



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

1 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | 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 At 50 Hz | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 0.5 A to 3 A | 0.28% |
| 2 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | AC Current At 50 Hz | Using 6 ½ DMM Agilent 34401A with Agilent Shunt 30A/mV by Comparison/Direct Method | 10 A to 20 A | 0.71 % to 0.72 % |
| 3 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | AC Current At 50 Hz | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 100 mA to 0.5 A | 0.65 % to 0.26 % |
| 4 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | AC Current At 50 Hz | Using 6 ½ DMM Agilent 34401A with Agilent Shunt 30A/30mV by Comparison/Direct Method | 3 A to 10 A | 0.25 % to 0.71 % |
| 5 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | Ac High Voltage At 50 Hz | Using DMM Escort 97 with HV Probe Fluke 80 K-40 by Direct Method | 1 kV to 25 kV | 0.1 kV to 1.7 kV |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

2 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 6 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | Ac High Voltage At 50 Hz | Using DMM Escort 97 with HV Probe Fluke 80 K-40 by Direct Method | 1 kV to 6 kV | 0.07 kV to 0.33 kV |
| 7 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | AC Voltage At 50 Hz | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 10 mV to 30 mV | 0.55 % to 0.25 % |
| 8 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | AC Voltage At 50 Hz | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 100 mV to 750 V | 0.15% |
| 9 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | AC Voltage At 50 Hz | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 30 mV to 100 mV | 0.55 % to 0.16 % |
| 10 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | Capacitance At 1 kHz | Using Digital LCR Meter Aplab 4910 by Direct Method | 1 nF to 1 µF | 0.64 % to 0.56 % |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 3 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 11 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | Inductance At 1 kHz | Using Digital LCR Meter Aplab 4910 by Direct Method | 1 mH to 1 H | 0.65 % to 0.5 % |
| 12 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Current (50 Hz - 1kHz) | Using Fluke 5522A Multiproduct Calibrator by direct Method | 100 μ A to 100 mA | 0.27 % to 0.16 % |
| 13 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Current (50 Hz - 1kHz) | Using Fluke 5522A Multiproduct Calibrator by Direct Method | 100 mA to 1 A | 0.16 % to 0.08 % |
| 14 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Current (50 Hz - 1kHz) | Fluke-5522A Multi Product Calibrator by direct method | 30 μ A to 100 μ A | 0.52 % to 0.27 % |
| 15 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Current 50 Hz | Using Fluke 5522A Multi Product Calibrator by Direct Method | 1 A to 10 A | 0.08 % to 0.15 % |
| 16 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Current 50 Hz | Using 5522A Multiproduct Calibrator by Direct Method | 10 to 20 | 0.15 to 0.21 |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

4 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|---|---|--|
| 17 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Current 50 Hz | Using 5522A Multiproduct Calibrator with 50 Turns coil by Direct Method | 50 A to 1000 A | 0.8 % to 0.8 % |
| 18 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Power @50 Hz, 7.5 W-12kW (15 V to 600V , 0.5 A to 20 A)0.5 Lead & Lag, UPF | Using Fluke 5522A Multiproduct Calibrator by Direct Method | 7.5 W to 12 kW | 0.31% |
| 19 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Voltage At 50 Hz to 1 kHz | Using 5522A Multiproduct Calibrator by Direct Method | 1 V to 1000 V | 0.04% |
| 20 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | AC Voltage At 50 Hz to 1 kHz | Using 5522A Multiproduct Calibrator by Direct Method | 10 mV to 1 V | 0.11 % to 0.04 % |
| 21 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | Capacitance At 1 kHz | Using Decade Capacitance Box Sigma by Direct Method | 100 pF to 10 µF | 2.26% |
| 22 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | Inductance At 1 kHz | Using Std.Inductance Box LDB-6 by Direct Method | 100 µH to 10 H | 2.26% |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 5 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|--|---|--|
| 23 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Source) | Power Factor At 50 Hz | Using 5522A Multiproduct Calibrator by Direct Method | 0.2 PF to 1 PF | 0.006PF |
| 24 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Current | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 0.1 mA to 1 mA | 2.33 % to 0.39 % |
| 25 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Current | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 1 mA to 100 mA | 0.29 % to 0.17 % |
| 26 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Current | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 100 mA to 3 A | 0.07 % to 0.18 % |
| 27 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Current | Using 6 ½ DMM Agilent 34401A & Shunt by Comparison/Direct Method | 3 A to 20 A | 0.16 % to 0.88 % |
| 28 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC High Voltage | Using DMM Escort 97 with HV Probe Fluke 80 K-40 by Direct Method | 1 kV to 30 kV | 0.06 kV to 1.2 kV |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 6 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|--|---|--|
| 29 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC High Voltage | Using DMM Escort 97 with HV Probe Fluke 80 K-40 by Direct Method | 1 kV to 6 kV | 0.07 kV to 0.33 kV |
| 30 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Resistance | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 1 MO to 100 MO | 0.08 % to 0.92 % |
| 31 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Resistance | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 1 O to 10 O | 0.48 % to 0.13 % |
| 32 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Resistance | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 10 O to 1 MO | 0.08 % to 0.7 % |
| 33 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Voltage | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 1 mV to 100 mV | 0.45 % to 0.04 % |
| 34 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Voltage | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 1 V to 1000 V | 0.008% |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 7 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|--|---|--|
| 35 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC Voltage | Using 6 ½ DMM Agilent 34401A by Comparison/Direct Method | 100 mV to 1 V | 0.04 % to 0.008 % |
| 36 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Current | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 10 A to 20 A | 0.15 % to 0.21 % |
| 37 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Current | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 100 µA to 100 mA | 0.27 % to 0.16 % |
| 38 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Current | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 100 mA to 3 A | 0.16 % to 0.08 % |
| 39 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Current | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 3 A to 10 A | 0.08 % to 0.15 % |
| 40 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Current | Using Fluke 5522A Multi Product Calibrator by direct method | 30 µA to 100 µA | 0.52 % to 0.27 % |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 8 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 41 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Current | Using Fluke 5522A Multiproduct Calibrator with 50 Turns Coil by Direct Method | 50 A to 1000 A | 0.72 % to 0.7 % |
| 42 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Resistance | Using Resistance Box (Discrete Values)by Direct Method | 1 mΩ | 0.55% |
| 43 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Resistance | Using Resistance Box(Discrete Values)by Direct Method | 1 Ω | 0.23% |
| 44 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Resistance | Using Resistance Box(Discrete Values)by Direct Method | 10 mΩ | 0.23% |
| 45 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Resistance | Using Resistance Box(Discrete Values)by Direct Method | 100 mΩ | 0.23% |
| 46 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Voltage | Using Fluke 5522A Multiproduct Calibrator by Direct Method | 1 mV to 100 mV | 0.17 % to 0.004 % |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

