

# COMPANY PROFILE



**AUTOCAL SOLUTIONS PVT. LTD.**

**Bringing Sharpness To The Quality Of Life Science**





# CONTENT

<b>Sr. No.</b>	<b>Content</b>	<b>Page No.</b>
<b>1</b>	<b>Index</b>	<b>2</b>
<b>2</b>	<b>About us</b>	<b>3</b>
<b>3</b>	<b>Legal Status</b>	<b>4</b>
<b>4</b>	<b>Our Memberships</b>	<b>5</b>
<b>5</b>	<b>Our Locations</b>	<b>6</b>
<b>6</b>	<b>Locate Us</b>	<b>7</b>
<b>7</b>	<b>Traceability to international standards</b>	<b>8</b>
<b>8</b>	<b>Who Governs us</b>	<b>9</b>
<b>8</b>	<b>About Calibration</b>	<b>10</b>
<b>9</b>	<b>Calibration Range</b>	<b>11</b>
<b>10</b>	<b>Scope of Calibration</b>	<b>12</b>
<b>11</b>	<b>List of Reference Standards-Calibration</b>	<b>23</b>
<b>12</b>	<b>Major Products Calibrated</b>	<b>36</b>
<b>13</b>	<b>About Validation</b>	<b>37</b>
<b>14</b>	<b>Equipment Validation</b>	<b>39</b>
<b>15</b>	<b>Facility qualification and Validation</b>	<b>40</b>
<b>16</b>	<b>Steam Quality Test</b>	<b>41</b>
<b>17</b>	<b>PLC services</b>	<b>42</b>
<b>18</b>	<b>HVAC Validation</b>	<b>44</b>
<b>19</b>	<b>Compressed Air Validation</b>	<b>45</b>
<b>20</b>	<b>List of Standard Instruments-Validation</b>	<b>46</b>
<b>21</b>	<b>Environmental, Safety, Health &amp; Sustainability</b>	<b>53</b>
<b>22</b>	<b>AUTOCAL Family</b>	<b>56</b>
<b>23</b>	<b>Associates with</b>	<b>57</b>
<b>24</b>	<b>Quality objectives and Quality Policy</b>	<b>62</b>
<b>25</b>	<b>Brief about Training Module</b>	<b>63</b>
<b>26</b>	<b>Consultancy Services</b>	<b>64</b>
<b>27</b>	<b>Thank You</b>	<b>65</b>

## Why AUTOCAL?



In a word... VALUE and the value comes from... People... AUTOCAL people.

Who are we?

Choosing a calibration company is a very important factor in maintaining QA requirements. Good calibrated equipment saves money and establishes the success of your company. So why don't you rely on the company that provides the best calibration service? AUTOCAL is the most advanced calibration laboratory for all types of measurement devices in India. For nearly fifteen years in the market, AUTOCAL has been committed in providing honesty, dependability & excellence to our Customers.

We believe in technological improvement and quality to drive our businesses to the next level. Our company not just raises the standard but soars beyond them with trained personnel, creating continual development to strive an excellent, professional and motivational environment. Also our laboratories are equipped with the most advanced instruments creating a customized based company to fill its needs.

Our mission is to provide our customers test & calibrations of the highest quality, with competitive pricing and on time delivery the first time and every time. We want to be an integrated solution where you will feel that we are another department in you company.

We keep ourselves ahead of the competition with our facilities and services. We have been accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) which is an autonomous body under the Department of Science and Technology which in turn has a Mutual recognition Agreement (MRA) with APLAC (Asia Pacific Laboratory Accreditation Council) and ILAC (International Laboratory Accreditation Council), is once again, a way to assure our customers with highest possible level of accuracy and precision in this calibration and certification of their instruments.

Our reminders system will let you know by phone and email when the calibration testing and certification renewal of your instruments are due. We offer pick-up and delivery services for your convenience. You can trust our calibration to fully trained professionals with expertise, talent, and resources letting your company focus on your core competency.

We can help you with your Calibration, Validation (Process, HVAC, PLC), Testing (Compressed Air, steam quality, Water, Microbiological, Food) and training in our field of operations & other quality assurance needs. Since our inception in 2002, we have provided critical calibration, validation and advisory services to more than 4000 customers from the Pharmaceuticals, Biomedical, Food, Chemical & Drug, Engineering, automotive industry, airlines and many more.

## Legal Status

Name of the company	:	<b>AUTOCAL SOLUTIONS PVT.LTD.</b>
Legal Status	:	Private Limited Company registered under the Company act. 1956
Chairman	:	Vinit A. Shirsat
Managing Director	:	Prashanth Kamath (Mob. No.09321250600)
Registered & Head Office (Correspondence Office)	:	Unit No.4, 5, 10 & 11, Ruby Industrial Estate PCS Ltd. Navghar, Vasai Road (East), District-Palghar, Pin-401210, Maharashtra, India
Phone	:	91 0250 2392288-89, 2393247, 2393502-03
Website	:	www.autocal.net
E-mail	:	sales@autocal.net
Bankers	:	ICICI BANK LTD., Vimal Shopping Centre, Main Road, Vasai(West), Dist. Thane – 401202 A/c. No.: 002251000002 RTGS/ NEFT No.:ICIC0000022
CIN No.	:	U72200MH2008PTC178116
Pan No.	:	AAGCA9480P
TAN No.	:	MUMA32604F
Professional tax No.	:	27270678266P
IEC (Import Export Code) No.	:	0308011619 dated 21/05/2008.
Shop & Establishment No.	:	1710200310921608 & 1710200310921890
ESIC No.	:	RM2914 wef 04/03/2004 (35000029630000607)
Provident fund No.	:	KD/MAL/0094005
GST No	:	27AAGCA9480P1ZV



## WE ARE MEMBERS OF FOLLOWING.....



Membership No.AOIL/M/180

**ieema**  
your link to electricity

Membership  
No.AUT-M-12-2013-1189



Membership No.1/043866



Membership No. 337/K/A



Membership ID. 1024803



Membership No.LM-0012



Membership No.AM1004



Membership  
No.CORP/CM/5332/2017-18



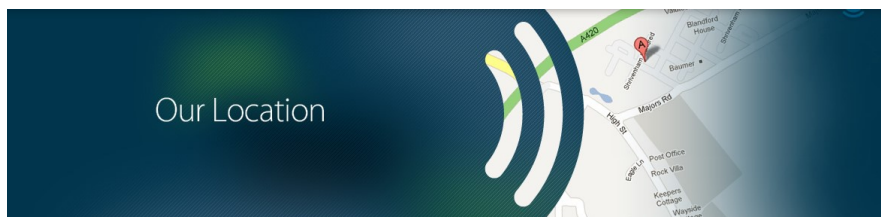
Membership No.LM955



Membership No. 67-565-2119



Membership No. AS-11829

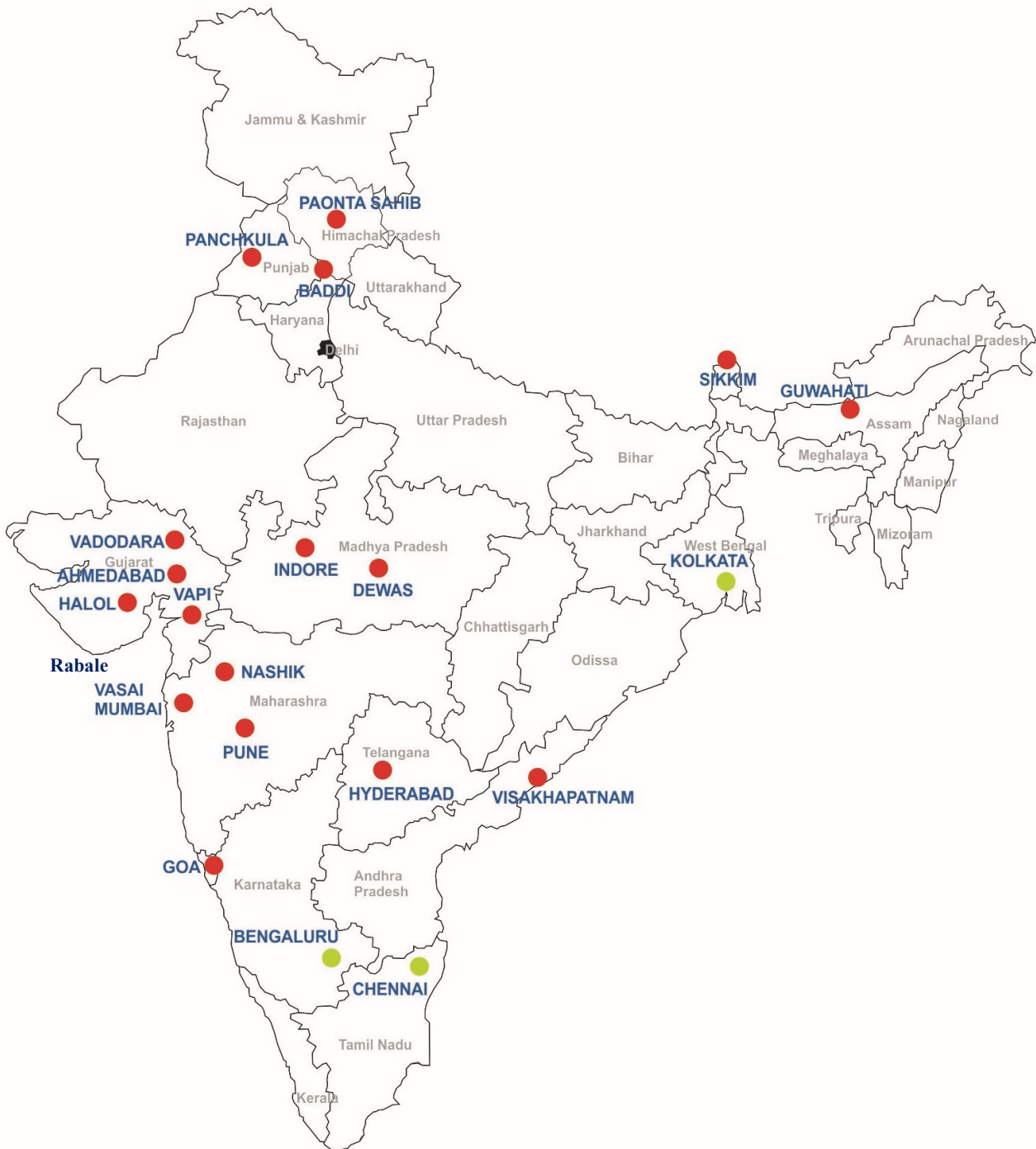


Location	Address	Email Id
Vasai (Head & Admin Office.)	Unit No. 4,5,10 & 11, Ruby Industrial Estate, Navghar, Vasai Road (East), Palghar- 401210, Maharashtra	sales@autocal.net
Goa	Unit no 1,Reema House,Ground Floor,Near Bharat Steel, Verna Industrial Estate, Verna-403722, Goa	<a href="mailto:goa@autocal.net">goa@autocal.net</a> , <a href="mailto:goal@autocal.net">goal@autocal.net</a>
Goa	Shed No - 11, Behind IDC office, Kundaim Industrial Estate, Kundaim- 403115, Goa	samservices@autocal.net
Indore	Plot No.2 & M1, Phase-II, Apperal Park, SEZ, Pithampur-12, Madhya Pradesh	indore@autocal.net
Baddi	Cabin No 32, SCO 45, Second floor, Canam Plaza, Sector-11, Panchkula-134112, Hararyana	baddi@autocal.net
Vadodara	109/110, 1st Floor, Siddhi Vinayak Complex,Opp. Vadodara Railway Station, Vadodara (W),Gujarat- 390005	vadodara@autocal.net
Nashik	06, Gurusampada Society, Vanvihar Colony, Behind Bhonsala School, Nashik - 422005	adminnsk@autocal.net
Sikkim	Near Govt Hospital, Opposite Green Hills Hotel, Rangpo, East Sikkim- 737132	sikkim@autocal.net
Dewas	House No. 417, Ganganagar, Dewas, M.P. 455001	mahendra.sonekar@sunpharma.com
Hyderabad	---	sales@autocal.net
Vapi	---	sales@autocal.net
Guwahati	Post Office Mirza, Village- Kochpara, Landmark Behind Shahid Bedi Park, Opp. Social Welfair office, Dist Kamrup(Rural), Police Station-Palashbari, Pincode-781125	plcval1@autocal.net
Vizag	D.No.31-28-17, Ground Floor, Rani Niwas, Kurmannapalem, Visakhapatnam-530046	vizag@autocal.net
Paonta Sahib	House No. 1351, Ward No. 11, Ekta Colony, Paonta Sahib, HP	pradeepv@autocal.net
Halol	39, Sharda Nagar Society, Near Garba Ground, Halol Distt. Panchmahal - 389350	halol@autocal.net
Ahmedabad	---	sales@autocal.net
Rabale	Plot No. PAP-R-149 & 150, Rabale MIDC, (Behind Hotel Sai Prasad) Pipeline Road, TTC Industrial Area, Navi Mumbai – 400701	rashmig@autocal.net

