0.004 %
72	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct method	1 V to 10 V	0.002%
73	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct method	10 V to 1000 V	0.002 % to 0.0025 %
74	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct method	100 mV to 1 V	0.004 % to 0.002 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 14 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
75	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (Insulation Resistance Upto 5 kV) (2-wire)	Using High Voltage Decade Resistance Box by Direct method	1 Gohm to 10 Gohm	5.78 % to 5.79 %
76	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (Insulation Resistance Upto 5 kV) (2-wire)	Using High Voltage Decade Resistance Box by Direct method	100 kohm to 1 Gohm	2.31 % to 5.78 %
77	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope (DC Signal)	Using Multiproduct Calibrator with Scope function by Direct method	1 mV to 55 V	4.77 % to 0.21 %
78	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope, Amplitude, Square Wave Signal	Using Multiproduct Calibrator with Scope function by Direct method	1 mV to 55 Vp-p	4.89 % to 0.21 %
79	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope, Band Width @ 50 kHz Reference, 50kHz to 1GHz	Using Multiproduct Calibrator with Scope function by Direct method	50 kHz to 1 GHz	2.05 % to 5.89 %
80	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope, Time Marker	Using Multiproduct Calibrator with Scope function by Direct method	1 ns to 5 s	0.03 % to 0.58 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 15 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
81	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	pH Meter	Using Multi function Calibrator by Simulation method	0 to 14 pH	0.04pH
82	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (RTD)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 800 °C	0.013°C
83	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - B TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	600 °C to 1800 °C	0.02°C
84	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - E TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-250 °C to 1000 °C	0.014°C
85	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - J TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 1200 °C	0.014°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	16 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
86	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - K TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 1370 °C	0.060°C
87	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - L TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 900 °C	0.014°C
88	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - N TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 1300 °C	0.016°C
89	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - R TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	0 °C to 1760 °C	0.02°C
90	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - S TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	0 °C to 1760 °C	0.02°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 17 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
91	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - T TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-250 °C to 400 °C	0.008°C
92	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - U TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 600 °C	0.016°C
93	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT / CONTROLLER / LOGGERS / RECORDER (RTD)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	0 °C to 800 °C	0.11°C
94	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT / CONTROLLER / LOGGERS / RECORDER (RTD)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	-200 °C to 0 °C	0.05°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	18 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
95	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - B TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	600 °C to 1800 °C	0.42°C
96	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - E TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-250 °C to 1000 °C	0.12°C
97	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - J TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 1200 °C	0.15°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	19 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
98	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - K TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 1370 °C	0.18°C
99	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - L TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 900 °C	0.13°C
100	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - N TYPE)	Using Multiproduct Calibrator in Conversion by using ITS 90 Scale mV to °C	-200 °C to 1300 °C	0.16°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	20 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
101	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - R TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	0 °C to 1760 °C	0.47°C
102	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - S TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	0 °C to 1760 °C	0.45°C
103	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - T TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	-250 °C to 400 °C	0.11°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	21 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
104	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - U TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	-200 °C to 600 °C	0.13°C
105	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	FREQUENCY	Using Reference Digital Multimeter by Direct method	10 Hz to 1 MHz	0.24 % to 0.0014 %
106	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	TIME INTERVAL (Stopwatch, Timers) 1 s to 24 hr	Using Digital Bench Timer by Comparison method	1 s to 86400 s	0.086 s to 1.002 s
107	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	FREQUENCY	Using Multiproduct Calibrator by Direct method	10 Hz to 1 MHz	6.98 ppm to 3.0 ppm
108	MECHANICAL-ACCELERATION AND SPEED	Digital Tachometer & Speed Measurement (Contact Type)	Using Tachogenerator and Precision Digital Tachometer by Comparison method	6 rpm to 4500 rpm	8.57 % to 0.034 %

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	22 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
109	MECHANICAL-ACCELERATION AND SPEED	Digital Tachometer, RPM Meter Digital & Speed Measurement (Non-Contact Type)	Using Tachogenerator and Precision Digital Tachometer by Comparison method	6 rpm to 90000 rpm	7.50 % to 0.016 %
110	MECHANICAL-ACOUSTICS	Sound Level Meter @ 1kHz	Using Sound Level Calibrator by direct method	114 dB	0.65dB
111	MECHANICAL-ACOUSTICS	Sound Level Meter @ 1kHz	Using Sound Level Calibrator by direct method	94 dB	0.58 dB
112	MECHANICAL-DENSITY AND VISCOSITY	Baume Hydometer	Using Precision Weighing Balance and appropriate Liquid by Gravimetric method	0 °Be to 70 °Be	0.0022g/ml
113	MECHANICAL-DENSITY AND VISCOSITY	Specific Gravity Hydrometer	Using Precision Weighing Balance and appropriate Liquid by Gravimetric method	0.6 g/ml to 2.0 g/ml	0.0007g/ml
114	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Angle Plate, Box Angle Plate (Flatness, Perpendicularity, Parallelism)	Using Co-ordinating Measuring Machine by Direct method	Up to 450 mm	Flatness: 3.76µm, Perpendicularity: 3.76µm, Parallelism: 3.76µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 23 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
115	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bench Comparator (Flatness)	Using Optical Flat & monochromic Check light by Comparison method	Up to 150 mm x 150 mm	0.6µm
116	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bench Comparator (Flatness)	Using Digital Dial Indicator & stand by Comparison method	Up to 300 mm x 300 mm	1.8µm
117	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor / Inclinometer Type: A,B,C & D L.C: 0.5'	Using Angle Gauge Set, Co-ordinating Measuring Machine by Comparison method	0° to 90° to 0°	3.3'
118	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bore Comparator/ 3 Anvil Micrometer, 3 Anvil Intramike (Transmission & Micrometer Error)	Using Master Setting Rings by Direct method	3 mm to 125 mm	1.60µm
119	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bore Gauges - (Transmission error)	Using Length Measuring Machine & Dial Calibration Tester by Comparison method	Up to 2 mm	0.67µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 24 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
120	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper (Vernier/Dial/Digital) L.C.:10 µm & Coarser	Using Caliper Checker, Length bars & Surface Plate by Comparison method	0 to 600 mm	8.6µm
121	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper (Vernier/Dial/Digital) L.C: 10 µm & Coarser	Using Length bars, Caliper Checker & Surface Plate by Comparison method	0 to 1000 mm	13.0µm
122	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Circumference Tape / Pie Tape L.C: 0.1mm, Calibration of Diametric and Circumferential Scales (Main and Vernier scales)	Using Tape & Scale Measuring Machine by Comparison method	0 to 3000 mm	49xSQRT(L)µm, where L in m
123	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coating Thickness Gauge (Analog/Digital) L.C.:0.0001 mm & Coarser	Using Thickness Foils by comparison method	0 to 1.0 mm	1.90µm
124	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coating Thickness Gauge (Analog/Digital) L.C.:0.01 mm & Coarser	Using Thickness Foils by comparison method	0 to 10.0 mm	10µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	25 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
125	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Combination Set, Degree/Angle Protractor	Using Angle Gauge Set & Co-ordinating Measuring Machine by Direct method	0° to 90° to 0° (180°)	0.5°
126	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge (Vernier/Dial/Digital) L.C: 10 µm & Coarser	Using Length bars & Slip Gauges by Comparison method	0 to 300 mm	8.90µm
127	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer (Analog/Numeric/Digital) L.C.:1 µm & Coarser	Using Gauge Blocks & Length Bars by Comparison Method	0 to 300 mm	4.0µm
128	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Calibration Tester (Analog/Digital) L.C: 0.0001 mm & Coarser	Using Gauge blocks & Electronic Probe by Comparison method	0 to 25 mm	0.62µm
129	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Indicator (Plunger/Lever) (Analog/Digital) L.C :0.001 mm & Coarser	Using Length Measuring Machine by Comparison method	0 to 25 mm	1µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 26 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
130	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Indicator (Plunger/Lever) (Analog/Digital) L.C.:0.001 mm & Coarser	Using Dial Calibration Tester by Comparison Method	0 to 25 mm	1.55µm
131	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Indicator (Plunger/Lever) (Analog/Digital) L.C.:0.001 mm & Coarser	Using Length Measuring Machine by Comparison method	0 to 50 mm	1.3µm
132	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Indicator (Plunger/Lever) (Analog/Digital) L.C: 0.0005 mm & Coarser	Using Length Measuring Machine by Comparison method	0 to 0.05 mm	0.40µm
133	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Thickness Gauge (Analog/Digital) L.C.:0.001 mm & Coarser	Using Gauge Block by Comparison Method	0 to 25 mm	1.0µm
134	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Thickness Gauge (Analog/Digital) L.C.:0.05 mm & Coarser	Using Gauge Block by Comparison Method	0 to 50 mm	30.0µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	27 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
135	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Engineer's Square, Straightness / Perpendicularity / Parallelism	Using Co-ordinating Measuring Machine by Direct method	Up to 500 mm	Straightness: 4.8µm,Perpendicularity: 9.3µm & Parallelism: 4.6µm
136	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C.:1 µm	Using Gauge blocks by comparison method.	0 to 25 mm	1.0µm
137	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C.:1µm	Using Gauge blocks by comparison method.	>100 mm to 300 mm	2.0µm
138	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C.:10 µm	Using Gauge Blocks & Length Bars by Comparison Method	>100 mm to 500 mm	4.0µm
139	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C.:10 µm	Using Gauge Blocks & Length Bars by Comparison Method	>25 mm to 100 mm	3.1µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	28 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
140	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C.:10 µm	Using Gauge Blocks & Length Bars by Comparison Method	0 to 25 mm	2.89µm
141	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C: 1 µm	Using Gauge Blocks by Comparison method	>25 mm to 100 mm	1.50µm
142	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (Analog/Digital) L.C: 10 µm	Using Gauge Blocks & Length Bars by Comparison method	>500 mm to 1000 mm	7.0µm
143	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler Gauge	Using Length Measuring Machine by Comparison method	0.01 mm to 1.00 mm	0.90µm
144	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Flakiness Gauge / Elongation Gauge	Using Video Measuring Machine & Digital Vernier by Comparison method	0 to 100 mm	4.72µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	29 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
145	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge (Vernier/Dial/Digital) L.C.:10 µm & Coarser	Using Caliper Checker, Length bars & Surface Plate by Comparison method	0 to 1000 mm	12.0µm
146	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge (Vernier/Dial/Digital) L.C: 10 µm & Coarser	Using Caliper Checker, length Bars & Surface plate by Comparison method	0 to 600 mm	10.56µm
147	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside / Internal Micrometer or Caliper (Analog/Digital) L.C.:1 µm & Coarser	Using Gauge blocks & Slip Gauge Accessories by comparison method.	5 mm to 300 mm	3.6µm
148	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside / Internal Micrometer or Caliper (Analog/Digital) L.C.:1 µm & Coarser	Using Gauge blocks & Slip Gauge Accessories by comparison method.	5 mm to 50 mm	2.1µm
149	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside Dial Caliper (Analog/Digital) L.C: 0.01 mm & Coarser	Using Gauge Block & Slip Gauge Accessories Set by Comparison method	Up to 100 mm	15.0µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	30 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
150	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside Micrometer Micrometer Head + Extension (Analog/Digital) L.C: 10 µm	Using Length Measuring Machine, Length Bar & Digital Indicator by Comparison method	0 to 300 mm	3.6µm
151	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside Micrometer-Stick or Tabular type Extension Rod	Using Length Bars and Digital Indicator by Comparison method	>600 mm to 1000 mm	7.8µm
152	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside Micrometer-Stick or Tabular type Extension Rod	Using Length Bars and Digital Indicator by Comparison Method.	>300 mm to 600 mm	5.00µm
153	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring Pin & Pin Gauge	Using Length Measuring Machine by Comparison method	0 to 20 mm	0.3µm
154	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring Tape	Using Tape and Scale calibrator by Comparison method	0 to 200000 mm	48xSQRT(L)µm, where L in m