9 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 47 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Voltage | Using Fluke 5522A Multiproduct Calibrator by Direct Method | 1 V to 1000 V | 0.002% |
| 48 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | DC Voltage | Using Fluke 5522A Multiproduct Calibrator by Direct Method | 100 mV to 1 V | 0.004 % to 0.002 % |
| 49 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | High Resistance | Using Mega Ohm Box Sigma (Discrete Values)by Direct Method | 1 GO | 3.4% |
| 50 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | High Resistance | Using Mega Ohm Box Sigma (Discrete Values)by Direct Method | 100 MO | 3.4% |
| 51 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | High Resistance | Using Mega Ohm Box Sigma (Discrete Values)by Direct Method | 2 GO | 4.0% |
| 52 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | High Resistance | Using Mega Ohm Box Sigma (Discrete Values)by Direct Method | 50 MO | 3.4% |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 10 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 53 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | High Resistance | Using Mega Ohm Box Sigma (Discrete Values)by Direct Method | 500 MO | 3.4% |
| 54 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | Resistance | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 1 O to 100 O | 0.12 % to 0.004 % |
| 55 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | Resistance | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 1 MO to 100 MO | 0.007 % to 0.07 % |
| 56 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | Resistance | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 100 O to 100 kO | 0.004% |
| 57 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | Resistance | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 100 kO to 1 MO | 0.004 % to 0.007 % |
| 58 | ELECTRO-TECHNICAL-DIRECT CURRENT (Source) | Resistance | Using Flluke 5522 A Multiproduct Calibrator by Direct Method | 100 MO to 1000 MO | 0.07 % to 1.26 % |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 11 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|---|---|--|
| 59 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (B Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 600 °C to 1800 °C | 0.64 °C to 0.64 °C |
| 60 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (J Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | -200 °C to 1000 °C | 0.31 °C to 0.31 °C |
| 61 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (K Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1300 °C | 0.19 °C to 0.46 °C |
| 62 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (R Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1750 °C | 0.65 °C to 0.47 °C |
| 63 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (S Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1750 °C | 0.56°C |
| 64 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (E-Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | -200 °C to 1000 °C | 0.57°C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 12 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|---|---|--|
| 65 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (N-Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1300 °C | 0.22 °C to 0.31 °C |
| 66 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (RTD - PT 100) | Using Masibus Calibrator MC -12 by direct method | -200 °C to 850 °C | 0.18 °C to 0.40 °C |
| 67 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure) | Temperature (T-Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | -200 °C to 390 °C | 0.72 °C to 0.17 °C |
| 68 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (B Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 600 °C to 1800 °C | 0.64 °C to 0.64 °C |
| 69 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (J Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | -200 °C to 1000 °C | 0.31 °C to 0.27 °C |
| 70 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (K Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1300 °C | 0.46 °C to 0.46 °C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

13 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 71 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (R Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1750 °C | 0.65 °C to 0.65 °C |
| 72 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (S Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1750 °C | 0.54 °C to 0.54 |
| 73 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (E Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1000 °C | 0.57 °C to 0.57 °C |
| 74 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (N Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | 0 °C to 1300 °C | 0.21 °C to 0.31 °C |
| 75 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (RTD - PT 100) | Fluke-5522A Multi Product Calibrator by direct method | -200 °C to 800 °C | 0.09 °C to 0.27 °C |
| 76 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (T Type Thermocouple) | Fluke-5522A Multi Product Calibrator by direct method | -200 °C to 390 °C | 0.72 °C to 0.17 °C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