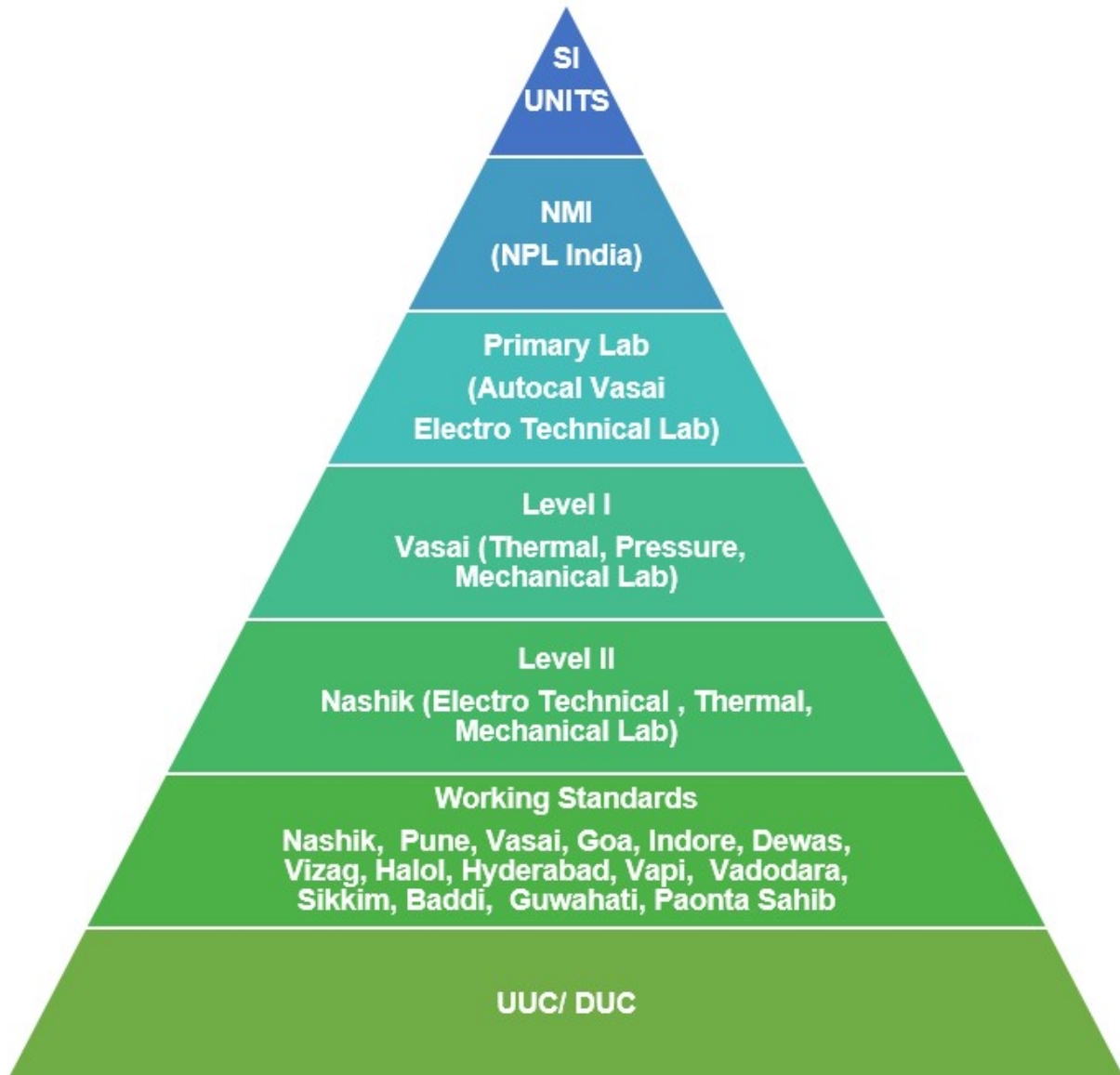
## LOCATE US AT:

● EXISTING PRESENCE IN INDIA

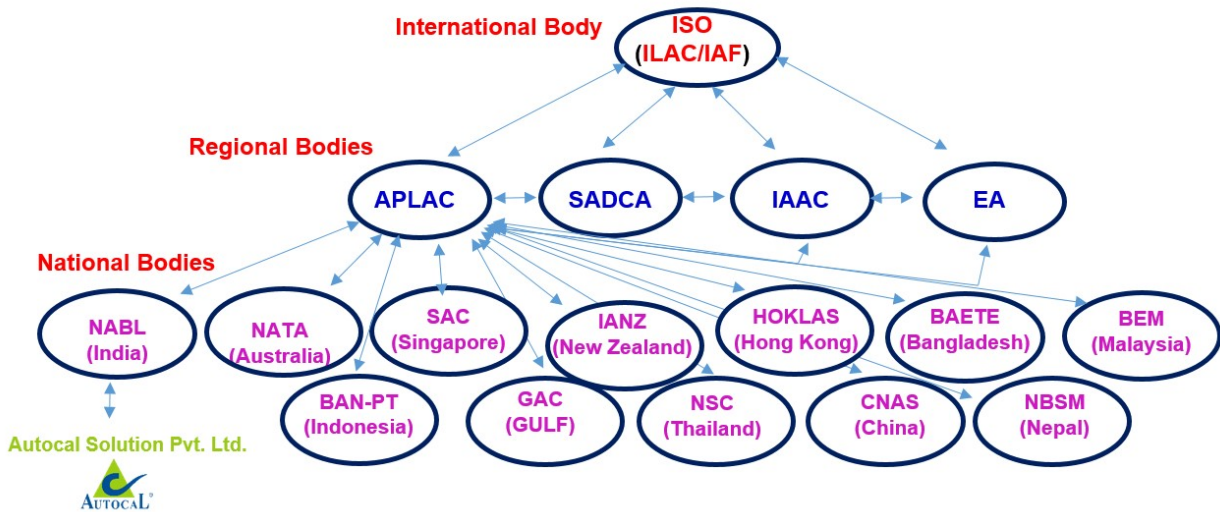
● PROPOSED PRESENCE IN INDIA



## TRACEBILITY TO INTERNATIONAL STANDARDS



# WHO GOVERNS US



TITLE	WEBSITE
SI ( <i>International System of Units</i> )	
NMI ( <i>National Metrology Institutes</i> )	<a href="http://www.nmi.nl">www.nmi.nl</a>
NPL India ( <i>National Physical Laboratory</i> )	<a href="http://www.nplindia.org">www.nplindia.org</a>
UUC ( <i>Unit Under Calibration</i> )	
DUC ( <i>Device under calibration</i> )	

## CALIBRATION

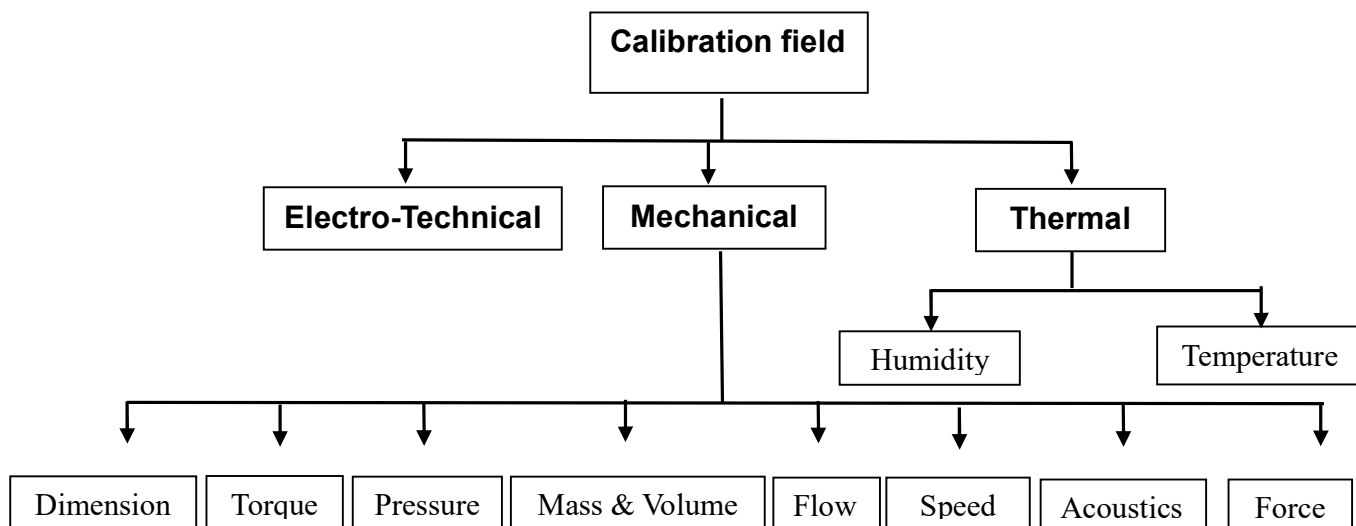
Calibration is the process for determination of correct value of each scale reading of measuring instruments by measurement or comparison with standard instruments. Consistency in the product you manufacture is imperative. From this aspect probably your product's government approval, its quality, acceptance and growth in the market are dependent.

Accuracy is the key to maintaining consistency. There are plenty of other elements involved in the production of your company's products; accuracy in the measurement of its ingredients should not be an extra concern. Nevertheless, it is a very well known fact that the lack of calibration and alignment of equipment causes plenty of drawbacks. We like to make sure that you never have to suffer such types of drawbacks.

Our calibration services involve:

- Identification of Calibration requirements by system and equipment (critical and non-critical)
- Identification of plant wide calibration requirements.
- Criteria for a calibration program and traceability to the National/International standard
- Generation and implementation of a plant-wide calibration program
- Certification of the plant-wide calibration program

AUTOCAL prides itself in its ability to perform quality work within budgetary and time constraints. We are the experts and have the references and success stories of our clients to attest to our abilities. With over five years of experience in the Calibration and Validation industry, AUTOCAL now can also provide your organization with personnel who have “been there & done that” experience in all phases of Calibration Database Implementation and Validation.





## CALIBRATION RANGES

**Liquid Flow calibration** Range: upto 500 m<sup>3</sup>/hr



**Volume calibration** Range: 1 µl to 20 ltr



**Mass calibration** Range: 1 mg to 1000 kg



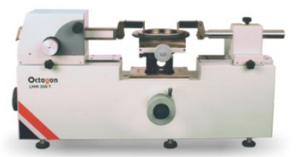
**Humidity calibration** Range: 10%RH to 95%RH



**Acoustic calibration** Range: 74dB, 84dB, 94dB & 104dB, 114dB @1KHZ



**Dimension calibration** Range: 0.1 µm to 1500 mm



**Pressure calibration** Range: -1bar to 2000 bar



**Temperature calibration** Range: -196°C (at fixed temp.), -95°C to 1200°C



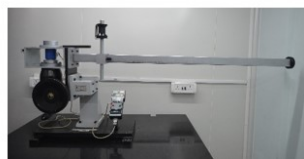
**Gas Flow calibration** Range: 0.5 SLPM to 4000 SLPM



**Speed calibration** Range: 5RPM to 99999RPM



**Torque calibration** Range: 1 N-m to 1000 N-m



**Electro-Technical calibration** Range: DC Voltage, DC Current, AC Voltage, AC Current, DC Resistance, AC Resistance, Capacitance, Inductance, Frequency, DC Power, AC Power, Power Factor, Active Energy, Transformer Turns Ratio, etc.



