

Laboratory

RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida,  
Gautam Budh Nagar, Uttar Pradesh

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2427

Page

1 of 7

Validity

30.10.2017 to 29.10.2019

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
<b><u>MECHANICAL CALIBRATION</u></b>				
<b>1.</b>	<b>DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)</b>			
1.	Vernier Caliper <sup>s</sup> L.C.: 0.01 mm <sup>φ</sup> L.C.: 0.02 mm	0 to 300 mm 0 to 600 mm	11.54 $\mu$ m 19.40 $\mu$ m	Using Caliper Checker, Gauge Block Set & Slip Gauge Set
2.	Height Gauge <sup>s</sup> L.C.: 0.02 mm	0 to 600 mm	13.40 $\mu$ m	Using Caliper Checker, Gauge Block Set & Slip Gauge Set
3.	External Micrometer <sup>s</sup> L.C.: 0.001 mm	0 to 50 mm	1.27 $\mu$ m	Using Micrometer Checker, Slip Gauge Set & Gauge Block Set
4.	Flange Micrometer <sup>s</sup> L.C.: 0.01 mm	0 to 25 mm	6.60 $\mu$ m	Using Micrometer Checker, Slip Gauge Set & Gauge Block Set
5.	Spline Micrometer <sup>s</sup> L.C.: 0.01 mm	0 to 25 mm	6.60 $\mu$ m	Using Micrometer Checker, Slip Gauge Set & Gauge Block Set
6.	Ball /Tube Micrometer <sup>s</sup> L.C.: 0.01 mm	0 to 25 mm	6.60 $\mu$ m	Using Micrometer Checker, Slip Gauge Set & Gauge Block Set
7.	Blade Micrometer / Dial Micrometer / Groove Micrometer <sup>s</sup> L.C.: 0.01 mm	0 to 25 mm	6.60 $\mu$ m	Using Micrometer Checker, Slip Gauge Set & Gauge Block Set

**Mohit Kaushik**  
Convenor

**Avijit Das**  
Program Director

Laboratory

RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida,  
Gautam Budh Nagar, Uttar Pradesh

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2427

Page

2 of 7

Validity

30.10.2017 to 29.10.2019

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
8.	Dial Thickness Gauge <sup>§</sup> L.C.: 0.001 mm L.C.: 0.01 mm	Up to 1 mm Up to 10 mm	3.00 $\mu$ m 7.70 $\mu$ m	Using Gauge Block Set, Standard Foil and Feeler Gauge Using Gauge Block Set
9.	Feeler Gauge <sup>§</sup>	0.05 mm to 1 mm	1.80 $\mu$ m	Using Digital Micrometer
10.	Standard Thickness Foils <sup>§</sup> L.C.: 0.001 mm	Up to 2 mm	1.99 $\mu$ m	Using Digital Micrometer
11.	Coating Thickness Gauge <sup>§</sup>	Up to 659 $\mu$ m	2.17 $\mu$ m	Using Standard Foils
12.	Depth Gauge (Digital / Dial / Vernier) <sup>§</sup> L.C.: 0.01 mm	Up to 300 mm	10.47 $\mu$ m	Using Caliper Checker and Gauge Block Set
13.	Dial Gauge <sup>§</sup> (Plunger Type) L.C.: 0.01 mm	0 to 50 mm	10.30 $\mu$ m	Using Gauge Block Set
14.	Inside Micrometer <sup>§</sup> L.C.: 0.01 mm	5 mm to 50 mm	8.01 $\mu$ m	Using Digital Micrometer/ Slip Gauge accessories
15.	Depth Micrometer <sup>§</sup> L.C.: 0.01 mm	0 to 150 mm	9.67 $\mu$ m	Using Slip Gauge Set, Slip Gauge Accessories & Caliper checker
16.	Test Sieves <sup>§</sup>	1.18 mm to 80 mm	21.09 $\mu$ m	Using Digital Vernier Caliper

Mohit Kaushik  
Convenor

Avijit Das  
Program Director

Laboratory RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida,  
Gautam Budh Nagar, Uttar Pradesh

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2427 Page 3 of 7

Validity 30.10.2017 to 29.10.2019 Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
II.	<b>ACCELERATION AND SPEED</b>			
1.	RPM Indicator, Centrifuge Rotator, RPM Measurement, Dissolution Apparatus, Mixture, Stirrer, Motor Fan <sup>\$</sup>	Up to 15500 RPM	1.04 %	By Direct Comparison using Tachometer With RPM generator & controller
III.	<b>PRESSURE INDICATING DEVICES</b>			
1.	Hydraulic Pressure <sup>#</sup> (Pressure Gauge / Indicator & Pressure Switch)	0 to 600 bar	0.5 bar	Using Digital Pressure Gauge
IV.	<b>ACCOUSTICS</b>			
1.	Sound Level Meter <sup>\$</sup>	94 dB 114 dB	1.1 dB 1.3 dB	Using Sound Level Calibrator
V.	<b>WEIGHING SCALE AND BALANCE</b>			
1.	Electronic Weighing Balance <sup>#</sup> (Class-1 and Coarser)	1 mg to 80 gm d $\geq$ 0.01 mg	0.04 mg	Using E2 Class Standard Weights as per OIML R-76
		10 mg to 200 g d $\geq$ 0.1 mg	0.3 mg	

Mohit Kaushik  
Convenor

Avijit Das  
Program Director

Laboratory RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida,  
Gautam Budh Nagar, Uttar Pradesh