14 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|---|---|--|
| 77 | ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure) | Frequency | 6.5 Digit Digital Multimeter Agilent 34401A by Comparison/Direct Method | 10 Hz to 300 kHz | 0.08 % to 0.02 % |
| 78 | ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure) | Time | Using digital timer by direct method | 1 S to 10 s | 0.022S |
| 79 | ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure) | Time | Using digital timer by direct method | 10 s to 1000 s | 0.022 sec to 0.083 sec |
| 80 | ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure) | Time | Using digital timer by direct method | 1000 s to 10000 s | 0.083 Sec to 1.42 Sec |
| 81 | ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure) | Time | Using digital timer by direct method | 10000 s to 86400 s | 1.42 s to 6.98 s |
| 82 | ELECTRO-TECHNICAL-TIME & FREQUENCY (Source) | Frequency | Fluke-5522A Multi Product Calibrator by direct method | 10 Hz to 1 MHz | 0.007 % to 0.007 % |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 15 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 83 | MECHANICAL-ACCELERATION AND SPEED | Non- Contact Type RPM Indicator/ Tachometer, Centrifuge | Digital Tachometer & RPM generator source | 100 RPM to 25000 RPM | 2.99 % to 0.13 % |
| 84 | MECHANICAL-ACOUSTICS | Sound Level meter (1 kHz) | Sound Level Calibrator | 94 dB to 114 dB | 0.64dB |
| 85 | MECHANICAL-DENSITY AND VISCOSITY | Density Hydrometers | Hydrometer of resolution 0.0005 g/ml and Appropriate Liquids BY Comparision method as per based on IS 3104 | 0.600 g/ml to 1.600 g/ml | 0.0018g/ml |
| 86 | MECHANICAL-DENSITY AND VISCOSITY | Density Hydrometers | Hydrometer of resolution 0.0005 g/ml and Appropriate Liquids BY Comparision method as per based on IS 3104 | 0.600 g/ml to 1.800 g/ml | 0.001g/ml |
| 87 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Angle Gauge | Using Sine bar, Gauge Block & Dial gauge | Upto 60 degree | 7.4Sec of arc |
| 88 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Angle Plate / Box Angle Plate | Using Master Cylinder, Surface Plate & Gauge Block | Upto 600 mm | 3.0µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

16 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 89 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Angle protector L.C 0.1 ° | Using sine bar, gauge block, master cylinder, surface plate | 50 mm to 1000 mm | 0.09° |
| 90 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bench Centre (Parallelism) | Using Dial Indicator, Electronic Level & Mandrel | Upto 1000 mm | 8µm |
| 91 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bench Centre (Co - Axiality) | Using Dial Indicator, Electronic Level & Mandrel | Upto 1000 mm | 8µm |
| 92 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bench Centre (Flatness) | Using Dial Indicator, Electronic Level & Mandrel | Upto 1000 mm | 4µm |
| 93 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bevel Protractor & Combination Set , LC - 5' | Angle Gauges | 0 ° to 360 ° | 4min. of arc |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

17 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 94 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bore Gauge Transmission movement only | Dial Calibration Tester, Dial Gauge, Electronic Probe & gauge Block | Upto 2 mm | 3.0µm |
| 95 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Caliper Checker | Caliper Checker, Length Bars & Lever Dial gauge | Upto 600 mm | 5.0µm |
| 96 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Coating Thickness Gauge | Using Thickness Foil | 10 µm to 700 µm | 3µm |
| 97 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Coating Thickness Gauge | Using Thickness Foils | Above 700 µm | 5µm |
| 98 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Comparator Stand (Flatness of Table) | Using Surface Plate & Dial Gauge with stand | 300X300 mm | 2.0µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

18 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 99 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Cube Mould | Digital caliper of LC 0.01 mm | 25 x 25 x 25 mm to 150 x 150 x 150 mm | 13.7µm |
| 100 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Cylindrical Square (Squareness Only) | Using Master cylinder & Gauge Block | Upto 600 mm | 3.0µm |
| 101 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Depth Gauge (LC - 0.01 mm) Vernier / Dial, Digital | Using Caliper Checker, Gauge Block & Length Bars | 0 mm to 600 mm | 7.2µm |
| 102 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Gauge (Plunger/Lever Type), (LC - 0.001mm) | Using Dial Gauge Calibrator and Gauge Blocks | 0 mm to 25 mm | 2.1µm |
| 103 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Gauge (Plunger/Lever Type), (LC - 0.01mm) | Using Dial Gauge Calibrator and Gauge Blocks | 0 mm to 50 mm | 6.11µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 19 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 104 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Gauge Calibrator (LC - 0.001 mm) | Using Gauge Blocks & Electronic Probe | 0 mm to 25 mm | 2.0µm |
| 105 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Thickness Gauge , (LC - 0.001mm) | Using Gauge blocks | 0 mm to 25 mm | 2.0µm |
| 106 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Digital Caliper | Using Caliper checker and Length bars | 0 mm to 1000 mm | 10.0µm |
| 107 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Engineer's Square/ Try Square | Using Master Cylinder, Slip Gauge & Surface Plate | Upto 600 mm | 3.0µm |
| 108 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer (LC - 0.01 mm) | Using Gauge Block & Length Bar | 100 mm to 600 mm | 7.0µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

20 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 109 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer (LC - 0.01 mm) | Using Gauge Block & Length Bar | Upto 100 mm | 3.0µm |
| 110 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer (LC - 0.001 mm) | Gauge Block & Length Bar | 0 mm to 150 mm | 0.83µm |
| 111 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Feeler Gauge | Using Digital Micrometer | 0.03 mm to 1 mm | 3.4µm |
| 112 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Floating Carriage Micrometer (LC - 0.2µm) | Using Gauge Block & Cylindrical Standards | 0 mm to 175 mm | 1.20µm |
| 113 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Gauge Block | Gauge Block Calibrator and Gauge Block Set Grade - 00 | 10 mm to 50 mm | 0.20µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