- Chemical
- Strain gauge installation & testing
- Accelerometry
- Humidity
- Force
- Mechanical inspection
- Temperature
- Radiometry / Photometry
- Time / Frequency
- Hardness
- Testing machines (force & hardness)



## SCOPE OF CALIBRATION (NASHIK LABORATORY)

NABL Accredited Laboratory As per ISO/ IEC: 17025 : 2005

### Electro-Technical:

Parameter/Test	Range	Calibration Measurement Capability ( $\pm$ )
<b><u>SOURCE: At Lab &amp; Site</u></b>		
DC Voltage		
DC Current	1 mV-1000V	0.92% - 0.012 %
Resistance	10 $\mu$ A - 1000A 10 $\Omega$ - 400M $\Omega$	0.32% - 0.35 % 0.15% - 0.90%
Discrete Resistance Box		
Discrete High Resistance Box	1 $\Omega$ - 1000M $\Omega$ 1 G $\Omega$ - 400G $\Omega$	0.58% - 1.20% 5.80%
AC Voltage		
	10mV - 1000V @50Hz -1kHz 10mV - 100V @1kHz - 20kHz 10mV - 100V @ 20kHz - 50kHz	1.16% - 0.07 % 2.84% - 0.11 % 5.65% - 0.21 %
AC Current		
	100 $\mu$ A - 20A @50Hz -1kHz 1mA - 20A @ 1kHz -10kHz 20A - 900 A @ 50Hz	0.56% - 0.30 % 0.86% - 0.71 % 0.85% - 0.65 %
Frequency		
	10Hz - 100kHz	0.06% - 0.006%
Capacitance		
	100kHz - 1 GHz 600 $\mu$ F - 1mF @ 1kHz 1 $\mu$ F - 600 $\mu$ F @ 1kHz 100pF - 1 $\mu$ F@ 1kHz	0.007% - 0.0003% 1.07% - 1.55% 0.36% 0.36% - 0.59 %
Inductance		
	0.1mH - 5H @1kHz	1.20%
Simulation method for calibration of Indicator /Recorder/Controller	RTD: - 200 $^{\circ}$ C - 850 $^{\circ}$ C T/c : - 200 $^{\circ}$ C - 1370 $^{\circ}$ C	0.20 $^{\circ}$ C - 0.40 $^{\circ}$ C 0.70 $^{\circ}$ C
Oscilloscope	5mV -100V DC 5mV -100V AC 0.1 $\mu$ sec - 2 sec 50kHz - 250MHz band width	1.16% - 0.30% 0.36% 0.07 % - 0.06% 3.50%
<b><u>Measure (At Lab):</u></b>		
DC Voltage	0.1mV - 1000V	0.68 % - 0.0014%
DC High Voltage	1kV - 15 kV	2.90 %
DC Current	0.01mA - 20A	0.007% - 0.35%
Resistance	10m $\Omega$ - 1G $\Omega$	0.85 % - 0.66%
AC Voltage	1mV - 700V @50Hz -1kHz 1mV - 500V @1kHz- 20kHz 1mV - 100V @20kHz- 50kHz 700V -1000V @50Hz - 1kHz	1.10% - 0.05% 0.44% - 0.075% 0.70% - 0.045% 0.82%

Parameter/Test	Range	Calibration Measurement Capability ( $\pm$ )
AC High Voltage	1kV - 10kV @50Hz	6.00% - 4.90%
AC Current	0.01mA - 1A@50Hz -100Hz 0.1mA - 1mA@ 100Hz - 1kHz 1mA - 1A@ 100Hz - 5kHz 1A - 20A@ 50Hz - 5kHz	0.53% - 0.16% 0.13% - 0.065% 0.065% - 0.20% 0.36%
Frequency	10hz - 1Ghz	0.010% - 0.006%
Time	6 sec - 24Hrs	0.65s - 6.00s
Capacitance	100pF - 600 $\mu$ F @1kHz	0.90% - 0.65%
Inductance	100 $\mu$ H - 5H@1kHz	2.50% - 1.20 %
Power Factor	UPF - 0.2PF @ 50Hz	0.01 PF
AC Active Power 1Phase UPF - 0.2 PF @50Hz	110V-230V 1A - 10A 24W - 2.30kW	0.60% - 3.60 %
<b><u>Measure (At Lab):</u></b>		
AC Active Energy 1 & 3 Phase UPF @ 50Hz	240V/1A 240V/ 5A	0.70% 0.70%
CT Ratio error Phase Error	5A- 3200A/ 1A- 5A 2000A- 6000A/ 1A-5A	RE: 0.060% PE 1.70 min RE: 0.130% PE: 5.10min
CT Burden 50 Hz Temp .Indicator /Recorder/Controller	(1A/ 5A) 1VA - 50VA RTD: - 200°C - 850°C T/c : - 250°C - 1700°C	1.80% 0.065°C - 0.024 ° C 0.25°C - 0.55 ° C
<b><u>Measure ( At site)</u></b>		
DC Voltage	1mV - 1000V	0.45% - 0.007%
DC Current	1mA - 20A 20A- 200A	0.30% - 0.35% 1.20%
Resistance	1 $\Omega$ - 100M $\Omega$	0.50% - 1.00%
AC Voltage	1mV - 700V@ 50Hz -1kHz 700V - 1000V @ 50Hz -1kHz	4.75% - 0.15% 0.82%
AC High Voltage	1kV - 10kV @ 50Hz 10kV - 75kV @ 50Hz	6.00 % - 4.90% 3.00%
AC Current	100mA - 20A2 50Hz - 1kHz	1.00% - 0.40 %
AC High Current	20A - 6000A@ 550Hz	0.90%

Parameter/Test	Range	Calibration Measurement Capability (±)
<b><u>Measure (At Site):</u></b>		
CT		
Ratio error	5A- 3200A/ 1A- 5A	RE: 0.060%
Phase Error	2000A- 6000A/ 1A-5A	PE 1.70 min RE: 0.130% PE: 5.10min
CT Burden	(1A/ 5A) 1VA - 15VA	1.80%
PT Burden	(63.5 / 110V) 2.5VA - 150VA	1.30%
Temp .Indicator /Recorder/Controller	RTD: - 200°C - 850°C T/c : - 250°C - 1700°C	0.065°C - 0.024 °C 0.25°C - 0.55 °C
	10Hz - 1GHz	0.015% - 0.01%
Frequency	6 Sec - 24Hrs	0.65 s - 6 s
Time	100pF - 600µF @1kHz	1.00% - 0.756 %
Capacitance	100µH - 5H@1kHz	2.50% 1.50 %
Inductance	1kV - 15kV	2.90%
DC High Voltage		

### **Mechanical:**

Parameter/Test	Range	Calibration Measurement Capability (±)
Caliper - LC 10µm Vernier/Dial Digital	Up to 600mm	14.33µm
Depth caliper- LC 10µm Vernier/Dial Digital	Up to 300mm	9.00µm
Height gauge - LC 10µm Vernier/Dial/ Digital	Up to 600mm	14.41µm
External Micrometer LC :10µm	Up to 500mm	9.62 µm
Dial gauge plunger LC :1µm	Up to 25 mm	2.15 µm
Dial gauge Lever LC: 1µm	0 to 0.80 mm	2.10 µm
Bore Gauge with Dial (Transmission Accuracy) LC:1µm	Up to 2mm	2.30 µm

<u>Parameter/Test</u>	<u>Range</u>	<u>Calibration Measurement Capability (±)</u>
External Micrometer LC :10µm	Up to 500mm	9.62 µm
Dial gauge plunger LC :1µm	Up to 25 mm	2.15 µm
Dial gauge Lever LC: 1µm	0 to 0.80 mm	2.10 µm
Bore Gauge with Dial (Transmission Accuracy) LC:1µm	Up to 2mm	2.30 µm
Dial Thickness gauge LC: 1 µm LC: 10 µm	Up to 1mm Up to 10mm	1.02 µm 7.03 µm
Bevel protractor LC: 5min	0-30-45-60-90°	2.95' of Arc
Feeler gauge	Up to 1 mm	3.39 µm
Depth Micrometer LC : 10µm	Up to 300mm	8.10 µm
RPM ( Non Contact)	60 - 60,000 RPM	1.93 RPM - 41.55 RPM
Sound Level Meter	94 & 114 dBA	2.36 dB
<b><u>Mechanical -Pressure (At lab &amp; site)</u></b>		
Pneumatic Pressure ( Dial & Digital Pressure Indicators)	0 to 35 bar	0.08 bar
Hydraulic Pressure ( Dial & Digital Pressure Indicators)	0 to 600 bar	0.08 bar

### **Thermal**

<u>Parameter/Test</u>	<u>Range</u>	<u>Calibration Measurement Capability (±)</u>
<b><u>(At lab only)</u></b> Glass Dial & Digital Thermometers	40°C to 200 °C	1.0 °C
<b><u>Thermal (At lab &amp; Site)</u></b> RTD & TC Sensors with & without Indicators	-80 °C to 0 °C 0 °C to 140 °C 140°C to 400 °C	0.30 °C 0.40 °C 0.50 °C
TC Sensors with & without Indicators	400 °C to 1000 °C 1000°C to 1200 °C	1.80 °C 2.60 °C

## SCOPE OF CALIBRATION (VASAI LABORATORY)

NABL accredited Calibration Laboratory as per ISO/IEC: 17025: 2005

### ELECTRO – TECHNICAL:

Parameter / Test	Range	Calibration Measurement Capability (±)
<b>SOURCE</b>		
*DC VOLTAGE	0.1 mV to 1000V	0.47% to 0.0009%
*AC VOLTAGE (10Hz to 100 kHz)	1 mV to 1000V	0.49% to 0.009%
*DC CURRENT	1 nA to 1000 A	1.39% to 0.32%
*AC CURRENT(10 Hz to 10 kHz)	10 μA to 6000 A	0.21% to 0.9%
*RESISTANCE	1 mΩ to to 1 TΩ	0.005% to 5.8%
*FREQUENCY	10 Hz to 500 MHz	0.0004% to 0.012%
*TIME PERIOD	0.1 s to 2 ns	0.0004% to 0.012%
*CAPACITANCE ( 1 KHz)	1 nF to 1 mF	0.13 % to 0.67%
*INDUCTANCE (1 KHz)	100 μFto 10 H	2.31% to 0.93%
*TEMPERATURE SIMULATION (Indicator/ Recorder/ Controller)		
THERMOCOUPLE		
K Type	(-) 200 °C to 1370 °C	0.035 0C to 0.030 0C
J Type	(-) 200 °C to 1200 °C	0.026 0C to 0.020 0C
N Type	(-) 200 °C to 1300 °C	0.050 0C to 0.027 0C
E Type	(-) 250 °C to 1000 °C	0.033 0C to 0.017 0C
T Type	(-) 250 °C to 400 °C	0.08 0C to 0.013 0C
R Type	(-) 50 °C to 1768 °C	0.13 0C to 0.06 0C
S Type	(-) 50 °C to 1768 °C	0.12 0C to 0.06 0C
B Type	600 °C to 1800 °C	0.08 0C to 0.05 0C
RTD (PT-100)	(-) 200 °C to 800 °C	0.01 0C to 0.04 0C
*AC POWER (1Phase) @ UPF (50HZ) to @ 0.2 PF	1.2 W to 4.8kW	0.2 1% to 1.2 %
*POWER FACTOR (50 Hz)	0.2 PF to UPF	0.002 PF
*OSCILLOSCOPE		
DC Amplitude (1 MΩ Output)	10 mV to 130V	0.55 % to 0.07 %
AC Amplitude (1 MΩ Output @ 1kHz)	10 mV <sub>p-p</sub> to 130V <sub>p-p</sub>	0.58 % to 0.14 %
Time Base	2 ns to 5 s	0.03 % to 0.6 %
Bandwidth	50 kHz to 600 MHz	2.3 % to 7 %
*TRANSFORMER TURNS RATIO METER	0.8 to 2000	0.06 %
<b>MEASURE</b>		
*DC VOLTAGE	10μV to 1000V	0.7% to 0.0002%
*AC Voltage	1 kV to 100 kV	5.09% to 3.67 %
10 Hz to 10 kHz	1 mV	0.48% to 0.26%
10 Hz to 1 kHz	2 mV to 1000 V	0.039% to 0.0061%
1k Hz to 100 kHz	2 mV to 1000 V	0.072% to 0.0029%
1 kHz to 300 kHz	20 V to 60 V	0.0025% to 0.0027%
100 kHz to 1 MHz	2 mV to 20 V	0.072% to 0.0043%
50 Hz	1 kV to 100 kV	7.21 % to 3.64 %
	10μV to 100 A	