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 31 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
155	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head (Analog/Digital) L.C.:0.001 mm	Using Gauge blocks & Electronic Probe by Comparison method	0 to 50 mm	1µm
156	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head (Analog/Digital) L.C: 0.0002 mm	Using Gauge blocks & Electronic Probe by Comparison method	0 to 25 mm	0.67µm
157	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Length Measuring Machine & Setting Standards by Comparison method	>100 mm to 200 mm	1.4µm
158	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Co-ordinating Measuring Machine by Direct method	>100 mm to 200 mm	3.52µm
159	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Length Measuring Machine & Setting Standards by Comparison method	>200 mm to 300 mm	1.86µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 32 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
160	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Co-ordinating Measuring Machine by Direct Method	>200 mm to 300 mm	3.58µm
161	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Co-ordinating Measuring Machine by Direct method	>300 mm to 400 mm	4.1µm
162	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Co-ordinating Measuring Machine by Direct method	2 mm to 100 mm	3.0µm
163	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain / Master Setting Ring Gauge	Using Length Measuring Machine & Setting Standards by Comparison method	3 mm to 100 mm	1.0µm
164	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge / OD Master / Reference Disc	Using Length Measuring Machine & Setting Standards by Comparison method	>100 mm to 200 mm	2.0µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 33 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
165	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge / OD Master / Reference Disc	Using Co-ordinating Measuring Machine by Direct method	>100 mm to 200 mm	3.44µm
166	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge / OD Master / Reference Disc	Using Co-ordinating Measuring Machine by Direct method	>200 mm to 300 mm	3.62µm
167	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge / OD Master / Reference Disc	Using Length Measuring Machine & Setting Standards by Comparison method	>200 mm to 300 mm	3.7µm
168	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge / OD Master / Reference Disc	Using Length Measuring Machine & Setting Standards by Comparison method	1 mm to 100 mm	1.0µm
169	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge / OD Master / Reference Disc	Using Co-ordinating Measuring Machine by Direct method	4 mm to 100 mm	3.34µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 34 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
170	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Snap Gauge	Using Length Measuring Machine & Setting Standards by Comparison method	>100 mm to 300 mm	2.2µm
171	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Snap Gauge	Using Co-ordinating Measuring Machine by Direct method	>100 mm to 300 mm	3.68µm
172	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Snap Gauge	Using Length Measuring Machine & Setting Standards by Comparison method	2 mm to 100 mm	1.5µm
173	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Snap Gauge	Using Co-ordinating Measuring Machine by Direct method	2 mm to 100 mm	3.36µm
174	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Radius Gauge/Radius Template (Concave and Convex)	Using Video Measuring Machine by Comparison method	Up to 25 mm	4.97µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	35 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
175	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Receiver Gauge/ Plain Work Piece/ Lever Arm/ Master Connecting Rod/ Inspection JIG And Fixture/Moulds	Using Co-ordinating Measuring Machine & Video Measuring Machine by Direct method	0 to 700 mm x 1000 mm x 600 mm (X,Y,Z)	Linear: 4.58µm and Angle: 9.11s
176	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Right Angle, Straightness / Perpendicularity / Parallelism	Using Co-ordinating Measuring Machine by Direct method	Up to 500 mm	Straightness: 4.8µm, Perpendicularity: 9.3 µm, Parallelism: 4.6µm
177	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Screw / Thread Pitch Gauge - Pitch and Angle	Using Video Measuring Machine by Comparison method	Pitch: 0.25 mm to 6 mm & Angle: 55°, 60°	Pitch: 4.81µm and Angle: 55s
178	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar, Sine Table (Angle)	Using Angle Gauges, Gauge Blocks & Co-ordinating Measuring Machine by Comparison method	100 mm to 500 mm	6"
179	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar, Sine Table (Center Distance)	Using Co-ordinating Measuring Machine & Master ball by Comparison method	100 mm to 300 mm	3.66µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 36 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
180	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Spirit Level / Level Bottle / Electronic Level Sensitivity 0.001 mm/m & Coarser. Range 2 mm /m	Using Electronic Level with precision Tilt table by comparison method	Base Size Up to 600 mm	7.0 µm/m
181	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Scale, L..C: 0.5 mm	Using Tape & Scale Measuring Machine by Comparison method	0 to 2000 mm	31xSQRT(L)µm, where L in m
182	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Straight edge	Using Precision Electronic Level (Up to 50 mm width), Gauge Blocks & Surface Plate (Up to 10 mm width) by Comparison method	100 mm to 4000 mm	8.1xSQRT(L/100)µm, where L in mm
183	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate	Using Electronic Level by Direct method	150 mm x 150 mm to 2000 mm x 2000 mm	1.2xSQRT((L+W)/100)µm, where L & W in mm
184	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Plug Gauge / Taper Master (Diameter & Taper Angle)	Using Length Measuring Machine & Setting Standards by Comparison method	>100 mm to 200 mm	3.5µm & 3.1s