21 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 114 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Gauge Block | Gauge Block Calibrator and Gauge Block Set Grade - 00 | 50 mm to 100 mm | 0.41µm |
| 115 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Gauge Block | Gauge Block Calibrator and Gauge Block Set Grade - 00 | Up to 10 mm | 0.12µm |
| 116 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (LC - 0.01mm) | Using Caliper Checker, Gauge Block ,Length Bars & Lever Dial gauge | 0 mm to 300 mm | 8µm |
| 117 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (LC - 0.01mm) | Using Caliper Checker, Gauge Block , Length Bars & Lever Dial Gauge | 300 mm to 1000 mm | 10.0µm |
| 118 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Master (LC - 0.001mm) | Using Caliper Checker, Gauge Block ,Length Bars & Lever Dial gauge | 0 mm to 600 mm | 3.5µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 22 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 119 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Indside Dial Caliper (LC - 0.010mm) | Using Gauge blocks | 4 mm to 75 mm | 8µm |
| 120 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Inside Micrometer , LC - 0.01mm, (Two Jaw & Stick type) | Caliper Checker, Gauge Block Accessories & Length Bars | 5 mm to 25 mm | 3.4µm |
| 121 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Inside Micrometer, (Two Jaw & Stick type) LC - 0.01mm, | Using Caliper Checker, Gauge Block Accessories & Length Bars | 25 mm to 50 mm | 8.0µm |
| 122 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Inside Micrometer, (Two Jaw & Stick type) LC - 0.01mm, | Using Caliper Checker, Gauge Block Accessories & Length Bars | 300 mm to 1000 mm | 10.0µm |
| 123 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Inside Micrometer, (Two Jaw & Stick type) LC - 0.01mm, | Using Caliper Checker, Gauge Block Accessories & Length Bars | 50 mm to 300 mm | 8.0µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

23 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 124 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Length Bars | Using Length Bars, LVDT Probe & Surface Plate | 100 mm to 300 mm | 1.10µm |
| 125 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Length Bars | Using Length Bars, LVDT Probe & Surface Plate | 300 mm to 600 mm | 4.3µm |
| 126 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Length Bars | Using Length Bars, LVDT Probe & Surface Plate | 600 mm to 1000 mm | 5.0µm |
| 127 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Length Bars | Using Length Bars, LVDT Probe & Surface Plate | Upto 100 mm | 0.40µm |
| 128 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Linear Height Gauge (LC - 0.001 mm) | Using Caliper Checker, Length Bars , Lever Dial gauge and Gauge Blocks | 0 mm to 1000 mm | 4.2µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 24 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 129 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Linear probe (Digital), LC - 0.1µm | Using Gauge Blocks | 0 mm to 2 mm | 0.60µm |
| 130 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Master Cylinder | Using Master Cylinder, Surface Plate & Gauge Block | Upto 600 mm | 3.0µm |
| 131 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Pie Tape LC - 0.1 mm | using scale calibration unit with DRO of 0.001 mm | 1 mm to 25 meter | 7.53µm |
| 132 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Pin Gauge | Using Length Measuring Machine | Upto 10 mm | 1.0µm |
| 133 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Pitch gauge | Using Profile Projector | Upto 10 mm | 5.0µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 25 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 134 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plain Plug Gauge | Length Measuring Machine | 0.5 mm to 100 mm | 1µm |
| 135 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plain Ring Gauge | Using Length Measuring Machine by Comparison method | 3 mm to 300 mm | 2.0µm |
| 136 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Profile Projector linear scale LC = 0.001mm | Glass Scale | Upto 300 mm | 2.3µm |
| 137 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Profile Projector Angular Scale LC = 1" | Angle gauge | Upto 90 ° | 33Sec of arc |
| 138 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Profile Projector Magnification | Glass Scale ,Standard wires & Vernier Caliper | 5 x to 100 x | 0.17% |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

26 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 139 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Radius gauge | Profile Projector | Upto 50 mm | 9.6µm |
| 140 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Riser Block | Using Caliper checker, Lever Dial gauge & Length bar | Upto 100 mm | 1µm |
| 141 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Riser Block | Using Caliper checker, Lever Dial Gauge & Length Bar | Upto 300 mm | 2.0µm |
| 142 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Riser Block | Using Caliper checker, lever Dial Gauge & Length Bar | Upto 600 mm | 3.0µm |
| 143 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Sieves | Profile projector & Digital Vernier Caliper | 10 mm to 150 mm | 30µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

27 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 144 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Sieves | Profile Projector & Digital Vernier Caliper | Upto 10 mm | 6.2µm |
| 145 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Sine bar | Using Angle Gauge, Dial gauge & Gauge Block | Upto 300 mm | 4.5 µm to 6.5 sec of arc |
| 146 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Snap Gauge | Using Gauge Blocks | 2 mm to 100 mm | 3.0µm |
| 147 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Spirit Level , Sensitivity : 0.005mm/m | Electronic Level & Titling table | 0 ' to 1 ' | 4µm/m |
| 148 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Spirit Level , Sensitivity : 0.01mm/m | Electronic Level & Titling Table | 0 ' to 1 ' | 6µm/m |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 28 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 149 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Spirit Level , Sensitivity : 0.02mm/m | Electronic Level & Titling Table | 0 ' to 1 ' | 8µm/m |
| 150 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Steel Scale LC - 0.5 mm | Steel Scale Fixture with DRO, LC - 0.001mm | 0 mm to 2000 mm | 9.48µm |
| 151 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Steel Scale/ Tape Calibrator | Using Length Bar Set | Upto 1000 mm | 6.9µm |
| 152 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Steel Tape (LC - 1 mm) | Scale calibration unit with DRO , LC = 0.001mm | 0 m to 1 Every Subsequent m | 7.04 µm |
| 153 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Straight Edge Thickness upto 10mm I-section Thickness 20mm & above (Straightness) | Gauge Blocks ,Surface Plate & Electronic Level | Upto 4 m | 17µm/ m |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 29 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 154 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Surface Plate (Flatness) | Using Electronic Level lest count 0.001mm/m | Upto size (6000X4000) mm | 0.60µm |
| 155 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Taper Plug Gauge | Using Gauge Block & Digital Micrometer, Standard Wires | Upto 100 mm | 3.0µm |
| 156 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Taper Thread Plug Gauge (Only PCD) | Using Floating Carriage Micrometer & Thread Measuring wires | Upto 100 mm | 3.5µm |
| 157 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thickness Foil | Using Gauge Block Comparator & Gauge Block | 10 µm to 1000 µm | 4.0µm |
| 158 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread Plug Gauge, wear Check Plugs (Only PCD) | Using Floating Carriage Micrometer & Thread Measuring wires | Upto 100 mm | 2.70µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