*DC CURRENT	10 $\mu$ A to 100A	0.002 % to 0.09%
*AC CURRENT	10 $\mu$ A to 20 A	0.3% to 0.015%
10 Hz to 10 kHz	10 A to 100 A	0.1% to 0.18%
50 Hz		
*DC RESISTANCE	1 m $\Omega$ to 100M $\Omega$	0.4% to 0.026%
	100 M $\Omega$ to 1 T $\Omega$	0.026 % to 0.5 %
	0.1 $\Omega$ to 10 M $\Omega$	0.4% to 0.14%
*AC RESISTANCE (1 kHz)	10Hz to 2 GHz	0.00011 %
*FREQUENCY/ PERIOD	10 pF to 1 mF	0.1% to 0.25%
*CAPACITANCE (1 kHz)	100 $\mu$ H to 10 H	0.08 % to 0.027%
*INDUCTANCE (1 kHz)		
*DC POWER	100 mW to 20 kW	0.47 % to 0.26 %
1 V to 20 A		
*AC POWER (1Phase)	100 mW to 14 kW	0.46 % to 0.2 %
@ UPF (50 Hz)	80 mW to 11.2 kW	0.56% to 1.6%
@ 0.8 PF (50 Hz)	50 mW to 7 kW	0.56% to 1.6%
@ 0.5 PF (50 Hz)	20 mW to 2.8 kW	0.56 % to 1.6 %
@ 0.2 PF (50 Hz)		
*POWER FACTOR/ PHASE ANGLE	UPF to 0.1 PF	0.0015 PF
	0 to 180 °	0.026 °
*ACTIVE ENERGY 3PH-4 WIRE	240V/5 mA to 100 A	0.23%
@ 50 HZ UPF		
	6s to 24 Hrs	0.15 s to 4.0 s
*TIME		
*TEMPERATURE SIMULATION		
(Process Calibrator)	(-) 200 °C to 1370 °C	0.010 °C to 0.02 °C
K Type	(-) 200 °C to 1200 °C	0.01 °C to 0.013 °C
J Type	(-) 200 °C to 1300 °C	0.013 °C to 0.020 °C
N Type	(-) 250 °C to 1000 °C	0.013 °C to 0.010 °C
E Type	(-) 250 °C to 400 °C	0.015 °C to 0.020 °C
T Type	(-) 50 °C to 1768 °C	0.02 °C to 0.06 °C
R Type	(-) 50 °C to 1768 °C	0.02 °C to 0.06 °C
S Type	600 °C to 1800 °C	0.02 °C to 0.06 °C
B Type	(-) 200 °C to 800 °C	0.005 °C to 0.018 °C
RTD (PT-100)		
	5 A to 3200 A/5 A	0.013 %
Current Transformer Ratio Error/Phase Error	2000 A to 6000 A/ 5 A	0.084 %
	6.6 – 11 – 22 – 33 kV/110 V	0.10 %
Potential Trasformer Ratio Error/ Phase Error		
	1.25 VA to 30 VA	1.75 %
CT Burdens		
	2.5 VA to 50 VA	2.0 %
PT Burdens		

## MECHANICAL – Mass, Volume, Dimension, Pressure, Speed, Sound & Torque

Parameter / Test	Range	Calibration Measurement Capability (±)
<b>I. MASS</b>		
1. *Weight		
(Conventional Mass)		
	1 mg	0.010 mg
	2 mg	0.010 mg
	5 mg	0.010 mg
	10mg	0.012 mg
	20 mg	0.012 mg
	50 mg	0.012 mg
	100 mg	0.014 mg
	200 mg	0.014 mg
	500 mg	0.014 mg
	1 g	0.020 mg
	2 g	0.020 mg
	5 g	0.020 mg
	10 g	0.034 mg
	20 g	0.034 mg
	50 g	0.034 mg
	100 g	0.094 mg
	200 g	0.10 mg
	500 g	0.02 g
	1 kg	0.03 g
	2 kg	0.03 g
	5 kg	0.03 g
	10 kg	0.08 g
	20 kg	0.18 g
*Weighing Machine		
D=0.001 mg	0 to 20 g	0.10 mg
D=0.01 mg	0 to 200 g	0.03 mg
D=0.1 mg	0 to 200 g	0.12 mg
D=1 mg	0 to 2 kg	5 mg
D=10 mg	0 to 10 g	60 mg
D=100 mg	0 to 10 g	150 mg
D=1 g	0 to 10 g	1.5 g
D=1 g	0 to 150 g	2 g
D=10 g	0 to 150 g	15 g
D=50 g	0 to 400 g	78 g
D=100 g	0 to 400 g	108 g
<b>II. VOLUME</b>		
1. Micropipette		
	10µl	0.09 µl
	20µl	0.09 µl
	50µl	0.09 µl
	100µl	0.10 µl
	200µl	0.10 µl
	500µl	0.82 µl
	1000µl	1.0 µl
	2000µl	2.0 µl
	5000µl	5.0 µl



2.Pipette /Burettes <sup>s</sup>	1 ml 5 ml 10 ml 20 ml 50 ml 100 ml	0.004 ml 0.007 ml 0.008 ml 0.008 ml 0.009 ml 0.010 ml
3. Measuring Cylinder/ Volumetric Flask/ Graduated Jar/ Can <sup>s</sup>	5 ml 10 ml 20 ml 50 ml 100 ml 200 ml 500 ml 1000 ml 2000 ml	0.007 ml 0.008 ml 0.008 ml 0.009 ml 0.010 ml 0.070 ml 0.08 ml 0.09 ml 0.10 ml
<b>III. DIMENSION</b>		
1.Caliper (Vernier/ Dial/ Digital) L.C.:0.01 mm L.C.:0.02 mm	Up to 600 mm Up to 1000 mm	13 $\mu\text{m}$ 21 $\mu\text{m}$
2.Depth Caliper (Vernier/ Dial/ Digital) L.C.:0.01 mm	Up to 300 mm	9 $\mu\text{m}$
3.Height Gauge (Vernier/ Dial/ Digital) L.C.:0.01 mm	Up to 300 mm Up to 100 mm	15 $\mu\text{m}$ 3 $\mu\text{m}$
4.External Micrometer (Stick Type) Head L.C.:0.001 mm L.C.:0.01 mm	Up to 300 mm	8 $\mu\text{m}$
5.Internal Micrometer (Stick Type) Head L.C.:0.01 Extension	12 mm to 25 mm 12 mm to 300 mm	6 $\mu\text{m}$ 8 $\mu\text{m}$
6.Depth Micrometer <sup>s</sup> (Travers) L.C.:0.01 Extension	Upton 100 mm 100 mm to 300 mm 25 mm to 125 mm >150 mm to 275 mm	2 $\mu\text{m}$ 6 $\mu\text{m}$ 1.6 $\mu\text{m}$ 3.3 $\mu\text{m}$
7.Setting Rod/ Extension Rod <sup>s</sup>	0 to 50 mm	1.1 $\mu\text{m}$
8.Dial Gauge (Plunger Type) L.C.:0.001 mm	0 to 1 mm 0 to 2 mm	1 $\mu\text{m}$ 2.4 $\mu\text{m}$
9.Dial Gauge (Lever Type) L.C.:0.001 mm	0 to 50 mm	1.2 $\mu\text{m}$
10.Bore Gauge <sup>s</sup> (Transmission Movement Only)		
11.Dial Thickness Gauge L.C.:0.001 mm	0 to 100 mm	8 $\mu\text{m}$

12. Dial Caliper (External Measurement) L.C.:0.01 mm	3 mm to 100 mm 0.5 mm to 1 mm	8 $\mu$ m 3 $\mu$ m
13. Dial Caliper (Internal Measurement) L.C.:0.01 mm	0.5 mm to 5 mm Upton 1000 mm Upton 50000 mm	4 $\mu$ m 290 $\mu$ m 580 $\sqrt{L}$ $\mu$ m Where L is in meters
14. Feeler Gauge	0.1 mm to 20 mm	1 $\mu$ m
15. Standard Foils	3 mm to 100 mm	1.6 $\mu$ m
16. Measuring Scale	3 mm to 50 mm	1.2 $\mu$ m
17. Measuring Tape	50 mm to 160 mm	2.5 $\mu$ m
18. Cylindrical Measuring Pins	3 mm to 100 mm	1.0 $\mu$ m
19. Cylindrical Setting Master	100 mm to 300 mm	4.9 $\mu$ m
20. Snap Gauge/ Gap Gauge	3 mm to 100 mm	1.7 $\mu$ m
21. Plain Plug Gauge/ OD Gauge	100 mm to 300 mm	4.4 $\mu$ m
22. Plain Ring Gauge/ OD Gauge	3 mm to 100 mm	1.3 $\mu$ m
23. Thread Plug Gauge/ (Effective Diameter) (Metric Thread Only)	100 mm to 300 mm	5.0 $\mu$ m
24. Thread Plug Gauge/ (Effective Diameter) (Metric Thread Only)	3 mm to 100 mm	1.7 $\mu$ m
	100 mm to 300 mm	3.0 $\mu$ m
IV. <b>ACOUSTICS</b>		
1. Sound Level Meter (1 kHz)	74 dB to 114 dB	0.7 dB
V. <b>TORQUE</b>		
1. Torque Wrench	10 Nm to 100 Nm 100 Nm to 300 Nm 300 Nm to 1000 Nm	1.9% 1.7% 5%
V. <b>PRESSURE - HYDRAULIC</b>		
Digital/Analogue pressure Gauges/Indicators, Pressure Transmitters, Pressure Switch, Pressure Recorders	0 to 35 Bar 35 Bar to 1200 Bar 1200 Bar to 2000 Bar	0.011 % rdg 0.013 % rdg 0.09 %
<b>PRESSURE</b>		
<b>PNEUMATIC/VACUUM</b>		
1. Digital/Analogue pressure Gauges/Indicators, Pressure Transmitters, Pressure Switch	0 to 35 Bar	0.017 %
2. Digital/Analogue pressure Gauges/Indicators, Manometers, Magnetic Gauges, Pressure Transmitters, Pressure Switch	6 kPa to 60 kPa 60 to 600 mbar 0 to 200 mmWC 200 mmWC to 2000 mmWC 600 to 6000 mmWC 0 to -0.93 bar	8.4 Pa 0.084 mbar 0.14 mmWC 1.33 mmWC 0.84 mmWC 0.08 % rdg
Digital/ Analogue Vacuum Gauge/Indicator, Vacuum Transmitter	0.06 bar(Abs) to 35 bar (Abs)	0.17 % to 0.057 %
<b>PRESSURE – ABSOLUTE</b>		





Digital/Analogue Pressure Gauge/Indicator, Pressure Transmitter, Pressure Switch  <b>VI. SPEED (RPM)</b>  1.Tachometer – Non – Contact Type 2.Tachometer – Contact Type 3.RPM measurement ( Centrifuge M/C)	5 rpm to 99999 rpm 100 rpm to 10000 rpm 5 rpm to 10000 rpm  0.2 N to 500 kN	0.53 rpm to 21.1 rpm 0.23 rpm to 2.4 rpm 0.6 rpm to 2.4 rpm  0.47%
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## THERMAL








Parameter / Test	Range	Calibration Capability (±)	Measurement
<b>I. TEMPERATURE</b>			
1.RTD/PRT/ Thermocouple Sensor With or without Indicator, Glass / Digital Thermometer, Dial Thermometer, Temperature Transmitter With Sensor	-196°C -95°C to -38°C -38°C to 250°C	0.05°C 0.07°C 0.035°C	
2.RTD/PRT/ Thermocouple Sensor With or without Indicator, Temperature Transmitter With Sensor	250°C to 600°C	1.5°C	
3.RTD/PRT/ Thermocouple Sensor With or without Indicator, Temperature Transmitter With Sensor	600 °C to 1200 °C	2.3°C	
1. Non-Contact Type Infrared Thermometers, Pyrometers, Thermal Imager	-15°C to 100°C 100°C to 500°C	0.33°C 1.1°C	
2. Freezers, Oven, Environmental Chamber, Incubator, BOD Incubator, Liquid Bath, Dry Block	95°C to 0°C 0°C to 600°C	0.067°C 1.5°C	
Furnace,(Using Single Point Calibration)	600 °C to 1100 °C	2.3°C	
3. Muffle Furnace, Dry Block Calibrator(Using Single Point Calibration)	-95°C to 300°C	1.43°C	
4. Environmental Chamber, Temperature Furnaces, (Using 9-Point Sensor)			

<p><b>II. SPECIFIC HEAT &amp; HUMIDITY</b></p> <p>5. Relative Humidity Sensor with Indicator, Relative Humidity Transmitter With sensor, Hygrometers</p> <p>6. Humidity Calibrator /Generator / Chamber</p>	<p>10% RH to 95% RH@ 25°C 10 °C to 50 °C@ 50 % RH</p> <p>10 % RH to 95 % RH</p>	<p>0.51 % RH</p> <p>0.36 °C</p> <p>0.51 % RH</p>
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## List of Reference Standards-Calibration ELECTRO -TECHNICAL