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	37 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
185	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Plug Gauge / Taper Master (Diameter & Taper Angle)	Using Co-ordinating Measuring Machine by Direct method	>100 mm to 200 mm & Upto 50°	5.16µm & 3.6s
186	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Plug Gauge / Taper Master (Diameter & Taper Angle)	Using Length Measuring Machine & Setting Standards by Comparison method	5 mm to 100 mm	2.0µm & 2.6s
187	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Plug Gauge / Taper Master (Diameter & Taper Angle)	Using Co-ordinating Measuring Machine by Direct method	5 mm to 100 mm	3.24µm & 3.6s
188	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Plug Gauge / Taper Master (Diameter & Taper Angle)	Using Co-ordinating Measuring Machine by Direct method	5 mm to 50 mm & Upto 50°	3.18µm & 3.5s
189	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Ring Gauge / Taper Ring Master (Diameter & Taper Angle)	Using Length Measuring Machine & Setting Standards by Comparison method	>100 mm to 200 mm & Upto 30°	3.5µm & 3.1s

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	38 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
190	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Ring Gauge / Taper Ring Master (Diameter & Taper Angle)	Using Co-ordinating Measuring Machine by Direct method	>100 mm to 200 mm & Upto 50°	3.5µm & 3.1s
191	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Ring Gauge / Taper Ring Master (Diameter & Taper Angle)	Using Co-ordinating Measuring Machine by Direct method	>50 mm to 100 mm & Upto 50°	1.70µm & 3.5s
192	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Ring Gauge / Taper Ring Master (Diameter & Taper Angle)	Using Length Measuring Machine and Setting Standards by Comparison method	5 mm to 100 mm & Upto 30°	1.7µm & 4.5s
193	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plain Ring Gauge / Taper Ring Master (Diameter & Taper Angle)	Using Co-ordinating Measuring Machine by Direct method	5 mm to 50 mm & Upto 50°	1.50µm & 3.5s
194	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Scale	Using Video Measuring Machine by Comparison method	0.80 mm to 20 mm	5µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 39 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
195	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Plug Gauge (Major & Effective Diameter)	Using Length Measuring Machine, Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	5 mm to 170 mm	2.0µm
196	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Ring Gauge (Effective Diameter)	Using Length Measuring Machine Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	5 mm to 100 mm	1.5µm
197	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieves (Aperture Size)	Using Video Measuring Machine by comparison method	0.034 mm to 4.00 mm	4.72µm
198	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieves (Aperture Size)	Using Video Measuring Machine by comparison method	4.00 mm to 125.00 mm	5.44µm
199	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thickness Foils, Calibration Foils	Using Length Measuring Machine by Comparison method	0 to 10.00 mm	1µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	40 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
200	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Measuring Prisms	Using Length Measuring Machine by Comparison method	A,B,C, D	0.2µm
201	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Measuring Wire	Using Length Measuring Machine by Comparison method	0 to 6.35 mm	0.3µm
202	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Major & Effective Diameter)	Using Length Measuring Machine Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	>100 mm to 200 mm	2.3µm
203	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Major & Effective Diameter)	Using Length Measuring Machine, Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	>100 mm to 200 mm	2.3µm
204	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Major & Effective Diameter)	Using Length Measuring Machine, Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	>200 mm to 300 mm	3.8µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	41 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
205	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Major & Effective Diameter)	Using Length Measuring Machine, Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	2 mm to 100 mm	3.0µm
206	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Major & Effective Diameter)	Using Floating Carriage Diameter Measuring Machine, Cylindrical Setting Masters & Thread Measuring Wire by Comparison method	2 mm to 100 mm	3µm
207	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge (Minor & Effective Diameter)	Using Length Measuring Machine, Setting Master Ring & Thread Measuring Ball by Comparison method	>100 mm to 200 mm	1.7µm
208	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge (Minor & Effective Diameter)	Using Length Measuring Machine, Setting Master Ring & Thread Measuring Ball by Comparison method	>200 mm to 300 mm	2.4µm
209	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge (Minor & Effective Diameter)	Using LMM, Setting Master Ring & Thread Measuring Ball by comparison method	2 mm to 100 mm	1.2µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 42 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
210	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Tri-Square (Straightness / Perpendicularity / Parallelism)	Using Co-ordinating Measuring Machine by Direct method	Up to 500 mm	Straightness: 4.8µm, Perpendicularity: 9.3µm & Parallelism: 4.6µm
211	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ultrasonic Test block /Step Block/ Test Block	Using Gauge blocks & Electronic Probe by Comparison method	0 to 300 mm	2.65µm
212	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ultrasonic Thickness Gauge L.C.:0.01 mm & Coarser	Using Length Bars by comparison method	0 to 300 mm	12.0µm
213	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V-Blocks / Parallels (Parallelism and Matching Tolerance)	Using Co-ordinating Measuring Machine and Master Ball by Comparison method	100 mm x 300 mm x 75 mm	Parallelism: 3.36µm, Symmetricity: 3.36µm and Squareness: 3.36µm
214	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Weld gauge/ Hi-low gauge	Using Video Measuring Machine by Comparison method	0 to 12 mm, 0 to 60s	5.44µm & 79.3s