30 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 159 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread Ring Gauge & Thread Check Ring Gauge | Using LMM, Master Ring & Thread Measuring Probe | 6 mm to 100 mm | 2.0µm |
| 160 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Ultra Sound Thickness Gauge | Using Slip Gauge set | 1 mm to 100 mm | 49.0µm |
| 161 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | V - Block (Flatness/ Parallelism) | Using Dial gauge & Test Mandrel | Upto 200X150X100 mm | 3.2µm |
| 162 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Vernier Caliper (LC - 0.01mm) | Using Caliper Checker, Gauge Block & Length Bars | 300 mm to 1000 mm | 10.0µm |
| 163 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Vernier Caliper (LC - 0.01mm) | Using Caliper Checker, Gauge Block & Length Bars | 0 mm to 300 mm | 7.2µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

31 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|---|---|--|
| 164 | MECHANICAL-DUROMETER | Shore A tester | Using digital single pan electronic balance of 0.1 g and fixture. ASTM 2240D | 0 shore A to 100 Shore A | 0.5Shore A |
| 165 | MECHANICAL-DUROMETER | Shore D tester | Using digital single pan electronic balance of 0.1 g and fixture. ASTM 2240D | 0 Shore D to 100 Shore D | 0.5Shore D |
| 166 | MECHANICAL-MOBILE FORCE MEASURING SYSTEM | Mobile force gauge (Push Pull Gauge) | Using fixture with aluminium and SS Hangers for push and pull mode and F1 class SS weights. VDI | 10 N to 1000 N | 0.77% |
| 167 | MECHANICAL-PRESSURE INDICATING DEVICES | Digital Vacuum Gauge/ Indicator # Vacuum Transducer, Vacuum Transmitter, Vacuum Valve, Vacuum Switch. | Digital Vacuum Gauge & Vacuum pump Comparator Direct Comparison, DKD- R-6-1 (Air medium) | -0.95 bar to 0 bar | 0.009bar |
| 168 | MECHANICAL-PRESSURE INDICATING DEVICES | Digital/Dial Pressure Gauge/ Indicator. Pressure Transducer, Pressure Transmitter, Pressure valve, Pressure Switch. | Digital Pressure Gauge & Comparator Direct Comparison, DKD- R-6-1 (Air medium) | 0 bar to 10 bar | 0.014bar |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 32 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--|--|---|---|--|
| 169 | MECHANICAL-PRESSURE INDICATING DEVICES | Digital/Dial Pressure Gauge/ Indicator. Pressure Transducer, Pressure Transmitter, PSV, Pressure valve, Pressure Switch. | Digital Pressure Gauge & Comparator Direct Comparison, DKD-R-6-1 (Water medium) | 10 bar to 700 bar | 0.43bar |
| 170 | MECHANICAL-TORQUE GENERATING DEVICES | Torque Transducer calibration, | Using primary method, calibrated 1 metre beam, pulley and F1 class SS and AL weights. BS 7882 | 10 Nm to 100 Nm | 0.05% |
| 171 | MECHANICAL-TORQUE GENERATING DEVICES | Torque Transducer calibration, | Using primary method, calibrated 1 m beam and F1 class SS weights. BS7882 | 100 Nm to 200 Nm | 0.08% |
| 172 | MECHANICAL-TORQUE MEASURING DEVICES | Torque Wrench Type - 1, Class, A,B,C,D,E Type - II, Class, A,B,C,D,E,F, & G | Digital Torque Calibrator IS 6789:2003 | 2 Nm to 20 Nm | 0.64% |
| 173 | MECHANICAL-TORQUE MEASURING DEVICES | Torque Wrench Type - 1, Class, A,B,C,D,E Type - II, Class, A,B,C,D,E,F, & G | Digital Torque Calibrator IS 6789:2003 | 2 Nm to 200 Nm | 0.64% |
| 174 | MECHANICAL-TORQUE MEASURING DEVICES | Torque Wrench Type - 1, Class, A,B,C,D,E Type - II, Class, A,B,C,D,E,F, & G | Digital Torque Calibrator IS: 6789:2003 | 200 Nm to 2000 Nm | 0.75% |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

33 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 175 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 0.1 ml to 100 ml | 2µl |
| 176 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 0.1 ml to 100 ml | 2µl |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 34 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 177 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 1 l to 5 l | 0.8ml |
| 178 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg.: | 1 l to 5 l | 0.8ml |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 35 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 179 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 100 ml to 1 l | 0.5ml |
| 180 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 5 l to 20 l | 7.1ml |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 36 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 181 | MECHANICAL-VOLUME | Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Cane etc. | Standard Weights F1 Class , precision balances, double distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 5 l to 20 l | 7ml |
| 182 | MECHANICAL-VOLUME | Micro Pipette | Standard Weights & Semi- micro balance and distilled water of known density as per Gravimetric method based on ISO 855-6, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 1 ml to 10 ml | 0.8µl |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