Make / Model		Parameter/ Range/ features/ Best Accuracy																												
Multifunction Calibrator Make : Fluke Model : 5520A		DC Voltage : 0 to $\pm 1020V$ Accuracy: $\pm 12$ ppm AC Voltage : 1 mV to 1020V 10 Hz to 500 kHz, Sine Accuracy: $\pm 120$ ppm DC Current : 0 to $\pm 20.5A$ Accuracy: $\pm 100$ ppm AC Current : 29 mA to 20.5A 10 Hz to 30 kHz, Sine, Accuracy: $\pm 0.06$ % Resistance : 0 to 1100 M $\Omega$ , Accuracy: $\pm 28$ ppm Capacitance: 19 nF to 110 mF, Accuracy: $\pm 0.25$ % Thermocouple Source and measure : - 250 $^{\circ}C$ to +2316 $^{\circ}C$ Accuracy: $\pm 0.14$ $^{\circ}C$ RTD Source : -200 $^{\circ}C$ to +800 $^{\circ}C$ , Accuracy : $\pm 0.03C$ DC Power: 10.9 mW to 20.5 kW , Accuracy: $\pm 0.023$ % AC Power : 10.9 mW to 20.5 kW, 45-65 Hz, PF=1 Accuracy: $\pm 0.08\%$ of setting Scope Function: 600 MHz																												
8.5 Digit Reference Multimeter Make : Fluke Model : 8508A		DC Voltage : 0 to $\pm 1050V$ Accuracy: $\pm 3$ ppm AC Voltage : 2 mV to 1050 V, 1 Hz to 1 MHz Accuracy: $\pm 65$ ppm DC Current : 0 to $\pm 20A$ , Accuracy $\pm 12$ ppm AC Current : 2 $\mu A$ to 20 A, 1 Hz to 100 kHz Accuracy: $\pm 250$ ppm Resistance : 1m $\Omega$ to 20 G $\Omega$ , Accuracy: $\pm 8$ ppm																												
AC Measurement Standard Make : Fluke Model : 5790A		ACV Measurement: 0.01 mV to 1000V, 10 Hz to 1 MHz , Accuracy: $\pm 24$ ppm																												
Precision AC Current Shunt (1mA)/ (10mA)/ (500mA)/ (1A)/ (10A)/ (20A)/ Make : Fluke Model :A40B		<table border="1"> <thead> <tr> <th data-bbox="887 1487 1102 1570">Absolute accuracy Shunt nominal Current: in <math>\pm</math> ppm</th> <th data-bbox="1107 1487 1166 1570">DC</th> <th data-bbox="1171 1487 1246 1570">1 kHz</th> <th data-bbox="1251 1487 1369 1570">100 kHz</th> </tr> </thead> <tbody> <tr> <td data-bbox="887 1576 1102 1599">1 mA</td> <td data-bbox="1107 1576 1166 1599">20</td> <td data-bbox="1171 1576 1246 1599">55</td> <td data-bbox="1251 1576 1369 1599">150</td> </tr> <tr> <td data-bbox="887 1606 1102 1628">10 mA</td> <td data-bbox="1107 1606 1166 1628">20</td> <td data-bbox="1171 1606 1246 1628">26</td> <td data-bbox="1251 1606 1369 1628">26</td> </tr> <tr> <td data-bbox="887 1635 1102 1657">500 mA</td> <td data-bbox="1107 1635 1166 1657">21</td> <td data-bbox="1171 1635 1246 1657">27</td> <td data-bbox="1251 1635 1369 1657">28</td> </tr> <tr> <td data-bbox="887 1664 1102 1686">1 A</td> <td data-bbox="1107 1664 1166 1686">21</td> <td data-bbox="1171 1664 1246 1686">27</td> <td data-bbox="1251 1664 1369 1686">31</td> </tr> <tr> <td data-bbox="887 1693 1102 1715">10 A</td> <td data-bbox="1107 1693 1166 1715">26</td> <td data-bbox="1171 1693 1246 1715">37</td> <td data-bbox="1251 1693 1369 1715">92</td> </tr> <tr> <td data-bbox="887 1722 1102 1744">20 A</td> <td data-bbox="1107 1722 1166 1744">26</td> <td data-bbox="1171 1722 1246 1744">43</td> <td data-bbox="1251 1722 1369 1744">113</td> </tr> </tbody> </table>	Absolute accuracy Shunt nominal Current: in $\pm$ ppm	DC	1 kHz	100 kHz	1 mA	20	55	150	10 mA	20	26	26	500 mA	21	27	28	1 A	21	27	31	10 A	26	37	92	20 A	26	43	113
Absolute accuracy Shunt nominal Current: in $\pm$ ppm	DC	1 kHz	100 kHz																											
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10 A	26	37	92																											
20 A	26	43	113																											

Make / Model		Parameter/ Range/ features/ specification
Phase Meter Make : Clarke-Hess Model :6000A		Phase Ranges: 0° to 360° or ±180° user selectable Amplitude Range: 10mV to 630 Vrms Accuracy: 0.02°
Universal Power Analyzer Make : Voltech Model : PM6000		DC Voltage Range: 1 to 1000 V DC Current Range: 100 mA to 30 A AC Voltage Range: 1 to 700 V AC Current Range: 100 mA to 30 A Power Measurement Range: 100 mW to 30kW Accuracy: ±0.02 % rdg
Timer/ Counter/ Analyzer Make : Pendulum Model : CNT 90 bridge		Range : 0.002Hz to 3GHz stability : 0.01ppm Resolution : 12digits
Standard Resistor, Make : Fluke Model :742A-1/ 742A-10/ 742A-100/ 742A-1k/ 742A-100k/ 742A-1M		Stability: ± 8 ppm Accuracy: < 2.5 ppm
Precise Air Bath Make: Sakav		

Make / Model	Image	Parameter/ Range/ features/ specification																								
Multifunction Calibrator Make : Fluke Model : 5720A		DC Voltage : 0 to $\pm 1100V$ Accuracy: $\pm 3.5$ ppm AC Voltage : $0.22 \mu V$ & $1100V$ Accuracy $\pm 45.0$ ppm DC Current : 0 to $\pm 2.2A$ Accuracy $\pm 35$ ppm AC Current : $9 \mu A$ to $2.2A$ 10 Hz to 10 kHz Accuracy $\pm 120.00$ ppm Resistance : 0 to $100 M\Omega$ , 18 values in $\times 1$ and $\times 1.9$ With best Accuracy $\pm 10$ ppm																								
High Accuracy all-Purpose Decade Inductor Make: IET Model : 1491G		<table border="1"> <thead> <tr> <th>Inductance per step</th> <th>Accuracy</th> <th>Test frequency</th> <th>Test voltage</th> </tr> </thead> <tbody> <tr> <td>100 <math>\mu H</math></td> <td><math>\pm 2\%</math></td> <td>1000 Hz</td> <td>10 mV</td> </tr> <tr> <td>1 mH</td> <td><math>\pm 2\%</math></td> <td>1000 Hz</td> <td>10 mV</td> </tr> <tr> <td>10 mH</td> <td><math>\pm 1.6\%</math></td> <td>500 Hz</td> <td>20 mV</td> </tr> <tr> <td>100 mH</td> <td><math>\pm 0.8\%</math></td> <td>200 Hz</td> <td>20 mV</td> </tr> <tr> <td>1 H</td> <td><math>\pm 0.8\%</math></td> <td>100 Hz</td> <td>40 mV</td> </tr> </tbody> </table>	Inductance per step	Accuracy	Test frequency	Test voltage	100 $\mu H$	$\pm 2\%$	1000 Hz	10 mV	1 mH	$\pm 2\%$	1000 Hz	10 mV	10 mH	$\pm 1.6\%$	500 Hz	20 mV	100 mH	$\pm 0.8\%$	200 Hz	20 mV	1 H	$\pm 0.8\%$	100 Hz	40 mV
Inductance per step	Accuracy	Test frequency	Test voltage																							
100 $\mu H$	$\pm 2\%$	1000 Hz	10 mV																							
1 mH	$\pm 2\%$	1000 Hz	10 mV																							
10 mH	$\pm 1.6\%$	500 Hz	20 mV																							
100 mH	$\pm 0.8\%$	200 Hz	20 mV																							
1 H	$\pm 0.8\%$	100 Hz	40 mV																							
High Stability Decade Megohm Box Make : Vaiseshika Model : 8400 HV		Range : $0.1 M\Omega$ to $10 T\Omega$ Accuracy: $\pm 2\%$ until 1 Giga ohm : $\pm 5\%$ from 1 Giga Ohm to $10 T\Omega$ , Stability : $0.5\%$																								
Electrometer Make : Keithley Model : 6517B		Resistance Measurement Range: $1M\Omega$ to $200T\Omega$ , Best accuracy: $0.15\%$																								
AC and DC Current Source Make KEITHLEY Model :6221		Range: 1 nA to 100 mA Best Accuracy: $0.05\%$																								
Ultra-Precise “Air” Resistance Standards Make: Guildline instruments limited Model : 9334A-0.001 $\Omega$ / 0.01 $\Omega$ / 0.1 $\Omega$ / 1G $\Omega$		Resistance Range $1m\Omega$ to $1 G\Omega$ Accuracy: $< 2$ ppm,																								
Precision LCR Meter Make : IET Labs Model : GenRad 1693		Range: C: $1pF$ to $1 F$ L: $100 \mu H$ to $10 H$ R: $0.1 \Omega$ to $10 M\Omega$  Accuracy: $\pm 0.02\%$																								






Make / Model		Parameter/ Range/ features/ specification
AC/DC Transfer Standard Make : Fluke Model :792A		Range: 2 mV to 1000V, 10 Hz to 1 MHz Accuracy: : ± 10ppm
Direct Voltage Standard Make : Fluke Model :732B		<b>Output:</b> 10V : ± 0.3 ppm, 1.018V: ± 0.8 ppm
High Accuracy Decade Capacitance Substituter Make: IET Model: Hacs-A-Z-A-10E-1pF		Range: 1 pF to 11,111 μF Accuracy: ± 0.05% + 0.5 pF Excellent Stability 100 ppm per year
3 Phase Portable Reference standard  Make : Zera Model : MT320		Voltage measurement: 100 mV ... 300 V Current measurement: 1 mA...12 A [5mA ... 120 A] Accuracy: ± 0.05 %
Trans conductance Amplifier Make : Fluke Mode: 52120A		Output ranges: 2 A, 20 A, 120 A (100 A dc) Input current range: 200 mA, 200 mA, 120 mA (100 mA dc) Input voltage range: 2 V, 2 V, 1.2 V (1.0 V dc) AC accuracy ± 140 ppm DC accuracy ± 160 ppm
Reference Divider Make: Fluke Model: 752A		Division Ratio 10:1 ±0.2 ppm: Input: 0 V to 100V Division Ratio 100:1 ±0.5 ppm: Input: 0V to 1000V Range 10: 0      Input Voltage: 0 to 100 V Output Uncertainty: 0.2 ppm Range 100: 1 Input Voltage: 0 to 1000V Output Uncertainty: 0.5 ppm





Make / Model		Parameter/ Range/ features/ specification
Automatic Instrument Transformer Test Set Model: AITTS – 98 Make: ELTEL		<b>Measuring Ranges:</b> : Ratio Error : 0 to $\pm 20\%$ Phase Error - 0 to $\pm 0.2$ radians (20 crad) 0 to $\pm 680$ minutes  <b>Accuracy CT</b> Ratio Error : 0.6 of rdg $\pm 10$ ppm Phase Error : 0.6 of rdg $\pm 10$ $\mu$ rad  <b>Accuracy VT</b> Ratio Error : 0.6 % rdg $\pm 10$ ppm Phase Error : 0.6 % rdg $\pm 10$ $\mu$ rad
Standard Current Transformer Make: ELTEL Model: 2509		Range: 5 A to 6300 A/ 5 A Class: 0.005
6.5 Digit Precision Multimeter Make: Fluke Model: 8846 A		V DC Range: 100 mV to 1000 V Accuracy: 0.0024 + 0.0005 V AC Range: 100 mV to 1000 V Accuracy: 0.06 + 0.03
Multifunction Electrical Tester Calibrator Make: Fluke Model: 5320A		<b>Low Resistance</b> Ranges: 100 m $\Omega$ to 10 k $\Omega$ Specification: $\pm 0.2$ % of setting <b>High Resistance</b> Ranges: 10 k $\Omega$ to 100 G $\Omega$ Specification: $\pm 0.2$ % of setting
Turns Ratio Standard Make: Quadeant Model: QTRS-1		Ratio Range: 0.8 to 2000 Test voltage: 110V Max Resolution: 0.01 at factor 1 Accuracy: 0.5%