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2427 Page 4 of 7

Validity 30.10.2017 to 29.10.2019 Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
<b>VI.</b>	<b>WEIGHTS</b>			
1.	Mass /Weights <sup>s</sup> (F2 class weights and coarser)	1 mg 2 mg 5 mg 10 mg 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g	0.03 mg 0.03 mg 0.03 mg 0.03 mg 0.03 mg 0.03 mg 0.04 mg 0.04 mg 0.04 mg 0.04 mg 0.04 mg 0.04 mg 0.04 mg 0.04 mg 0.04 mg 0.05 mg 0.3 mg 0.3 mg	Using E2 class standard weights 1 mg to 200g and weighing balance of d:0.01/ 0.1 mg as per OIML R-111: 2004 By Substitution Method through ABBA cycles
<b>VII.</b>	<b>VOLUME</b>			
1.	Volume Glassware <sup>s</sup> (Pipette, Burette, Measuring Cylinder, Volumetric Flasks)	1 ml $\leq$ V < 25 ml 25 ml < V $\leq$ 100 ml	3.7 $\mu$ l 5 $\mu$ l	Using Weighing balance With d: 0.01/0.1mg & distilled water by Gravimetric method as per ISO 4787
2.	Micro Pipettes <sup>s</sup>	10 $\mu$ l < V $\leq$ 100 $\mu$ l 100 $\mu$ l < V $\leq$ 1000 $\mu$ l 1ml < V $\leq$ 5 ml	0.24 $\mu$ l 0.4 $\mu$ l 0.2 $\mu$ l	Using weighing balance With d: 0.01/ 0.1mg & Distilled water by Gravimetric Method as per ISO 8655

**Laboratory** RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida,  
 Gautam Budh Nagar, Uttar Pradesh  
**Accreditation Standard** ISO/IEC 17025: 2005  
**Certificate Number** CC-2427 **Page** 5 of 7  
**Validity** 30.10.2017 to 29.10.2019 **Last Amended on** -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
<b>VIII.</b>	<b>DENSITY AND VISCOSITY</b>			
1.	Hydrometer <sup>s</sup>	0.700 g/ml to 1.840 g/ml	0.04g/ml	Using Hydrometer of resolution: 0.01g/ml and Appropriate liquid as per Archimedes Principle based on IS 3104

---

**Mohit Kaushik**  
 Convenor

---

**Avijit Das**  
 Program Director

**Laboratory** RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida,  
 Gautam Budh Nagar, Uttar Pradesh  
**Accreditation Standard** ISO/IEC 17025: 2005  
**Certificate Number** CC-2427 **Page** 6 of 7  
**Validity** 30.10.2017 to 29.10.2019 **Last Amended on** -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
<b><u>THERMAL CALIBRATION</u></b>				
<b>1.</b>	<b>TEMPERATURE</b>			
1.	RTD/TCs with Temperature Indicator/Data Logger/ Recorder <sup>§</sup>	(-) 20 °C to 25 °C	0.5 °C	Using RTD with Temperature Indicator, Low Temp. Air Bath
2.	RTD /TCs with Temp. Indicator / Data Logger / Recorder <sup>§</sup>	50 °C to 100 °C 100 °C to 250 °C 250 °C to 500 °C	0.5 °C 2.1 °C 2.1 °C	Using RTD with Temperature Indicator , Dry Block Bath
3.	Temperature Indicator with Inbuilt Sensor <sup>§</sup>	20 °C to 50 °C	0.5 °C	Using RTD Indicator, Cold / Hot Air Chamber
4.	Temperature Indicator with sensor of Deep Freezer, Cold Chamber <sup>*</sup>	(-) 20 °C to 25 °C	1 °C	Using RTD with Temperature Indicator by Single Position Calibration (At Measuring Location in DUC)
5.	Temperature Indicator with Sensor of Incubator, Oven, Chamber etc <sup>*</sup>	25 °C to 250 °C	2.0 °C	Using RTD with Temperature Indicator Single Position Calibration (At Measuring Location in DUC)

**Mohit Kaushik**  
 Convenor

**Avijit Das**  
 Program Director

**Laboratory** RICTA (OPC) Private Limited, D-375, 1<sup>st</sup> Floor, Sector-10, Noida, Gautam Budh Nagar, Uttar Pradesh

**Accreditation Standard** ISO/IEC 17025: 2005

**Certificate Number** CC-2427 **Page** 7 of 7

**Validity** 30.10.2017 to 29.10.2019 **Last Amended on** -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
II.	<b>SPECIFIC HEAT &amp; HUMIDITY</b>			
1.	Humidity Indicator With Sensor, Dial / Digital Thermo-Hygrometer <sup>#</sup>	40 % RH to 90 % RH @ 25 °C	2.4 % RH	Using Humidity Chamber, Humidity Indicator with Inbuilt Sensor

\* Measurement Capability is expressed as an uncertainty ( $\pm$ ) at a confidence probability of 95%

<sup>§</sup> Only in Permanent Laboratory

<sup>\*</sup> Only for Site Calibration

<sup>#</sup> The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.

<sup>ϕ</sup> Laboratory can also calibrate instruments/devices of coarser resolution / least count within the accredited range using same reference standard/ master equipment under the scope of accreditation.

---

Mohit Kaushik  
Convenor

---

Avijit Das  
Program Director