37 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 183 | MECHANICAL-VOLUME | Micro Pipette | Standard Weights & Semi- micro balance and distilled water of known density as per Gravimetric method based on ISO 855-6, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 10 µl to 100 µl | 0.5µl |
| 184 | MECHANICAL-VOLUME | Micro Pipette | Standard Weights & Semi- micro balance and distilled water of known density as per Gravimetric method based on ISO 855-6, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 100 µl to 1000 µl | 0.6µl |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 38 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 185 | MECHANICAL-VOLUME | Pipettes & Burettes | Standard Weights & Semi- micro balance and distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 0.1 ml to 5 ml | 1µl |
| 186 | MECHANICAL-VOLUME | Pipettes & Burettes | Standard Weights & Semi- micro balance and distilled water of known density as per Gravimetric method based on ISO 4787, 10 µl to 200 ml, LC of Balance = 0.01 / 0.1 mg, Range 80 / 220 g, 200 ml to 5000 ml, LC of Balance = 0.1 g, Range - 5000 g, 5000 to 20000 ml, LC of Balance = 5 g, Range - 60 kg. | 5 ml to 100 ml | 1.3µl |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

39 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---------------------------------------|--|---|---|--|
| 187 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability = 2 mg & coarser | Standard Weights of F1 Class as per Procedure based on OIML R76 (2006)calibration of Class I Weighing Balance & Coarser | to upto 200 g | 3mg |
| 188 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability = 2 mg & coarser | Standard Weights of F1 Class as per Procedure based on OIML R76 (2006)calibration of Class I Weighing Balance & Coarser | up to 200 g | 3mg |
| 189 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =1 mg & coarser | Standard Weights of F1 Class II Weighing Balance & Coarser | 0 to 1 kg | 2.5mg |
| 190 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =100 mg & coarser | Standard Weights of F1 Calibration & Weighing Balance of accuracy Class II & Coarser | upto 5 kg | 0.11g |
| 191 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =1g & coarser | Weighing Balance of Class IV | upto 100 kg | 2g |
| 192 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =20g & coarser | Weighing Balance of Class IV | upto 200 kg | 26g |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

40 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---------------------------------------|--|---|---|--|
| 193 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =20g & coarser | Weighing Balance of Class IV | upto 200 kg | 26g |
| 194 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =5 g & coarser | Weighing Balance of Class III & Coarser | upto 50 kg | 5.1g |
| 195 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 1 g | 0.10mg |
| 196 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 1 mg | 0.02mg |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

41 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 197 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 10 g | 0.20mg |
| 198 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 10 mg | 0.02mg |
| 199 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.1mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 100 g | 0.5mg |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

42 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 200 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 100 mg | 0.05mg |
| 201 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 2 g | 0.12mg |
| 202 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 2 mg | 0.02mg |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 43 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 203 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 20 g | 0.25mg |
| 204 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 20 mg | 0.03mg |
| 205 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.1mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 200 g | 1.0mg |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 44 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 206 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 200 mg | 0.06mg |
| 207 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 5 g | 0.16mg |
| 208 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 5 mg | 0.02 |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 45 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|---|---|--|
| 209 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 50 g | 0.30mg |
| 210 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 50 mg | 0.04mg |
| 211 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of F2 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.01mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 500 mg | 0.08mg |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

46 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 212 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.2 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 1 kg | 0.1g |
| 213 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 5 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 10 kg | 5g |
| 214 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 5 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 10 kg | 6g |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 47 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 215 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.2mg Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 2 kg | 0.1g |
| 216 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 5 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 20 kg | 5g |
| 217 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 5 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 20 kg | 6g |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

48 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|--------------------|--|--|---|--|
| 218 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 5 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 20 kg | 6g |
| 219 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.2 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 5 kg | 0.3g |
| 220 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 5 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 50 kg | 6g |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 49 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|----------------------------------|--|--|---|--|
| 221 | MECHANICAL-WEIGHTS | Mass Calibration of weights (Conventional Mass) of M1 class and coarser | Standard Weights F1 Class & Precision Balance of readability 0.2 g Procedure based on OIML R 111 Substitution method of ABA Weighing cycle | 500 g | 0.2g |
| 222 | OPTICAL-EQUIPMENTS | Digital Lux meter | Using light chamber and calibrated LUX meter by comparison method | 100 lx to 10000 lx | 5.9 % to 6.5 % |
| 223 | THERMAL-SPECIFIC HEAT & HUMIDITY | Humidity Sensor with Indicator (Dial/Digital)/Thermo Hygrometer, Humidity Chamber, Environmental/Climatic Humidity Chamber | Relative Humidity Sensor with Indicator, Humidity Generator by Comparison Method | 10 %RH to 95 %RH @ 25 °C | 1.16%RH |
| 224 | THERMAL-TEMPERATURE | Temperature Indicator of Dry Block furnace , Muffle Furnace | R Type Thermocouple with Indicator by Comparison Method | 50 °C to 600 °C | 0.65°C |
| 225 | THERMAL-TEMPERATURE | Temperature Indicator of Dry Block furnace , Muffle Furnace | R Type Thermocouple with Indicator by Comparison method | 600 °C to 1200 °C | 1.88°C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