## List of Reference Standards-Calibration

### THERMAL

Make / Model		Parameter/ Range/ features/ specification
Deep Well Compact Baths Make : Fluke Model : 7381/ 6331		Range (6331) 35 °C to 300 °C Stability (6331) ±0.007 °C at 100 °C (oil 5012) ±0.010 °C at 200 °C (oil 5017) ±0.015 °C at 300 °C (oil 5017) Uniformity(6331) ±0.007 °C at 100 °C (oil 5012) ±0.017 °C at 200 °C (oil 5017) ±0.025 °C at 300 °C (oil 5017) Range (7381) -80 °C to 110 °C Stability Stability (7381) ±0.006°C at -80°C (ethanol) ±0.005°C at 0°C (ethanol) ±0.005°C at 100°C (oil 5012) Uniformity (7381) ±0.007 °C at -80 °C (ethanol) ±0.007 °C at 0 °C (ethanol) ±0.007 °C at 100 °C (oil 5012)
Ultra-Cool Field Metrology Well Make: Fluke Model: 9190A		Temperature Range: -95 °C to 140 °C Stability: ± 0.015 °C full range Axial uniformity at 40 mm : ± 0.05 °C full range Radial uniformity : ± 0.01 °C full range
Thermocouple Furnace Make: Fluke Model: 9150		Temperature Range: 150 °C to 1200 °C Stability: ±0.5 °C Well-to-Well Uniformity: ±2.5 °C (Insert "C" at 1200 °C)

Make / Model		Parameter/ Range/ features/ specification
Humidity Calibrator Make: Michell Model: S904		Humidity Generation Range: 10 - 95% RH Humidity Stability: $\pm 0.2\%$ RH Temperature Generation Range: +10 to +50°C Temperature Stability: $\pm 0.1^\circ\text{C}$
Secondary Reference PRT Make: Fluke Model: 5616		Temperature range: $-200^\circ\text{C}$ to $420^\circ\text{C}$ Excellent stability: $\pm 10$ mK Accuracy: $0.011^\circ\text{C}$
Handheld Thermometer Readout Make: Fluke Model: 1524		PRT'S Range: $-200^\circ\text{C}$ to $+420^\circ\text{C}$ Accuracy: $\pm 0.011^\circ\text{C}$ Thermocouple range: $-200^\circ\text{C}$ to $2300^\circ\text{C}$ Accuracy: $\pm 0.22^\circ\text{C}$
High-Temperature Metal-Sheath SPRT Make: Fluke Model: 5699		Temperature Range: $-200^\circ\text{C}$ to $670^\circ\text{C}$ Drift rate: $< 0.008^\circ\text{C}/\text{year}$
Type R and Type S Thermocouple Standards Make: Fluke Model: 5650		Range: $0^\circ\text{C}$ to $1450^\circ\text{C}$ Long-Term Stability: $\pm 0.5^\circ\text{C}$ to $1100^\circ\text{C}$ $\pm 2.0^\circ\text{C}$ to $1450^\circ\text{C}$

Make / Model		Parameter/ Range/ features/ specification
Super-DAQ Precision Temperature Scanner Make: Fluke Model: 1586A		PRT/RTD Temperature Range: $-200\text{ }^{\circ}\text{C}$ to $1200\text{ }^{\circ}\text{C}$ (depending on the sensor) Resistance Range: $0\ \Omega$ to $4\ \text{k}\Omega$ PRT/RTD Resistance Accuracy : $0.002\%$ PRT/RTD Temperature Accuracy: $0.002\text{ }^{\circ}\text{C}$ to $0.2\text{ }^{\circ}\text{C}$ in the range: $-200\text{ }^{\circ}\text{C}$ to $600\text{ }^{\circ}\text{C}$ . Thermocouple Range: $-270\text{ }^{\circ}\text{C}$ to $2315\text{ }^{\circ}\text{C}$ ( depending on the sensor) Accuracy: $\pm 0.20\text{ }^{\circ}\text{C}$
Precision Infrared Calibrators Make: Fluke Model: 4180/ 4181		Temperature Range (@ $23\text{ }^{\circ}\text{C}$ ambient, $0.95$ emissivity): $-15\text{ }^{\circ}\text{C}$ to $120\text{ }^{\circ}\text{C}$ (4180) $35\text{ }^{\circ}\text{C}$ to $500\text{ }^{\circ}\text{C}$ (4181) Stability: 4180 $\pm 0.10\text{ }^{\circ}\text{C}$ at $-15\text{ }^{\circ}\text{C}$ $\pm 0.05\text{ }^{\circ}\text{C}$ at $0\text{ }^{\circ}\text{C}$ $\pm 0.10\text{ }^{\circ}\text{C}$ at $120\text{ }^{\circ}\text{C}$ 4181 $\pm 0.05\text{ }^{\circ}\text{C}$ at $35\text{ }^{\circ}\text{C}$ $\pm 0.20\text{ }^{\circ}\text{C}$ at $200\text{ }^{\circ}\text{C}$ $\pm 0.40\text{ }^{\circ}\text{C}$ at $500\text{ }^{\circ}\text{C}$ Uniformity (2.0 in dia of center of target) <sup>2</sup> 4180 $\pm 0.10\text{ }^{\circ}\text{C}$ at $-15\text{ }^{\circ}\text{C}$ $\pm 0.10\text{ }^{\circ}\text{C}$ at $0\text{ }^{\circ}\text{C}$ $\pm 0.20\text{ }^{\circ}\text{C}$ at $120\text{ }^{\circ}\text{C}$ 4181 $\pm 0.10\text{ }^{\circ}\text{C}$ at $35\text{ }^{\circ}\text{C}$ $\pm 0.25\text{ }^{\circ}\text{C}$ at $250\text{ }^{\circ}\text{C}$ $\pm 0.50\text{ }^{\circ}\text{C}$ at $500\text{ }^{\circ}\text{C}$
Series Graphic Recorder Make: Chino		PRT/RTD Range: $-200\text{ }^{\circ}\text{C}$ to $600\text{ }^{\circ}\text{C}$ Thermocouple Range: $-270\text{ }^{\circ}\text{C}$ to $2315\text{ }^{\circ}\text{C}$  PRT/RTD input Accuracy: $\pm 0.3\text{ }^{\circ}\text{C}$ Thermocouple input Accuracy: $\pm 0.5\text{ }^{\circ}\text{C}$
Versatile handheld indicator Make:Rotronic Model:HYGROPALM:HP22 -A with HC2-S Probe		Operating Range: $-10\text{ }^{\circ}\text{C}$ to $60\text{ }^{\circ}\text{C}$ / $0 - 100\%$ RH Accuracy: $0.1\text{ }^{\circ}\text{C}$ / $0.8\%$ RH

Make / Model		Parameter/ Range/ features/ specification
Portable Calibration Bath Make: Fluke Model: 7109A		Range: -25 °C to 140 °C , Stability: 0.01 °C , Uniformity: 0.02 °C
Ex “Stik” Thermometer Readout Make: Fluke Model: 1551A		Range: -50 °C to 160 °C , Resolution: 0.001 °C Accuracy: ± 0.05 °C
Thermocouple Calibration Furnance Make: Fluke Model: 9118A		Range: 300 °C to 1200 °C , Stability: ± 0.1 °C , Uniformity: ± 0.1 °C to ± 0.25 °C
Thermocouple Calibration Furnance Make: Fluke Model: 9142A		Range: -25 °C to 150 °C, Stability: ± 0.01 °C, Uniformity: ± 0.05 °C




## List of Reference Standards-Calibration

### DIMENSION



Make / Model		Parameter/ Range/ features/ specification
Universal Length Measuring Machines Make: Octagon Model: LMM 300 T		Range: upto 300 mm Accuracy: $\pm 0.7 \mu\text{m}$
Measuring Scale & Tape Calibration Systems Make: Octagon Model: MSTC 1000		Measuring Range - Absolute: 1000 mm Accuracy: $\pm (10 \pm L/100) \mu\text{m}$
Slip Gauge Set Make: Mikronix Model: M121/1, M88/1, M10, M8		Range: 0.5 mm to 500 mm Accuracy: As per ISO/FDIS 3650 : 1998 (E)
Caliper Checker Make: Aditya Model: CC3-1000		Range: 0 to 1000 mm Accuracy: 0.010 mm
Profile Projector Make: Mitutoyo Model: PJ-A3000		Range: 200 x 100 mm XY Stage, Magnification: 10 X , 20 X & 50 X , Magnification Accuracy: $\pm 0.1 \%$




## List of Reference Standards-Calibration TORQUE

Make / Model		Parameter/ Range/ features/ specification
Electronic Torque Wrench Tester Calibrator Make: Kudale		Measuring Range : 0-100 N-m, 0-300 N-m & 0 – 1000 N-m Accuracy: ± 1 %


## List of Reference Standards-Calibration SPEED

Make / Model		Parameter/ Range/ features/ Specification
Pocket Laser Tech Make: Monarch Model: PLT 200		Range(s): Optical: 5 to 200,000 RPM Accuracy: Optical: ±0.01% of reading Contact: ±0.05% of reading (rpm)
Tachometer Calibrator Make: Zeal Model: ZSDTC		Range: 1 rpm to 1 Lac rpm Accuracy: 0.01%




## List of Reference Standards-Calibration VOLUME

Make / Model		Parameter/ Range/ features/ Specification
Digital Weighing Balance Make: Shimadzu Model: AUW 220D, Model: UX 6200H Model: BX 22KH		Capacity: 0 to 220g (Model: AUW 220D) 0 to 6200g (Model: UX 6200H) 0 to 22 kg (Model: BX 22KH) Accuracy: Class I


## List of Reference Standards-Calibration ACOUSTIC

Make / Model		Parameter/ Range/ features/ Specification
Sound Level Calibrator Make: Gen Rad Model:1986		Range: 74 dB, 84 dB, 94 dB, 104 db & 114 dB @ 1 KHz Accuracy: $\pm 0.5$ dB



## List of Reference Standards-Calibration PRESSURE

Make / Model		Parameter/ Range/ features/ Specification
Pressure Controller/Calibrator Make: Fluke Model: PPC4		Range: -1 bar to 0 barG, 0 to 16. barG, 0.06 bar 1.6 bar Abs.  Accuracy: $\pm 0.008$ % rdg or $\pm 0.0024$ %FS (whichever is greater)
Hydraulic Deadweight Testers Make: Fluke Model: P312 XT-BAR		Range: 1 bar to 35 bar Accuracy: $\pm (0.008$ % Rdg or 0.0008% FS) Range: 20 bar to 1200 bar Accuracy: $\pm (0.008$ % Rdg or 0.0004 % FS)
Reference Pressure Monitor Make: Fluke Model: RPM4 A200Ms-L		Range: 0 to 2000 bar Accuracy: $\pm (0.005$ % rdg or 0.0015 % FS, whichever is greater)


## List of Reference Standards-Calibration FORCE

Make / Model		Parameter/ Range/ features/ Specification
Uni-axial Testing Machine Make: FIE Model: UTN60		Accuracy: $\pm 1$ % Capacity: up to 600kn

## List of Reference Standards-Calibration FLOW

Make / Model		Parameter/ Range/ features/ Specification
Gas Flow Standard meters & Controllers Make: Alicat Scientific Model: M series		Range: 0 to 5 SCCM 0 to 50 SCCM 0 to 500 SCCM 0 to 1 SLM 0 to 50 SLM 0 to 500 SLM 0 to 4000 SLM Accuracy: $\pm 0.4\% + 0.2\% \text{ FS}$ Suitable for 27 no's Gases Standard media used for calibration N2 or Air
Portable Ultrasonic Flow Meter, Make: GE Model: Trans Port PT878		Range: 0 to 500 m <sup>3</sup> /hr Accuracy: $\pm 0.5\% \text{ Rdg}$ Clamp-on Pipe Transducer suitable for 1/2" to 24" pipe portable liquid flowmeter is a complete portable ultrasonic flow metering system for measurement of: Potable water, Wastewater, Cooling and heating water, Ultrapure water and liquids, Water/glycol solutions, Crude oil, Refined hydrocarbons, Diesel and fuel oils, Lubricating oils, Chemicals, Beverages, Other liquids

## List of Reference Standards-Calibration MASS

Make / Model		Parameter/ Range/ features/ Specification
Austenitic S. S. Laboratory Weights Make: Weigh India		Range: 1 mg to 200 g Accuracy: Class E1 Range: 500 g to 20 kg Accuracy: Class F1