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA
Accreditation Standard	ISO/IEC 17025:2017
Certificate Number	CC-2727
Page No	43 of 102
Validity	12/11/2022 to 11/11/2024
Last Amended on	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
215	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Welding Fillet Gauge, Templates, Vickers/Knoop/Rock well Diamond Cone Indenter/ Bridge Cam Gauge /Traverse Of Cupping Machine /Limit Gauges/CD Gauge/PCD Gauge / Cube Mould	Using Co-ordinating Measuring Machine & Video Measuring Machine by Direct method	0 to (700x1000x600) mm (X,Y,Z)	4.58µm & 5.57s
216	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Width Gauge/Paddle Gauge	Using Co-ordinate Measuring Machine by Direct method	Up to 250 mm	3.52µm
217	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Wire Gauge	Using Video Measuring Machine by comparison method	0.025 mm to 8.00 mm	4.74µm
218	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker / Depth Micro-checker / Internal Micrometer Checker, Height master	Using Gauge Block & Co-ordinate Measuring Machine by Comparison method	0 to 300 mm	3.60µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	44 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
219	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker / Depth Micro-checker / Internal Micrometer Checker, Height master	Using Gauge Block, Standard Length Bar & Co-ordinate Measuring Machine by Comparison method	0 to 600 mm	4.50µm
220	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker / Depth Micro-checker / Internal Micrometer Checker, Height master	Using Gauge Block, Standard Length Bar & Co-ordinate Measuring Machine by Comparison method	0 to 1000 mm	6.0µm
221	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Cylindrical Setting Masters (Diameter & Run Out)	Using Length Measuring Machine & Electronic Probe with display, Co-ordinate Measuring Machine by Comparison method	3 mm to 100 mm	Diameter: 0.68µm & Runout: 1.66µm
222	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Cylindrical Squares (Only Squareness and Straightness)	Using Co-ordinate Measuring Machine by Direct method	Up to 300 mm	3.54µm
223	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Probe with Display Unit (LVDT, Plunger, Lever Type), L.C.: 0.1 µm & Coarser	Using Length Measuring Machine by Direct method	0 to 200 µm	0.3µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	45 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
224	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Probe with Display Unit (LVDT, Plunger, Lever Type), L.C: 0.1 µm & Coarser	Using Length Measuring Machine by Direct method	0 to 25 mm	0.9µm
225	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block (Long Slip)	Using Gauge Blocks Grade 'K' & Length Measuring Machine by Comparison method	>100 mm to 200 mm	0.64µm
226	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block (Long Slip)	Using Gauge Blocks & Length Measuring Machine by Comparison method	>200 mm to 300 mm	0.90µm
227	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block (Long Slip)	Using Gauge Blocks, Standard Length Bar, Electronic Probe & Co-ordinate Measuring Machine by Comparison method	>300 mm to 500 mm	3.66µm
228	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block (Long Slip)	Using Gauge Blocks, Standard Length Bar, Electronic Probe & Co-ordinate Measuring Machine by Comparison method	>500 mm to 1000 mm	3.82µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 46 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
229	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Accessories (Size and Flatness of Base and Jaws)	Using Optical Flat, Co-ordinate Measuring Machine / Electronic Comparator by Comparison method	0 to 25.0 mm	Size: 0.80µm & Flatness: 0.83µm
230	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Set (Carbide)	Using Gauge Block Grade 'K' & Gauge Block Comparator with Bridge type Gauge Blocks by Comparison method	>25 mm to 50 mm	0.15µm
231	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Set (Carbide)	Using Gauge Block Grade 'K' & Gauge Block Comparator with Bridge type Gauge Blocks by Comparison method	>50 mm to 75 mm	0.18µm
232	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Set (Carbide)	Using Gauge Block Grade 'K' & Gauge Block Comparator with Bridge type Gauge Blocks by Comparison method	>75 mm to 100 mm	0.22µm
233	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Set (Carbide)	Using Gauge Block Grade 'K' & Gauge Block Comparator with Bridge type Gauge Blocks by Comparison method	0.5 mm to 25 mm	0.09µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 47 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
234	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Set (Steel)	Using Gauge Block Grade 'K' & Gauge Block Comparator with Bridge type Gauge Blocks by Comparison method	>30 mm to 100 mm	0.42µm
235	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block Set (Steel)	Using Gauge Block Grade 'K' & Gauge Block Comparator with Bridge type Gauge Blocks by Comparison method	0.5 mm to 30 mm	0.15µm
236	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Measuring Machine / ULM (X and Z Axis) Linear Measurement., L.C: 0.01 µm or coarser	Using 'K' Grade Gauge Block Set, by Comparison method	0 to 100 mm	0.40µm
237	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Measuring Tape & Scale Calibrator, L.C: 0.001 mm or coarser	Using Gauge Block & Standard Length Bar by Comparison method	0 to 1000 mm	1.5+1.74(L)µm, where L in m
238	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Micrometer Setting Master	Using Gauge Blocks & Electronic Probe with DRO & Length Measuring Machine by Comparison method	>100 mm to 200 mm	0.64µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 48 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
239	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Micrometer Setting Master	Using Gauge Blocks & Electronic Probe with DRO & Length Measuring Machine by Comparison method	>200 mm to 300 mm	0.88µm
240	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Micrometer Setting Master	Using Standard Length Bar, Electronic Probe with DRO & Co-ordinate Measuring Machine by Comparison method	>300 mm to 500 mm	3.92µm
241	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Micrometer Setting Master	Using Standard Co-ordinate Measuring Machine by Comparison method	>500 mm to 1000 mm	3.9µm
242	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Micrometer Setting Master	Using Gauge Blocks Set, Electronic Probe with DRO & Length Measuring Machine by Comparison method	25 mm to 100 mm	0.43µm
243	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Flats – Type A	Using Master Flat & Monochromatic Light Source by Comparison method	Up to 50 mm	0.28µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	49 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
244	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Parallels (Optical Flats-Type B) Grade I and II	Using Gauge Block set 'K' Grade and Gauge Block Comparator by Comparison method	12.00 mm to 12.37 mm	0.13µm
245	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector (Magnification Measurement)	Using Gauge Blocks and Digital Vernier Caliper by Direct method	Up to 100X	0.57%
246	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Reference Discs	Using Length Measuring Machine by Comparison method	Up to 100 mm	0.65µm
247	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Standard Length Bar	Using Gauge Blocks & Electronic Probe with DRO & Length Measuring Machine by Comparison method	>100 mm to 200 mm	0.64µm
248	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Standard Length Bar	Using Gauge Blocks & Electronic Probe with DRO & Length Measuring Machine by Comparison method	>200 mm to 300 mm	0.88µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 50 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
249	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Standard Length Bar	Using Standard Length Bar, Electronic Probe with DRO & Co-ordinate Measuring Machine by Comparison method	>300 mm to 500 mm	3.92µm
250	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Standard Length Bar	Using Gauge Blocks Set, Electronic Probe with DRO & Length Measuring Machine by Comparison method	25 mm to 100 mm	0.43µm
251	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Standard Length Bar & Micrometer Setting Master	Using Standard Co-ordinate Measuring Machine by Comparison method	>500 mm to 1000 mm	5.36µm
252	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring Machine,Profile Projector (Angular Measurement), L.C.: 1s & coarser	Using Standard Angle Gauge Set by Comparison method	Up to 360°	4s of arc
253	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring Machine,Profile Projector (Linear Measurement), L.C.: 0.1 µm & coarser	Using Gauge Block Set by Direct method	Up to 300 mm x 300 mm	2.1µm

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	51 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
254	MECHANICAL-DUROMETER	Rubber Hardness Tester, Shore-A Scale	Using Gauge Blocks and Dial Calibration Tester by Indentation depth measurement method as per ISO 18898	0 to 100 Shore A	0.66Shore A
255	MECHANICAL-DUROMETER	Rubber Hardness Tester, Shore-D Scale	Using Gauge Blocks and Dial Calibration Tester by Indentation depth measurement method as per ISO 18898	0 to 100 Shore D	0.66Shore D
256	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Pressure: Dead Weight Pressure Tester by Piston-Cylinder Characterization	Using Hydraulic Dead Weight Pressure Tester by Piston-Cylinder Characterization method as per Euramet cg-3	1 bar to 1200 bar	0.008%rdg
257	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Pressure:Dead Weight Tester Cross Float Method	Using Hydraulic Dead Weight Pressure Tester, by Cross-float Method, as per Euramet cg3	6 bar to 1100 bar	0.01%rdg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	52 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
258	MECHANICAL-PRESSURE INDICATING DEVICES	Hydraulic Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Pressure Comparator and Transducers with Display Unit by Comparison Method based on DKD R6-1	>100 bar to 700 bar	0.025%rdg
259	MECHANICAL-PRESSURE INDICATING DEVICES	Hydraulic Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Pressure Comparator and Transducers with Display Unit along with Digital Multimeter by Comparison method based on DKD R6-1	0 to 100 bar	0.017%rdg
260	MECHANICAL-PRESSURE INDICATING DEVICES	Hydraulic Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Standard Dead Weight Pressure Tester and Digital Multimeter by Direct method based on DKD R-6-1	6 bar to 1100 bar	0.01%rdg
261	MECHANICAL-PRESSURE INDICATING DEVICES	Hydraulic Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Transmitter, Transducers & Switches	Using Pressure Comparator, Transducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	>700 bar to 1000 bar	0.052%rdg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 53 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
262	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Absolute Pressure: Digital & Dial Pressure Gauge, Gauge, Pressure Calibrator, Barometer, Pressure Transmitter & Switches	Using Pressure Controller / Calibrator and Digital Multimeter by Direct method based on DKD R-6-1	0.01 bar to 70 bar (absolute)	0.011%rdg
263	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Negative Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Pressure Controller / Calibrator and Digital Multimeter by Direct method based on DKD R-6-1	0 to -0.950 bar	0.00021bar
264	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Negative Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Low Pressure Calibrator and Digital Multimeter by Comparison method based on DKD R-6-1	0 to -20 mbar	0.67%rdg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 54 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
265	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Low Pressure Calibrator and Digital Multimeter by Comparison method based on DKD R-6-1	0 to 20 mbar	0.67%rdg
266	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator/Controller, Pressure Modules, Pressure Transmitter & Switches	Using Pressure Controller / Calibrator and Digital Multimeter by Direct method based on DKD R-6-1	>7 bar to 70 bar	0.011%rdg
267	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator/Controller, Pressure Modules, Pressure Transmitter & Switches	Using Pressure Controller / Calibrator and Digital Multimeter by Direct method based on DKD R-6-1	0.01 bar to 7 bar	0.011%rdg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	55 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
268	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Negative Pressure: Digital & Dial Pressure Gauge, Gauge, Pressure Calibrator, Pressure Transmitter & Switches	Using Pressure Comparator, Tansducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	0 to -0.980 bar	0.00088bar
269	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Pressure: Digital & Dial Pressure Gauge / Indicator, Pressure Calibrator, Pressure Modules, Pressure Transmitter, Pressure Switches / Safety Valves	Using Pressure Comparator, Transducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	0 to 100 bar	0.017%rdg
270	MECHANICAL-TORQUE GENERATING DEVICES	Torque Screw Driver/Torque Wrench /Torque Dial Gauges, Torque Meter Type I & II (All Type Class) (Clock wise and anti-clock wise)	Using Precision Torque Transducer with Digital Display & Test Rig as per IS 16906:2018	>200 Nm to 2000 Nm	0.57%rdg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	56 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
271	MECHANICAL-TORQUE GENERATING DEVICES	Torque Screw Driver/Torque Wrench /Torque Dial Gauges, Torque Meter, Type I & II (All Type Class) (Clock wise and anti-clock wise)	Using Precision Torque Transducer with Digital Display & Test Rig as per IS 16906:2018	>20 Nm to 200 Nm	0.35%rdg
272	MECHANICAL-TORQUE GENERATING DEVICES	Torque Screw Driver/Torque Wrench /Torque Dial Gauges, Torque Meter, Type I & II (All Type Class) (Clock wise and anti-clock wise)	Using Precision Torque Transducer with Digital Display & Test Rig as per IS 16906:2018	>50 Nm to 500 Nm	0.38%rdg
273	MECHANICAL-TORQUE GENERATING DEVICES	Torque Screw Driver/Torque Wrench /Torque Dial Gauges, Torque Meter, Type I & II (All Type Class)(Clock wise and anti-clock wise)	Using Precision Torque Transducer with Digital Display & Test Rig as per IS 16906:2018	2 Nm to 20 Nm	0.86%rdg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 57 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
274	MECHANICAL-VOLUME	Measuring Cylinders, Volumetric Flask, Dispensette and Volumetric apparatus	Using Electronic Weighing Balance (Range: upto 30kg, Readability: 0.01/100mg) & Distilled Water by gravimetric method as per ISO 4787	2000 ml to 10000 ml	2.9ml
275	MECHANICAL-VOLUME	Micro Pipettes	Using Electronic Weighing Balance (Range: 0 to 200g, Readability: 0.01/0.1mg) & Distilled Water by gravimetric method as per ISO 8655-6	10 µl to 100 µl	0.2µl
276	MECHANICAL-VOLUME	Micro Pipettes	Using Electronic Weighing Balance (Range: 0 to 200g, Readability: 0.01/0.1mg) & Distilled Water by gravimetric method as per ISO 8655-6	100 µl to 1000 µl	1.0µl