50 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---------------------|--|--|---|--|
| 226 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor | RTD (PT-100) 4 wire with Indicator, Oil bath by Comparison method | 50 °C to 300 °C | 0.62°C |
| 227 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor | R Type Thermocouple with Indicator, Dry Block Furnace by Comparison method | 600 °C to 1200 °C | 1.88°C |
| 228 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor, Thermohygrometers with Sensor | R Type Thermocouple with Indicator, Dry Block Furnace by Comparison method | 300 °C to 600 °C | 1.5°C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 51 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 229 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor. | RTD (PT-100) 4 wire with Indicator, Liquid bath by Comparison method | -30 °C to 50 °C | 0.21°C |
| 230 | THERMAL-TEMPERATURE | Thermohygrometer, Temperature Indicator/Thermometer/Data logger/Temperature Gauge with inbuilt Temperature Sensor | Using 4 Wire RTD (PT-100) sensor with Indicator using Temperature chamber by comparison method | 20 °C to 50 °C @50%RH | 0.82 °C |
| Site | | | | | |
| 1 | ELECTRO-TECHNICAL-ALTERNATING CURRENT (< 1 GHZ) (Measure) | Ac High Voltage At 50 Hz | Using DMM Escort 97 with HV Probe Fluke 80 K-40 by Direct Method | 1 kV to 25 kV | 0.1 kV to 1.7 kV |
| 2 | ELECTRO-TECHNICAL-DIRECT CURRENT (Measure) | DC High Voltage | Using DMM Escort 97 with HV Probe Fluke 80 K-40 by Direct Method | 1 kV to 30 kV | 0.06 kV to 1.2 kV |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 52 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 3 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (J Type Thermocouple) | Masibus Calibrator MC -12 by direct method | -200 °C to 1050 °C | 0.35 °C to 0.35 °C |
| 4 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (K Type Thermocouple) | Masibus Calibrator MC -12 by direct method | 0 °C to 1300 °C | 0.46 °C to 0.46 °C |
| 5 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (R Type Thermocouple) | Masibus Calibrator MC -12 by direct method | 0 °C to 1750 °C | 0.57 °C to 0.57 °C |
| 6 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (S Type Thermocouple) | Masibus Calibrator MC -12 by direct method | 0 °C to 1750 °C | 0.57 °C to 0.57 °C |
| 7 | ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source) | Temperature (RTD - PT 100) | Using Masibus Calibrator MC -12 by direct method | -200 °C to 850 °C | 0.18 °C to 0.40 °C |
| 8 | MECHANICAL-ACCELERATION AND SPEED | Non- Contact Type RPM Indicator/ Tachometer, Centrifuge | Digital Tachometer & RPM generator source | 100 RPM to 25000 RPM | 2.99 % to 0.13 % |
| 9 | MECHANICAL-ACOUSTICS | Sound Level meter (1 kHz) | Sound Level Calibrator | 94 dB to 114 dB | 0.64dB |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 53 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 10 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Angle Plate / Box Angle Plate | Using Master Cylinder, Surface Plate & Gauge Block | Upto 600 mm | 3.0µm |
| 11 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bench Centre (Parallelism) | Using Dial Indicator, Electronic Level & Mandrel | Upto 1000 mm | 8µm |
| 12 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bench Centre (Co - Axiality) | Using Dial Indicator, Electronic Level & Mandrel | Upto 1000 mm | 8µm |
| 13 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bench Centre (Flatness) | Using Dial Indicator, Electronic Level & Mandrel | Upto 1000 mm | 4µm |
| 14 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Floating Carriage Micrometer (LC - 0.2µm) | Using Gauge Block & Cylindrical Standards | 0 mm to 175 mm | 1.20µm |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 54 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 15 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Linear Height Gauge LC - 0.0001mm | Using Caliper Checker, Length Bars & Lever Dial Gauge | 0 mm to 1000 mm | 4µm |
| 16 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Profile Projector linear scale LC = 0.001mm | Glass Scale | Upto 300 mm | 2.3µm |
| 17 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Profile Projector Angular Scale LC = 1" | Angle gauge | Upto 90 ° | 33Sec of arc |
| 18 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Profile Projector Magnification | Glass Scale ,Standard wires & Vernier Caliper | 5 x to 100 x | 0.17% |
| 19 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Straight Edge Thickness upto 10mm I-section Thickness 20mm & above (Straightness) | Gauge Blocks ,Surface Plate & Electronic Level | Upto 4 m | 17µm/ m |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

CC-2555

Page No

55 of 60

Validity

14/02/2020 to 13/02/2022

Last Amended on

08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|--|---|--|
| 20 | MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Surface Plate (Flatness) | Using Electronic Level lest count 0.001mm/m | Upto size (6000X4000) mm | 0.60µm |
| 21 | MECHANICAL-HARDNESS TESTING MACHINES | Hardness Rockwell Testing machines | Hardness Blocks Indirect Method IS : 1586 | 20 HRC to 70 HRC | 0.45 HRC |
| 22 | MECHANICAL-PRESSURE INDICATING DEVICES | Digital Vacuum Gauge/ Indicator # Vacuum Transducer, Vacuum Transmitter, Vacuum Valve, Vacuum Switch. | Digital Vacuum Gauge & Vacuum pump Comparator Direct Comparison, DKD- R-6-1 (Air medium) | -0.95 bar to 0 bar | 0.009bar |
| 23 | MECHANICAL-PRESSURE INDICATING DEVICES | Digital/Dial Pressure Gauge/ Indicator. Pressure Transducer, Pressure Transmitter, Pressure valve, Pressure Switch. | Digital Pressure Gauge & Comparator Direct Comparison, DKD- R-6-1 (Air medium) | 0 bar to 10 bar | 0.014bar |
| 24 | MECHANICAL-PRESSURE INDICATING DEVICES | Digital/Dial Pressure Gauge/ Indicator. Pressure Transducer, Pressure Transmitter, PSV, Pressure valve, Pressure Switch. | Digital Pressure Gauge & Comparator Direct Comparison, DKD- R-6-1 (Water medium) | 10 bar to 700 bar | 0.43bar |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 56 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---|--|---|---|--|
| 25 | MECHANICAL-UTM, TENSION CREEP AND TORSION TESTING MACHINE | Compression Testing machine | Dynamometer (Class - 1) IS: 1828 | 200 kN to 2000 kN | 0.9% |
| 26 | MECHANICAL-UTM, TENSION CREEP AND TORSION TESTING MACHINE | Compression Testing machine | Dynamometer (Class- 0/1) IS: 1828 | 50 kN to 1000 kN | 0.5% |
| 27 | MECHANICAL-UTM, TENSION CREEP AND TORSION TESTING MACHINE | Tensile/ compression testing machines | Using Digital load cell class 0/1 IS 1828 | 0.5 N to 50 N | 0.5% |
| 28 | MECHANICAL-UTM, TENSION CREEP AND TORSION TESTING MACHINE | Tensile/ Compression Testing machine | Digital Load Cell (class - 0/1) IS : 1828 | 50 N to 50 kN | 0.7% |
| 29 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability = 2 mg & coarser | Standard Weights of F1 Class as per Procedure based on OIML R76 (2006)calibration of Class I Weighing Balance & Coarser | to upto 200 g | 3mg |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