## MAJOR PRODUCTS CALIBRATED/ CALIBRATION DONE

<b>ELECTRO - TECHNICAL</b>
Multifunction Calibrators , DC Voltage Reference Standards, 6 ½, 7 1/2, 8 ½ Digit Digital Multimeters, HV Testers/ Probes/ Meters, Power/Energy Calibrators, Power Analyzers, Power Quality meters, Watt hour meters, Signal Generators, Frequency Standards, Frequency Counters, Resistance Standards/ Decade, Capacitance/ Inductance Standards, LCR Meters & Bridges, Insulation testers, High Mega ohm meters, AC/DC shunts, Rogoswi coils/ Current transducers, Ammeter, Voltmeter, Temperature Indicator/Controller (By Electrical Simulation), Process Calibrators, Hipot Testers, Battery Testers, Clamp on meters, Medical safety Testers, High Voltage Breakdown testers, HV Probes, Impedance Resistance Testers, Oscilloscopes, Memory Recorders, ECG Simulators, Tachometers, Timer, Stop watch, Time totalizers, Scope Calibrators, V, I & R Calibrator, Loop Calibrator, Earth testers, RCD Testers, Leakage Current testers, Current Transformers, Voltage Transformers, CT Burdens, PT Burdens, 1 ph/3 ph Energy meters.
<b>THERMAL</b>
Temp. Sensors (RTDS/TC/Thermistors), Temperature transmitters, Temperature Recorders, Indicators, Baths, furnaces, Environmental chambers, ovens, deep freezers, incubators, controllers, gauges, walk-in chambers, refrigerators, glass Thermometers data loggers, data acquisition systems, scanners etc. , Humidity sensors with or without indicators, Humidity Generator/ Chamber/Calibrators, Temperature Transmitters, humidity Transmitters
<b>PRESSURE</b>
Pressure Dial/Digital gauges & Calibrators, Manometers, Magnelic Gauges, Low pressure calibrators, Transmitters, pressure switches, Pressure recorders etc.(Hydraulic & Pneumatic)
<b>SPEED</b>
Tachometers (Contact Type/Non-Contact type), Stroboscope, Centrifuge machine
<b>ACOUSTICS</b>
Sound level meters, Microphones
<b>TORQUE</b>
Torque wrenches, Torque Screw Drivers
<b>MASS</b>
Weighing Scale, Weighing Balance, Spring Balance, Fractional weights, Weights
<b>VOLUME</b>
Micro-pipettes, Pipettes, Burette, Glassware's, Beakers, Cylinders, Jars etc
<b>FLOW</b>
Liquid Flow meters, Gas flow meters
<b>DIMENSION</b>
Caliper (Vernier/ Dial/ Digital), Depth Caliper (Vernier/ Dial/ Digital), Height Gauge (Vernier/ Dial/ Digital), External Micrometer (Stick Type) Micrometer Head , Internal Micrometer (Stick Type) Head , Depth Micrometer, Setting Rod/ Extension Rod , Dial Gauge (Plunger Type), Dial Gauge (Lever Type) , Bore Gauge (Transmission Movement Only), Dial Thickness Gauge, Dial Caliper (External Measurement) , Dial Caliper (Internal Measurement), Feeler Gauge, Standard Foils , Measuring Scale, Measuring Tape, Cylindrical Measuring Pins, Cylindrical Setting Master, Snap Gauge/ Gap Gauge, Plain Plug Gauge/ OD Gauge, Plain Ring Gauge/ OD Gauge, Thread Plug Gauge/ (Effective Diameter) (Metric Thread Only), Thread Plug Gauge/ (Effective Diameter) (Metric Thread Only), Push – Pull Gauge, 3-point micrometers, Slip gauge sets etc
<b>FORCE</b>
Force Measuring Instruments, Force Transducers, Proving rings, Load Cells, Push-Pull Meters, Force Gayes

## ABOUT VALIDATION

### **About Validation**

Through its Equipment & Process Validation Group, AUTOCAL executes and manages projects ranging from validation of stand-alone automated equipment and systems to start-up, commissioning and validation of new facilities.

### **The Challenge**

Changing regulatory expectations coupled with new technologies, new equipment, and new products all lead to short-term workloads that can easily exceed your current resources. Comprehensive regulatory knowledge, in-depth understanding of process & equipment are vital for development of practical and cost-effective validation strategy. A business partner with this level of expertise, as well as the ability to employ proven, systematic approaches is critical for ensuring the success of the business initiatives you undertake.

### **The Solution**

Whether your business is biotechnology, pharmaceuticals, aseptic manufacturing or solid dosage forms, AUTOCAL has the expertise & resources to help you define and achieve sustainable results. Our teams have extensive experience with utilities (BMS, HVAC systems), sterile manufacturing processes and change control. Our equipment validation experience includes packaging equipment such as blister formers, tablet fillers & labelers, manufacturing equipment such as granulators, film coaters and autoclaves, and biotechnology equipment such as bioreactors and lyophilizers.

### **Implementing Sound Strategies**

AUTOCAL believes that a successful facility startup requires significant input from client-engineering, process, manufacturing and validation personnel. Our teams are accustomed to asking the right questions up front knowing that it is much more efficient to create and approve specifications without making changes during construction that will increase costs, introduce time delays and cause revision or repetition of validation activities. AUTOCAL develops and implements sound validation strategies and rationale prior to the start of formal validation activities, providing the highest level of assurance that systems and equipment meet required specifications. This approach is one way AUTOCAL helps reduce overall project costs.

AUTOCAL provides contract services, as do other firms, to the industry. We differentiate ourselves in several ways from our competition. We provide a team of professionals who have worked in the industry and all have hands-on experience with validation activity. We build partnerships and prioritize teamwork too efficiently and cost effectively provide benefit to your company. We want a win-win result in every business relationship. We are a dedicated validation group offering greater experience than is available from our competitors and offer superior service. Our strengths have been our relationships with customers, the dedication of our employees and our expertise in the field of validation technology. We believe that the combination of our resources and expertise with your internal capabilities is the most effective approach to economical solutions.



Welcome to the Validation Services at AUTOCAL. We specialize in providing our customers in the Pharmaceutical, Biotechnology, and Medical Devices industries with cGMP validation services. We provide validation services for Equipment's, Computer, Facility, HVAC and more. We are aligned with our customer's compliance and validation needs.

Our primary area of service is fulfilling validation, regulatory and compliance services from stand-alone automated equipment to start-up, commissioning & validation of new facilities, AUTOCAL achieves results through a comprehensive portfolio of services:

- Calibration: auditing established programs for compliance and development of new Programs;
- Development and execution of master plans;
- Development of guidelines and standard operating procedures;
- Development of User Requirements, Functional Requirements and design specifications;
- Factory and site acceptance testing and vendor audits;
- Installation, operational and performance qualification protocol development and execution;
- Cleaning validation: bulk actives, pharmaceuticals and biological;
- Change control design, implementation and administration;
- Preparation of regulatory submissions technical summaries and documents;
- Revalidation and process improvement activities;
- Audits of internal/external cGMP compliance;
- Compliance gap assessments

**Our department offers a full range of Validation Services such as:**

- Equipment Validation**
- Steam Quality Test**
- PLC Validation**
- HVAC Validation**
- Compressed Air Line Validation**

## EQUIPMENT VALIDATION

Equipment Validation ensures that an instrument is appropriate for its intended use.

Typical validation phases are:

- Design Qualification (DQ) for setting up the functional and performance specification
- Installation qualification (IQ) for performing and documenting the installation in the selected user environments.
- Operational qualification (OQ) for testing the equipment in the selected user environment to ensure that it meets the previously defined functional and performance specifications.
- Performance qualifications (PQ) for testing that the system consistently performs as intended for the selected application.
- Revalidation & Temperature Mapping
- Temperature Distribution Study.

AUTOCAL is well equipped with More Than 3000 Wireless data Logger for area Mapping, 24 wired loggers and more than five hundred sensors to provide temperature mapping services for the following:

### **Sterilizers:**

Autoclaves, Dry Heat Sterilizers, EO Sterilizers Tunnel.



### **Stability Study:**

Humidity chambers, Walk In chambers, Ware House and rooms.

### **Equipment's:**

Incubators, BOD Incubators, Refrigerators, Freezers, Lyophilizes, Ovens and Muffle Furnace Fermenters.



The data logged from the mapping of the above equipment is further processed to give analysis reports like  $F_0$  values, lethal rate, standard deviation, lag time in case of autoclaves and Mean Kinetic temperature value, Hot spot and cold spot identification in case of other equipment's and rooms. This process can be certified by CFR21 Part of 11 Compliance software.

Autocal also provides qualification services for all other manufacturing / utility and packing equipment's.



## FACILITY QUALIFICATION AND VALIDATION

Pharmaceutical facilities are required to comply with the FDA's current Good Manufacturing Practices (cGMPs) and other regulatory bodies. The validation effort documents that a facility's design meets the intent of the cGMP's.

Our key competencies lie in state-of-the-art laboratories, cGMP areas, pilot plants, facility automation and advanced process controls and specialized utility systems e.g. for sterile manufacturing.

AUTOCAL Validation team are experts at new facilities, performing HVAC, Validation, and validating other systems as part of a facility Qualification/validation utilities/ facility systems:

### Water system

- USP purified
- Water for injection
- Reverse Osmosis
- Deionization
- Ozonation
- Clean Steam
- Clean in place/ Steam in place

### Cold Chain Mapping

Cold chains are universally used in the food, pharmaceutical and some chemical shipments. The **cold chain** is a logistical system which manages temperature, often between 2° to 8° Celsius. It is a series of distribution activities which continuously maintain this temperature in order to protect the temperature-sensitive cargo from manufacture to the point of consumption. Unique to fresh produce cargoes, the cold chain requires to additionally maintain product specific environment parameters which include air quality levels (carbon dioxide, oxygen, humidity and others) which makes this the most complicated cold chain to operate.

It is important for every cold storage to have a refrigerant, a valve, a vapour barrier and insulation during the cargo shipping, leakages may occur from the containers and when this happens, the temperature may increase which can lead to spoilage as well. In order to avoid such kind of problems, the containers have to be filled with insulators.

The primary segments of an integrated cold chain, which include;

- 1) Packing and cooling fresh food products,
- 2) Food processing (i.e. freezing of certain processed foods,
- 3) Cold storage (short or long term warehousing of chilled or frozen foods),
- 4) Distribution (cold transport and temporary warehousing under temperature controlled conditions),
- 5) Marketing (refrigerated or freezer storage and displays at wholesale markets, retail markets and foodservice operations) can be simple or complex, low tech or high tech.

Cold chain logistics is the planning and management of the interactions and transitions between these five segments, in order to keep product at their optimum temperature for maintenance of quality, food safety and prevention of waste and economic losses. Speed is often the key to success when handling and marketing perishable product.

A cold chain is a temperature-controlled supply chain. An unbroken cold chain is an uninterrupted series of storage and distribution activities which maintain a given temperature range.



## STEAM QUALITY TEST

The Steam Quality Testing service was created for manufacturers and processors of sterile products and medical devices that are required to meet international standards for steam sterilization. We have equipped ourselves with latest equipment's for steam quality test, for testing quality of pure steam PSG at user point like Autoclave, Sterilizers, Manufacturing tanks, SIP, Liophalizer, etc. It is Regulatory requirement to test the quality of steam periodically.

The testing involved in Facility Utility pure steam validation requires a continuous supply of saturated steam; preferably sourced from the actual line that supplies your sterilization systems. Too high a level of non-condensable gases will prevent the attainment of sterilization; too little moisture carried in suspension may allow the steam to become super-heated during expansion into the chamber, while excess moisture may cause damp loads. Where steam systems are either routinely or irregularly shut down, large quantities of air will be present in the distribution system on restarting.

Why Steam Quality Test is require?

- To Detect Non-condensable Gas, Dryness, Superheat
- To qualify plant/utility/clean/pure steam generators, steam distribution systems and steam supplies to autoclaves in accordance with cGMP (Orange Guide), HTM 01, HTM 2010: 1994, HTM 2031: 1997, EN 285: 2006, AAMI ST79, ISO 14937:2000, ISPE Baseline Guide for Steam and Water and PDA Technical Reports No. 1 & 48.
- To test your physical steam quality with assured and repeatable results in no time at all.
- To satisfy your Regulator/QA immediately.

The steam supply required for moist heat sterilization needs to be within the specifications set out in EN285:2006. This is:

**Non-Condensable Gases: Required Result = 3.5%**

Air and other gases such as Carbon Dioxide, which do not condense under the conditions of steam sterilization.

**Superheat: Required Result = 25°C**

Superheat steam is a steam at a temperature which is greater than its boiling point for its pressure. It will not condense until its temperature drops to its boiling point and until this occurs the moisture required for sterilization cannot be produced.

**Dryness Value: Required Result = 0.90 for Non Metal / 0.95 for Metal Loads**

Wet steam can cause wet loads which in turn can be considered un-sterile. In today's world, confidence of sterility is paramount. Modern packaging prevents re-infection when dry but bacterial retentive properties will be dramatically affected by the presence of moisture. A value of 1 represents steam that is completely dry and free of moisture.