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	58 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
277	MECHANICAL-VOLUME	Pipettes, Volumetric Flask, Burettes, Conical Flask, Dispensette	Using Electronic Weighing Balance (Range: upto 30kg, Readability: 0.01/100mg) & Distilled Water by gravimetric method as per ISO 4787	1 ml to 10 ml	5.0µl
278	MECHANICAL-VOLUME	Pipettes, Volumetric Flask, Burettes, Conical Flask, Dispensette	Using Electronic Weighing Balance (Range: upto 30kg, Readability: 0.01/100mg) & Distilled Water by gravimetric method as per ISO 4787	10 ml to 100 ml	30.0µl
279	MECHANICAL-VOLUME	Pipettes, Volumetric Flask, Burettes, Conical Flask, Dispensette	Using Electronic Weighing Balance (Range: upto 30kg, Readability: 0.01/100mg) & Distilled Water by gravimetric method as per ISO 4787	100 ml to 500 ml	0.29ml

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	59 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
280	MECHANICAL-VOLUME	Pipettes, Volumetric Flask, Burettes, Conical Flask, Dispensette	Using Electronic Weighing Balance (Range: upto 6kg, Readability: 0.001 & 0.01g) & Distilled Water by gravimetric method as per ISO 4787	500 ml to 2000 ml	1.45ml
281	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 0.01 g	Using Standard Weights of E2 class (Upto 30 kg) as per OIML R-76	0.5 g to 6 kg	20mg
282	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 0.1 mg	Using Standard Weights of E2 class (1 mg to 200 g) as per OIML R-76	1 mg to 80 g	0.16mg
283	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 0.1 mg	Using Standard Weights of E2 class (1 mg to 200 g) as per OIML R-76	10 mg to 200 g	0.2mg
284	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 1 g	Using Standard Weights of E2 class (Upto 30 kg) as per OIML R-76	20 g to 30 kg	0.1g
285	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 1mg	Using Standard Weights of E2 class (Upto 30 kg) as per OIML R-76	50 mg to 500 g	2mg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 60 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
286	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	1 g	0.03mg
287	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	10 g	0.04mg
288	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	100 g	0.15mg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	61 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
289	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	2 g	0.03mg
290	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	20 g	0.04mg
291	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	200 g	0.2mg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 62 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
292	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	5 g	0.03mg
293	MECHANICAL-WEIGHTS	Weights having Accuracy Class F1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	500 mg	0.03mg
294	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	1 mg	0.02mg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	63 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
295	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	10 mg	0.02mg
296	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	100 mg	0.03mg
297	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	2 mg	0.02mg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	64 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
298	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	20 mg	0.02mg
299	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	200 mg	0.03mg
300	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by substitution method through ABBA cycle as per OIML R 111:2004	5 mg	0.02mg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	65 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
301	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by Substitution method through ABBA cycle as per OIML R 111:2004	50 mg	0.03mg
302	MECHANICAL-WEIGHTS	Weights having Accuracy Class F2 and coarser	Using Standard Weights of F1 class (500 g to 20 kg) & Electronic balance Readability: 0.001/0.01/0.1g) by substitution method through ABBA cycle as per OIML R 111:2004	500 g	3mg
303	MECHANICAL-WEIGHTS	Weights having Accuracy Class M1 and coarser	Using Standard Weights of F1 class (500 g to 20 kg) & Electronic balance Readability: 0.001/0.01/0.1g) by substitution method through ABBA cycle as per OIML R 111:2004	1 kg	10.67mg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	66 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
304	MECHANICAL-WEIGHTS	Weights having Accuracy Class M1 and coarser	Using Standard Weights of F1 class (500 g to 20 kg) & Electronic balance Readability: 0.001/0.01/0.1g) by substitution method through ABBA cycle as per OIML R 111:2004	2 kg	10.1mg
305	MECHANICAL-WEIGHTS	Weights having Accuracy Class M1 and coarser	Using Standard Weights of F1 class (500 g to 20 kg) & Electronic balance Readability: 0.001/0.01/0.1g) by substitution method through ABBA cycle as per OIML R 111:2004	20 kg	300mg
306	MECHANICAL-WEIGHTS	Weights having Accuracy Class M1 and coarser	Using Standard Weights of F1 class (500 g to 20 kg) & Electronic balance Readability: 0.001/0.01/0.1g) by substitution method through ABBA cycle as per OIML R 111:2004	5 kg	40mg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 67 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
307	MECHANICAL-WEIGHTS	Weights having Accuracy Class M1 and coarser	Using Standard Weights of E2 class (1 mg to 200 g) & Electronic balance Readability: 0.01/0.1mg) by Substitution method through ABBA cycle as per OIML R 111:2004	50 g	0.48mg
308	MECHANICAL-WEIGHTS	Weights having Accuracy Class M2 and coarser	Using Standard Weights of F1 class (500 g to 20 kg) & Electronic balance Readability: 0.001/0.01/0.1g) by substitution method through ABBA cycle as per OIML R 111:2004	10 kg	233mg
309	THERMAL-SPECIFIC HEAT & HUMIDITY	Calibration of Thermo-Humidity Generator/chamber and Environmental Chambers (Single Position Calibration)	Using Precision Thermo-Humidity Meter by Comparison method	15 %rh to 95 %rh	1.3%rh