| | | | |
|-------------------------------|--|------------------------|------------|
| Laboratory Name : | BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA | | |
| Accreditation Standard | ISO/IEC 17025:2017 | | |
| Certificate Number | CC-2555 | Page No | 57 of 60 |
| Validity | 14/02/2020 to 13/02/2022 | Last Amended on | 08/04/2020 |

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---------------------------------------|--|---|---|--|
| 30 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability = 2 mg & coarser | Standard Weights of F1 Class as per Procedure based on OIML R76 (2006)calibration of Class I Weighing Balance & Coarser | up to 200 g | 3mg |
| 31 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =1 mg & coarser | Standard Weights of F1 Class II Weighing Balance & Coarser | 0 to 1 kg | 2.5mg |
| 32 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =100 mg & coarser | Standard Weights of F1 Calibration & Weighing Balance of accuracy Class II & Coarser | upto 5 kg | 0.11g |
| 33 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =1g & coarser | Weighing Balance of Class IV | upto 100 kg | 2g |
| 34 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =20g & coarser | Weighing Balance of Class IV | upto 200 kg | 26g |
| 35 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =20g & coarser | Weighing Balance of Class IV | upto 200 kg | 26g |
| 36 | MECHANICAL-WEIGHING SCALE AND BALANCE | Weighing Machine Readability =5 g & coarser | Weighing Balance of Class III & Coarser | upto 50 kg | 5.1g |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 58 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|----------------------------------|---|---|---|--|
| 37 | THERMAL-SPECIFIC HEAT & HUMIDITY | Humidity Sensor with Indicator of Environmental/conditioning Chamber/Humidity chamber | Relative Humidity Sensor with Indicator(Single point Calibration) | 10 %RH to 95 %RH @25 °C | 1.16%RH |
| 38 | THERMAL-TEMPERATURE | Calibration of Deep Freezer, Freezer, Incubator, BOD Incubator, Oven, Water bath, Temperature Furnace, Chamber, Autoclave (Industrial purpose only) | Using Data Logger with RTD Sensors (PT-100) by Multi Position Calibration | -80 °C to 300 °C | 1.0°C |
| 39 | THERMAL-TEMPERATURE | Calibration of Oven, Thermostat, Chamber, Temperature Furnace | Using Data Logger with K-Type Sensors by Multi Position Calibration | 300 °C to 1200 °C | 3.0°C |
| 40 | THERMAL-TEMPERATURE | Temperature Indicator of Deep Freezer, Freezer, Incubator, BOD Incubator, Oven, Water bath, Temperature Furnace, Chamber, Autoclave (Industrial purpose only) | RTD (PT-100) 4 wire with Indicator by Comparison method | -80 °C to 300 °C | 0.26°C |
| 41 | THERMAL-TEMPERATURE | Temperature Indicator of Dry Block furnace, Muffle Furnace | R Type Thermocouple with Indicator by Comparison Method | 50 °C to 600 °C | 0.65°C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 59 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---------------------|---|--|---|--|
| 42 | THERMAL-TEMPERATURE | Temperature Indicator of Dry Block furnace , Muffle Furnace | R Type Thermocouple with Indicator by Comparison method | 600 °C to 1200 °C | 1.88°C |
| 43 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor | RTD (PT-100) 4 wire with Indicator, Oil bath by Comparison method | 50 °C to 300 °C | 0.62°C |
| 44 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor | R Type Thermocouple with Indicator, Dry Block Furnace by Comparison method | 600 °C to 1200 °C | 1.88°C |



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BAGSON CALIBRATION LAB PVT LTD, B-14 DSIDC COMPLEX, PATPARGANJ
INDUSTRIAL AREA, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2555 **Page No** 60 of 60

Validity 14/02/2020 to 13/02/2022 **Last Amended on** 08/04/2020

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
|------|---------------------|--|--|---|--|
| 45 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor, Thermohygrometers with Sensor | R Type Thermocouple with Indicator, Dry Block Furnace by Comparison method | 300 °C to 600 °C | 1.5°C |
| 46 | THERMAL-TEMPERATURE | Temperature Transmitter, RTD, Thermocouples with & without controller/Data Logger/recorder, Temperature Gauge, Glass Thermometer, Digital Thermometer with inbuilt sensor. | RTD (PT-100) 4 wire with Indicator, Liquid bath by Comparison method | -30 °C to 50 °C | 0.21°C |

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