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	68 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
310	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity sensor with indicator, Thermo-humidiy meter, Transmitters, Data loggers, Thermo-humidity Recorders @ 50%rh	Using RH generator with chamber and Thermo-Humidity Reference Meter by Comparison method	10 °C to 50 °C	0.51°C
311	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity sensor with indicator, Thermo-humidiy meter, Transmitters, Data loggers, Thermo-humidity Recorders, @25°C	Using RH generator with chamber and Thermo-Humidity Reference Meter by Comparison method	15 %rh to 95 %rh	1.18%rh
312	THERMAL-TEMPERATURE	Infrared Thermometer, Thermal Imager, Thermal Radiation Pyrometer Emissivity 0.95	Using IR Calibrator and Precision IR Thermometer by Comparison method	35 °C to 100 °C	1.38°C
313	THERMAL-TEMPERATURE	Infrared Thermometer, Thermal Imager, Thermal Radiation Pyrometer Emissivity 0.95	Using IR Calibrator and Precision IR Thermometer by Comparison method	100 °C to 500 °C	2.27°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 69 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
314	THERMAL-TEMPERATURE	Liquid In Glass Thermometer	Using SSPRT, Precision Temperature Readout and Liquid Temperature Bath by Comparison method	-80 °C to 100 °C	0.067°C
315	THERMAL-TEMPERATURE	PRT/RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with temperature indicator, Temperature Dial Gauge	Using SSPRT, Precision Temperature Readouts, Metrology Dry Well Calibrator by Comparison method	100 °C to 650 °C	0.036°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	70 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
316	THERMAL-TEMPERATURE	PRT/RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with/without temperature indicator, Temperature Dial	Using SSPRT, Precision Temperature Readouts, Liquid Temperature Bath by Comparison method	0 °C to 100 °C	0.029°C
317	THERMAL-TEMPERATURE	PRT/RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with/without temperature indicator, Temperature Dial	Using SSPRT, Precision Temperature Readouts, LN2 container by Comparison method	-196 °C	0.021°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 71 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
318	THERMAL-TEMPERATURE	PRT/RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with/without temperature indicator, Temperature Dial	Using SSPRT, Precision Temperature Readouts, Liquid Temperature Bath, Dry Block Calibrators by Comparison method	-80 °C to 0 °C	0.020°C
319	THERMAL-TEMPERATURE	PRT/RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with/without temperature indicator, Temperature Dial	Using SSPRT, Precision Temperature Readouts, Ultra-cool Field Metrology Dry Well by Comparison method	-95 °C to -80 °C	0.029°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	72 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
320	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Dry Wells, Dry Block Calibrators (Single Position Calibration)	Using SSPRT, Precision Temperature Readouts by Comparison method	425 °C to 650 °C	0.080°C
321	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Dry Wells, Dry Block Calibrators (Single Position Calibration)	Using S-Type Thermocouple with Precision Temperature Readouts by Comparison method	650 °C to 1200 °C	1.23°C
322	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Liquid Bath, Dry Wells, Dry Block Calibrators (Single Position Calibration)	Using SSPRT, Precision Temperature Readouts by Comparison method	150 °C to 425 °C	0.080°C
323	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Liquid Bath, Dry Wells, Dry Block Calibrators (Single Position Calibration)	Using SSPRT, Precision Temperature Readouts by Comparison method	-95 °C to 150 °C	0.034°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	73 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
324	THERMAL-TEMPERATURE	Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor	Using S-Type Thermocouple, Precision Temperature Readouts, High Temperature thermocouple Furnace by Comparison method	650 °C to 1200 °C	1.23°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 74 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Site Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50 Hz)	Using Precision Current Clamp with Digital Multimeter by Comparison method	20 A to 1000 A	0.6 % to 3.7 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	100 µA to 100 mA	0.058 % to 0.053 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	30 µA to 100 µA	0.26 % to 0.058 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 10 kHz	Using Reference Digital Multimeter by Direct method	1 A to 20 A	0.094 % to 0.30 %

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	75 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC CURRENT 45 Hz to 10 kHz	Using Reference Digital Multimeter by Direct method	100 mA to 1 A	0.058 % to 0.11 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC HIGH VOLTAGE 50Hz	Using High Voltage Divider Probe with Multimeter by comparison method	1 kV to 28 kV	6.8% to 1.98%
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 1 kHz to 10 kHz	Using Reference Digital Multimeter by Direct method	1 mV to 100 mV	0.50 % to 0.034 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 1 kHz to 10 kHz	Using Reference Digital Multimeter by Direct method	100 mV to 100 V	0.018 % to 0.015 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 1 kHz to 10 kHz	Using Reference Digital Multimeter by Direct method	100 V to 1000 V	0.015 % to 0.031 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 76 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 10 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	1 mV to 100 mV	1.64 % to 0.034 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 10 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	100 mV to 100 V	0.031 % to 0.015 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE 45 Hz to 1 kHz	Using Reference Digital Multimeter by Direct method	100 V to 1000 V	0.017 % to 0.041 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	CAPACITANCE @ 1kHz	Using Reference Digital Multimeter by Direct method	1 nF to 1 mF	16.74 % to 5.08 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT (30 µA @ 1kHz) (100 mA @1kHz to 5kHz)	Using Multiproduct Calibrator by Direct method	30 µA to 100 mA	0.92 % to 0.18 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 77 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 1 kHz to 5 kHz	Using Multiproduct Calibrator by Direct method	1 A to 20 A	0.81 % to 3.49 %
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 1 kHz to 5 kHz	Using Multiproduct Calibrator by Direct method	100 mA to 1 A	0.18 % to 0.81 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	1 A to 20 A	0.076 % to 0.21 %
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	100 mA to 1 A	0.48 % to 0.076 %
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC CURRENT 45 Hz to 1 kHz	Using Multiproduct Calibrator by Direct method	30 µA to 100 mA	0.56 % to 0.48 %
20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power,Single Phase, 50Hz @ UPF, 0.1 V to 1000 V, 0.01 A to 20 A	Using Multiproduct Calibrator by Direct method	10 mW to 20 kW	0.23 % to 3.30 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 78 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power,Single Phase, 50Hz @ UPF, 0.1 V to 1000 V, 0.01 A to 20 A x 50 turn Toroidal Coil	Using Multiproduct Calibrator with Toroidal Coil by Direct method	0.05 kW to 1 MW	0.81 % to 3.30 %
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC VOLTAGE 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	1 mV to 3 mV	0.83 % to 0.26 %
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC VOLTAGE 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	1 V to 1000 V	0.041 % to 0.036 %
24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC VOLTAGE 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	100 mV to 1 V	0.031 % to 0.041 %
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC VOLTAGE 45 Hz to 8 kHz	Using Multiproduct Calibrator by Direct method	3 mV to 100 mV	0.26 % to 0.44 %
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100Hz	Using Multiproduct Calibrator by Direct method	1 µF to 109 µF	0.42 % to 0.64 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 79 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 100Hz	Using Multiproduct Calibrator by Direct method	1 mF to 0.109 mF	0.64 % to 1.4 %
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1kHz	Using Multiproduct Calibrator by Direct method	10 nF to 200 nF	0.42 % to 0.47 %
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1kHz	Using Multiproduct Calibrator by Direct method	200 nF to 1 µF	0.35 % to 0.43 %
30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1kHz	Using Multiproduct Calibrator by Direct method	220 pF to 10 nF	5.84 % to 0.43 %
31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1kHz	Using Decade Inductance Box by Direct method	1 mH to 100 mH	2.89%
32	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1kHz	Using Decade Inductance Box by direct method	10 µH to 1 mH	3.24 % to 2.89 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 80 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
33	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor/Phase angle @ 50Hz	Using Multiproduct Calibrator by Direct method	0.2 Lag to UPF	1.23 % to 0.08 %
34	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor/Phase angle @ 50Hz	Using Multiproduct Calibrator by Direct method	0.2 Lead to UPF	1.23 % to 0.08 %
35	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using Reference Digital Multimeter by Direct method	1 A to 10 A	0.026 % to 0.058 %
36	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using Reference Digital Multimeter by Direct method	10 µA to 100 µA	0.072 % to 0.0028 %
37	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using Reference Digital Multimeter by Direct method	10 A to 20 A	0.058 % to 0.047 %
38	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using Reference Digital Multimeter by Direct method	10 mA to 100 mA	0.0028 % to 0.0063 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 81 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using Reference Digital Multimeter by Direct method	100 µA to 10 mA	0.0028%
40	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using Reference Digital Multimeter by Direct method	100 mA to 1 A	0.063 % to 0.026 %
41	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using High Voltage Divider Probe with Digital Multimeter by Direct method	1 kV to 25 kV	6.70 % to 2.9 %
42	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using Reference Digital Multimeter by Direct method	1 mV to 100 mV	0.013 % to 0.001 %
43	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using Reference Digital Multimeter by Direct method	1 V to 10 V	0.0006%
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using Reference Digital Multimeter by Direct method	10 µV to 0.1 mV	1.31 % to 0.13 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 82 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using Reference Digital Multimeter by Direct method	10 V to 1000 V	0.00056 % to 0.00074 %
46	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using Reference Digital Multimeter by Direct method	100 µV to 1 mV	0.13 % to 0.013 %
47	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using Reference Digital Multimeter by Direct method	100 mV to 1 V	0.001 % to 0.0006 %
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	RESISTANCE (2-Wire)	Using Reference Digital Multimeter by Direct method	1 Gohm to 10 Gohm	0.22%
49	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	RESISTANCE (2-Wire)	Using Reference Digital Multimeter by Direct method	10 Mohm to 1 Gohm	0.0039 % to 0.22 %
50	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	RESISTANCE (4-Wire)	Using Reference Digital Multimeter by Direct method	1 mohm to 10 mohm	0.48 % to 0.056 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 83 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
51	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	RESISTANCE (4-Wire)	Using Reference Digital Multimeter by Direct method	10 mohm to 10 Ohm	0.05 % to 0.0016 %
52	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	RESISTANCE (4-Wire)	Using Reference Digital Multimeter by Direct method	10 Ohm to 100 kohm	0.0016 % to 0.0012 %
53	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	RESISTANCE (4-Wire)	Using Reference Digital Multimeter by Direct method	100 kohm to 10 Mohm	0.0012 % to 0.0039 %
54	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator by Direct method	1 A to 10 A	0.028 % to 0.064 %
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator by Direct method	1 mA to 100 mA	0.017 % to 0.015 %
56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator by Direct method	10 µA to 190 µA	0.25 % to 0.030 %

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	84 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator with Toroidal Coil by Direct method	10 A to 1000 A	0.89 % to 0.87 %
58	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator by Direct method	10 A to 20 A	0.064 % to 0.120 %
59	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator by Direct method	100 mA to 1 A	0.015 % to 0.028 %
60	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC CURRENT	Using Multiproduct Calibrator by Direct method	190 µA to 1 mA	0.03 % to 0.017 %
61	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC POWER (0.1V to 1000V, 0.03A to 20A)	Using Multiproduct Calibrator by Direct method	3 mW to 20 kW	0.28 % to 0.12 %
62	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC VOLTAGE	Using Multiproduct Calibrator by Direct method	0.03 mV to 1 mV	4.36 % to 0.23 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 85 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
63	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC VOLTAGE	Using Multiproduct Calibrator by Direct method	1 mV to 100 mV	0.23 % to 0.003 %
64	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC VOLTAGE	Using Multiproduct Calibrator by Direct method	1 V to 10 V	0.002%
65	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC VOLTAGE	Using Multiproduct Calibrator by Direct method	10 V to 1000 V	0.002 % to 0.0024 %
66	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC VOLTAGE	Using Multiproduct Calibrator by Direct method	100 mV to 1 V	0.003 % to 0.002 %
67	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (2-wire)	Using Multiproduct Calibrator by Direct method	10 Mohm to 300 Mohm	0.018 % to 0.39 %
68	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (2-wire)	Using Multiproduct Calibrator by Direct method	100 kohm to 10 Mohm	0.005 % to 0.018 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 86 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
69	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (2-wire)	Using Multiproduct Calibrator by Direct method	300 Mohm to 1 Gohm	0.39 % to 1.79 %
70	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (4-wire)	Using Multiproduct Calibrator by Direct method	0.2 Ohm to 2 Ohm	5.78 % to 0.58 %
71	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (4-wire)	Using Multiproduct Calibrator by Direct method	10 Ohm to 100 Ohm	0.12 % to 0.021 %
72	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (4-wire)	Using Multiproduct Calibrator by Direct method	100 Ohm to 100 kohm	0.021 % to 0.005 %
73	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (4-wire)	Using Multiproduct Calibrator by Direct method	2 Ohm to 10 Ohm	0.58 % to 0.12 %
74	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (Insulation Resistance Upto 5 kV) (2-wire)	Using High Voltage Decade Resistance Box by Direct method	1 Gohm to 10 Gohm	5.78 % to 5.79 %

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 87 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
75	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	RESISTANCE (Insulation Resistance Upto 5 kV) (2-wire)	Using High Voltage Decade Resistance Box by Direct method	100 kohm to 1 Gohm	2.31 % to 5.78 %
76	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope (DC Signal)	Using Multiproduct Calibrator with Scope function by Direct method	1 mV to 55 V	4.77 % to 0.22 %
77	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope, Amplitude, Square Wave Signal	Using Multiproduct Calibrator with Scope function by Direct method	1 mV to 55 Vp-p	4.89 % to 0.21 %
78	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope, Band Width @ 50 kHz Reference.	Using Multiproduct Calibrator with Scope function by Direct method	50 kHz to 1 GHz	2.05 % to 5.89 %
79	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope, Time Marker	Using Multiproduct Calibrator with Scope function by Direct method	1 ns to 5 s	0.03 % to 0.58 %
80	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	pH Meter	Using Multi function Calibrator by Simulation method	0 to 14 pH	0.04pH

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	88 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
81	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (RTD)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-210 °C to 800 °C	0.013°C
82	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - E TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-250 °C to 1000 °C	0.012°C
83	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - J TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 1200 °C	0.014°C
84	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - K TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 1370 °C	0.060°C
85	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - L TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 900 °C	0.012°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	89 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
86	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - N TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 1300 °C	0.016°C
87	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - R TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	0 °C to 1760 °C	0.02°C
88	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - S TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	0 °C to 1760 °C	0.02°C
89	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - T TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-250 °C to 400 °C	0.008°C
90	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C - U TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	-200 °C to 600 °C	0.016°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 90 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
91	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	TEMPERATURE CALIBRATORS / SIMULATORS / TRANSMITTERS / CONVERTERS (T/C- B TYPE)	Using Reference Digital Multimeter in Corresponding Temperature Measurement mode as per ITS-90 Scale	600 °C to 1800 °C	0.02°C
92	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT / CONTROLLER / LOGGERS / RECORDER (RTD)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	0 °C to 800 °C	0.11°C
93	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT / CONTROLLER / LOGGERS / RECORDER (RTD)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	-200 °C to 0 °C	0.05°C
94	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - B TYPE)	Using Multiproduct Calibrator conversion by using ITS 90 Scale mV to °C	600 °C to 1800 °C	0.42°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 91 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
95	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - E TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-250 °C to 1000 °C	0.12°C
96	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - J TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 1200 °C	0.15°C
97	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - K TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 1370 °C	0.18°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 92 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
98	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - L TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 900 °C	0.13°C
99	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - N TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale mV to °C	-200 °C to 1300 °C	0.16°C
100	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - R TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	0 °C to 1760 °C	0.47°C

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	93 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
101	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - S TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	0 °C to 1760 °C	0.45°C
102	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - T TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	-250 °C to 400 °C	0.11°C
103	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	TEMPERATURE INDICATOR / READOUT /CALIBRATORS / CONTROLLER / LOGGERS / RECORDER (T/C - U TYPE)	Using Multiproduct Calibrator Conversion by using ITS 90 Scale Ohm to °C	-200 °C to 600 °C	0.13°C
104	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	FREQUENCY	Using Reference Digital Multimeter by Direct method	10 Hz to 1 MHz	0.24 % to 0.0014 %

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	94 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
105	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	TIME INTERVAL (Stopwatch, Timers) (1 s to 24 hr)	Using Digital Stopwatch by Comparison method	5 s to 86400 s	0.62 s to 1.08 s
106	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	TIME INTERVAL, STOPWATCH, TIMER	Using Digital Timer by Comparison method	5 s to 86400 s	0.62 s to 1.08 s
107	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	FREQUENCY	Using Multiproduct Calibrator by Direct method	10 Hz to 1 MHz	3.54 ppm to 3.0 ppm
108	MECHANICAL-ACCELERATION AND SPEED	Digital RPM Meter RPM Generator & Speed Measurement (Contact Type)	Using Precision Digital Tachometer by Comparison method	6 rpm to 4500 rpm	8.57 % to 0.034 %
109	MECHANICAL-ACCELERATION AND SPEED	RPM Meter RPM generator & Speed measurement (Non-Contact Type)	Using Precision Digital Tachometer by Comparison method	6 rpm to 90000 rpm	7.50 % to 0.016 %
110	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Straight edge (Up to 4000 mm)	Using Electronic Level by Direct method	Up to 4000 mm	4.5xSQRT(L/100)µm, where L in mm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 95 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
111	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate (Up to 3000 mm x 3000 mm)	Using Electronic Level by Direct method	Up to 2000 mm x 2000 mm	1.1xSQRT((L+W)/100)µm, where L and W in mm
112	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Measuring Machine / ULM (X and Z Axis) Linear Measurement., L.C: 0.01 µm or coarser	Using 'K' Grade Gauge Block Set by Comparison method	0 to 100 mm	0.40µm
113	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Measuring Tape & Scale Calibrator, L.C: 0.001mm or coarser	Using Gauge Block & Standard Length Bar by Comparison method	0 to 1000 mm	1.5+1.76(L)µm, where L in m
114	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector (Magnification Measurement)	Using Gauge Blocks and Digital Vernier Caliper by Direct method	Up to 100X	0.57%
115	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring Machine,Profile Projector (Angular Measurement), L.C.: 1s & coarser	Using Standard Angle Gauge Set by Comparison method	Up to 360°	4.0s of arc
116	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring Machine,Profile Projector (Linear Measurement), L.C.: 0.1 µm & coarser	Using Gauge Block Set by direct method	Upto 300 x 300 mm	2.1µm

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 96 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
117	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Negative Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Digital Vacuum Indicator / Pressure Gauge, Digital Multimeter & Comparator pump by Comparison method based on DKD R-6-1	0 to -0.980 bar	0.0005bar
118	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Negative Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Low Pressure Calibrator and Digital Multimeter by Comparison method based on DKD R-6-1	0 to -20 mbar	0.67%rdg
119	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Low Pressure: Digital & Dial Pressure Gauge, Manometer, Magnehelic Gauge, Pressure Calibrator, Pressure Modules, Pressure Transmitter & Switches	Using Low Pressure Calibrator and Digital Multimeter by Comparison method based on DKD R-6-1	0 to 20 mbar	0.67%rdg

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 97 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
120	MECHANICAL-PRESSURE INDICATING DEVICES	Pneumatic Pressure: Digital & Dial Pressure Gauge / Indicator, Pressure Calibrator, Pressure Modules, Pressure Transmitter, Pressure Switches / Safety Valves	Using Pressure Comparator, Transducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	0 to 100 bar	0.017%rdg
121	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Transmitter, Transducers & Switches	Using Pressure Comparator, Transducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	>100 bar to 700 bar	0.025%rdg
122	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Transmitter, Transducers & Switches	Using Pressure Comparator and Transducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	>700 bar to 1000 bar	0.052%rdg
123	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure: Digital & Dial Pressure Gauge, Pressure Calibrator, Pressure Transmitter, Transducers & Switches	Using Pressure Comparator, Transducers with Display Unit and Digital Multimeter by Comparison Method based on DKD R6-1	0 to 100 bar	0.017%rdg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	98 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
124	MECHANICAL-TORQUE GENERATING DEVICES	Torque Screw Driver/Torque Wrench /Torque Dial Gauges, Torque Meter. Type I & II (All Type Class)(Clockwise and anti-clockwise)	Using Torque Wrench Calibration System as per IS 16906:2018	1 Nm to 300 Nm	0.35%rdg
125	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 0.01 g	Using Standard Weights of E2 class (Upto 30 kg) as per OIML R-76	0.5 g to 6 kg	20mg
126	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 0.1 mg	Using Standard Weights of E2 class (1 mg to 200 g) as per OIML R-76	10 mg to 200 g	0.2mg
127	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 0.1mg	Using Standard Weights of E2 class (1 mg to 200 g) as per OIML R-76	1 mg to 80 g	0.16mg
128	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 1 g	Using Standard Weights of E2 class as per OIML R-76	20 g to 30 kg	0.1g
129	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 1 mg	Using Standard Weights of E2 class as per OIML R-76	0.5 g to 6.0 kg	20mg

SCOPE OF ACCREDITATION

Laboratory Name :	GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2727	**Page No**	99 of 102
Validity	12/11/2022 to 11/11/2024	**Last Amended on**	05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
130	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Weighing Balance (Class-I and Coarser), Readability: 1mg	Using Standard Weights of E2 class as per OIML R-76	50 mg to 500 g	2mg
131	THERMAL-SPECIFIC HEAT & HUMIDITY	Calibration of Thermo-Humidity Generator/chamber and Environmental Chambers (Multiposition Calibration)	Using Thermo-Humidity Data Loggers (minimum 9 sensors) by Comparison method	15 %rh to 95 %rh	8.21%rh
132	THERMAL-SPECIFIC HEAT & HUMIDITY	Calibration of Thermo-Humidity Generator/chamber and Environmental Chambers (Single Position Calibration)	Using Precision Thermo-Humidity Meter by Comparison method	15 %rh to 95 %rh	1.3%rh
133	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Dry Wells, Dry Block Calibrators, Furnaces, Ovens, Thermal Chambers (Single Position Calibration)	Using S-Type Thermocouple, Precision Temperature Readouts by Comparison method	650 °C to 1200 °C	1.50°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 100 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
134	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Liquid Bath, Dry Wells, Dry Block Calibrators, Deep Freezers, Incubators, Ovens, Thermal Chambers (Single Position Calibration)	Using PRT, Precision Temperature Readouts by Comparison method	-95 °C to 150 °C	0.030°C
135	THERMAL-TEMPERATURE	Calibration / Mapping / Surveying of Incubators, Freezers, Ovens, Environment Chambers and Control Rooms (Multiposition Calibration)	Using Precision Data Scanners with minimum 9 RTD sensors and Data Loggers by Comparison method	-65 °C to 100 °C	1.5°C
136	THERMAL-TEMPERATURE	RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with temperature indicator, Temperature Dial Gauge	Using PRT Sensor, Precision Temperature Readouts, Dry Block Calibrators by Comparison method	150 °C to 650 °C	0.085°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 101 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
137	THERMAL-TEMPERATURE	RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with/without temperature indicator, Temperature Dial Gauge	Using PRT Sensor, Precision Temperature Readouts, Dry Block Calibrators by Comparison method	0 °C to 150 °C	0.03°C
138	THERMAL-TEMPERATURE	RTD/Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor, Thermistor with/without temperature indicator, Temperature Dial Gauge	Using PRT Sensor, Precision Temperature Readouts, Ultra-cool Field Metrology Dry Well by Comparison method	-95 °C to 0 °C	0.03°C

SCOPE OF ACCREDITATION

Laboratory Name : GATRAD CAL-TEST LABORATORIES AND RESEARCH PVT. LTD., 248, GIDC ESTATE, TELEPHONE EXCHANGE ROAD, ODHAV, AHMEDABAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2727 **Page No** 102 of 102

Validity 12/11/2022 to 11/11/2024 **Last Amended on** 05/04/2023

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
139	THERMAL-TEMPERATURE	Temperature Indicator with sensor of : Liquid Bath, Dry Wells, Dry Block Calibrators, Furnaces, Ovens, Thermal Chambers (Single Position Calibration)	Using PRT, Precision Temperature Readouts by Comparison method	150 °C to 425 °C	0.080°C
140	THERMAL-TEMPERATURE	Temperature Indicator with sensor of :Dry Wells, Dry Block Calibrators, Furnaces, Ovens, Thermal Chambers (Single Position Calibration)	Using PRT, Precision Temperature Readouts by Comparison method	425 °C to 650 °C	0.080°C
141	THERMAL-TEMPERATURE	Thermocouple sensor with or without indicator, Digital Thermometers, Temperature transmitters with sensor, Recorder with Sensor	Using S-Type Thermocouple, Precision Temperature Readouts, High Temperature thermocouple Furnace by Comparison method	650 °C to 1200 °C	1.50°C

*** CMCs represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of k = 2.**