Steam Quality Testing Kit



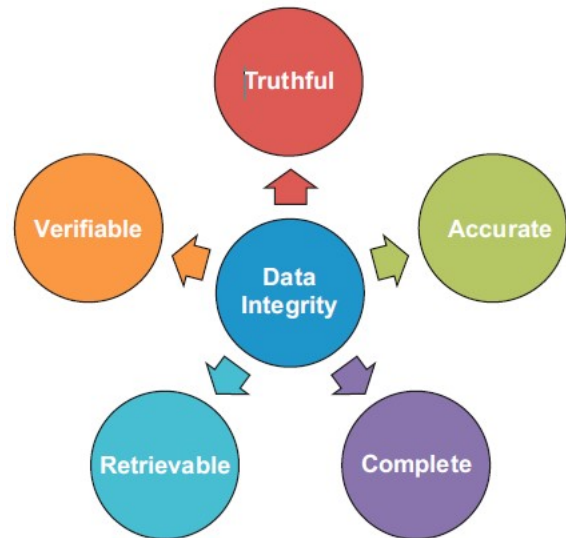
## PLC SERVICE

Autocal Solution Pvt. Ltd. offers Turnkey Validation services compliant to 21CFR part 11/Annex 11 regulations in pharmaceutical industry. We undertake complete turnkey Validation from basic to detail on PLC and computerised systems based on GAMP guidelines.

### Services Offered:

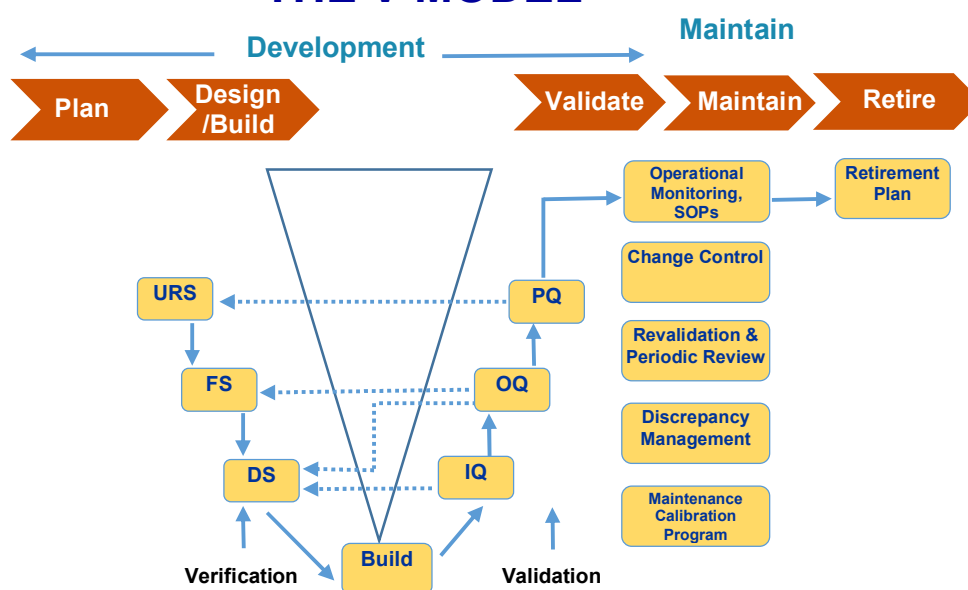
- ▲ Programmable Logic Control (PLC )
- ▲ Supervisory Control & Data Acquisition (SCADA/DAS) Systems
- ▲ Computer System/PLC Validation
- ▲ Validate Building Management (BMS) & Environment Control Systems
- ▲ Human Machine Interface (HMI/MMI) System
- ▲ Distributed Control Systems ( DCS )
- ▲ Computer Based Systems in Laboratory
- ▲ Data Acquisition Software for different Process / Equipment's.

### An Introduction to Data Integrity...



Good CSV can help you Reduce CAPA, Change Control, Batch Recall and give all people on earth a good Peace of mind including your shareholders. Data Integrity, Security, Patient safety and Product Quality is a key thing.

## THE V-MODEL



## OUR SUPPORTS/ HIGHLIGHTS

- Most appropriate & latest GAMP, PIC/S, 21 CFR Part 11, EU Annex 11 guideline based Compliance services for your new / legacy systems.
- Comprehensive GAP & RISK Analysis.
- Organising and Executing Activities at client's plants.
- Preparation of Protocols & Validation related Documentation as per Regulatory & Clients requirements.
- Accountable for completing activities as per Schedule, Proper Coordination with Client.
- Understanding Clients requirement. Preparation for Vendor Audits requires a thorough knowledge/ understanding of validation principles and quality philosophies.
- Coordination of QA and QC programs and functions.
- Implementation of company's first self-directed work teams resulting in a flat organization.
- Planning, development, and direction of Quality programs.

Computerized Systems that perform regulated functions must be qualified or validated. Computerized Systems may include networks (wired and wireless), workstations, operating system software, application software, equipment software, and interfaces with other computerized systems.

AUTOCAL offers a complete range of services for your computer validation needs and Complete Quality Assurance services for software implementation & validation projects.

- Preparation of Software Validation Document
- User requirement specification
- Execution of Validation Protocols and resolution of deviation
- 21 CFR Part 11 Gap Analysis remediation, and validation



## HVAC Validation

Provides Clean Room / Area Validation services with complete set of latest Equipment's by experienced Engineers with sound knowledge. Our primary area of quality service is fulfilling validation, regulatory and compliance services from stand-alone automated equipment to start-up, commissioning and validation of new facilities.

HVAC (Heating, Ventilation & Air Conditioning) validation continues to be a source of anxiety for many manufacturers of pharmaceutical and biological products. HVAC validation is likely to be successful when good strategy and planning are involved in the process. AUTOCAL helps direct you in the right direction. There are many factors to consider in HVAC validation and it is best to take on a realistic approach based on good science, business and compliance sense. We are familiar with HVAC validation requirements and industry standard validation practices for your product forms, what documented evidence is needed for your HVAC Systems (e.g. drawings, specifications, balancing reports), and we know if your control systems are strong enough to be validated.

We then develop a general strategy consisting of the following factors:

- Classification of HVAC systems as GMP or non GMP systems.
- Determination of what documentation you have and what documentation you Need to create before validation begins.
- Development of targets for differential pressure, room air changes, temperature And humidity.
- Concentration of validation efforts on the areas where there is a direct on product impact.
- Validation of Building monitoring system that are connected to HVAC systems.

### Complying with Standards:

- ★ ISO-14644-1,2,3
- ★ EU-GMP/ EC GMP
- ★ WHO-TRS-937
- ★ WHO-TRS-961
- ★ Schedule M



## Compressed Air Line Validation

Clean Dry Air is essential for many different types of applications. Air compressors draw in large volumes of air from the surrounding atmosphere containing contaminants. The air compressor itself can also add contaminants. Process air contamination found in automotive spray paint air lines, powder coating air lines, pharmaceutical processing air lines, food processing air lines, instrument air lines and in nuclear facilities can affect product quality. A major problem in

compressed air systems is the presence of water, oil and solid contaminants which can affect air quality and lead to rust, scaling, instruments clogging, valves sticking and process contamination. Compressed Air is supplied for manufacturing process as well as for the operation of pneumatic controls for machine, instrument, spray system and other multiple uses.

The following parameters of compressed air system should be checked during the performance qualification.

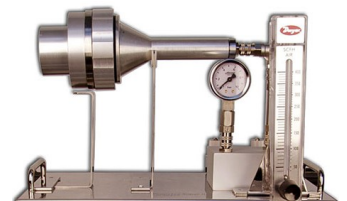
### AIR QUALITY IS IMPORTANT,

So have your compressed air tested periodically to assure:-

1. Protection of equipment and processes.
2. Safety for your employees
3. Energy efficiency of compressor
4. Lower operating and maintenance costs
5. Assure product quality
6. Meet standards/regulations

### Services Offered for Compressed Air:





- Water Vapour (Moisture Content)
- Dew point Temperature
- Total Viable Count
- Oil Mist
- Non Viable Particle Count
- Hydrocarbon
- Various gases (CO<sub>2</sub>, CO, NO<sub>x</sub>, HC, SO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>s.)









## List of Standard Instruments Validation HVAC & Compressed Air Validation






Make / Model		Parameter/ Range/ features/ specification
Particle Counter Make : PMS Inc Model : 310A,310C, 350L, 5100		Range: 0.3 - 25.0 $\mu\text{m}$ (6 channels) Accuracy: $\pm 5 \%$ Test Parameter-Partial count test recovery test
Particle Counter Make : TSI-PC Model : 9500-01/9350-03		Range: 0.3 - 25.0 $\mu\text{m}$ (6 channels) Accuracy: $\pm 5 \%$ Test Parameter-Partial count test recovery test
Capture Hood Make: TSI Model: 8375 & 8380		For 8375 Range: 25 to 2500 ft <sup>3</sup> /min, 25 to 8,000 ft/min, $\pm 150$ in H <sub>2</sub> O, 0 to 95 % RH, 0 to 170 0 C For 8380 Range: 25 to 2500 ft <sup>3</sup> /min, 25 to 8,000 ft/min, $\pm 150$ in H <sub>2</sub> O, 0 to 95 % RH, 0 to 170 0 C Test Parameter-Air Velocity Test
Photometer Make: TEC Model: PH-4		Range: 100% Test Parameter-Installed Filter System leakage Test
Aerosol Generator Make: TEC Model: AG -A1		Range: 540 - 5400 CFM Test Parameter-Installed Filter System leakage Test

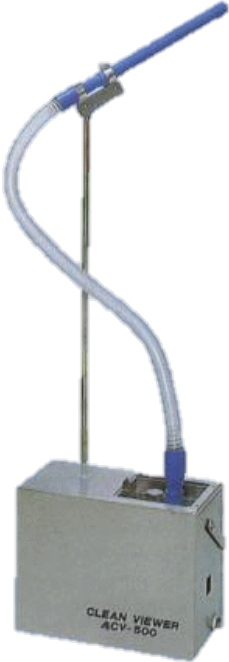


Make / Model	Parameter/ Range/ features/ specification
Lux Meter Make: LUTRON Model: 101 A	 Range: 0-1999,2000-19,990 20,000-50,000 Test Parameter-Light Intensity test
Digital Handy Cam Make: Panasonic Model:VDR-D50	 Test Parameter-Air Flow Pattern test
Sound Level Meter Make:LUTRON Model: SL4010	 Range: 35-80 dB,50-100dB,80-130dB Test Parameter-Sound Level Measurement
Fog Generator Make: Concept smoke system Model:Mini Colt 4	 Test Parameter-Air Flow Pattern Test

Make / Model		Parameter/ Range/ features/ specification
Vane Type Anemometer Make: Testo Model: 417		Range: 0 to +50 °C +0.3 to +20 m/s Accuracy: $\pm 1$ digit $\pm 0.5$ °C $\pm (0.1$ m/s +1.5% of m.v.) Resolution: 0.1 °C 0.01 m/s Volume flow: 0 to +99999 m <sup>3</sup> /h 0.1 m <sup>3</sup> /h (0 to +99.9 m <sup>3</sup> /h) 1 m <sup>3</sup> /h (+100 to +99999 m <sup>3</sup> /h) Test Parameter-Air Velocity Test
Vane Type Anemometer Make: Mextech Model: AM-4208		Range: 80 -8860, 0.4 m/s - 45.0 m/s Accuracy: $\pm (2\%) + 0.1$ m/s, $\pm 2\% + 1$ ft/m Test Parameter-Air Velocity Test
Anemometer Make: Testo Model: Testo-425		Accuracy: 0 - 20 m/s Test Parameter-Air Velocity Test
Water Fogger Make: main land mart USA Model:MHB12		Test Parameter-Air Flow Pattern Test
S S Kit		Test Parameter- Various type of Gases and Oil content




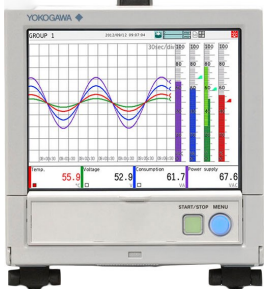




Make / Model		Parameter/ Range/ features/ specification
Hot Wire Anemometer Make: HTC Instruments Model: AVM-08		Range: 0 to 6000 ft/min, -17.8 to 93.3, 0 C 0 to 95 % RH Accuracy: $\pm 3\%$ of Rdg, $\pm 0.3$ 0 C, $\pm 3$ % RH Test Parameter-Air Velocity Test
Van type Anemometer Make: TSI Model: 5725		Range: 0.4 to 25.0 m/s & 0 to 50 0C Accuracy: $\pm (2\% + 0.2 \text{ m/s})$ , 0.8 oC Test Parameter-Air Velocity Test
Photometer Make: TEC Services Model: PH-5		Range: 100% Accuracy: $\pm 0.5\%$ Rdg Test Parameter-Installed Filter System Leakage Test
Micromanometer (SAM) Make: TSI Model: 8710		Range: 25 to 2500 ft <sup>3</sup> /min, 25 to 8,000 ft <sup>3</sup> /min, $\pm 150$ in H <sub>2</sub> O, 0 to 95 % RH, 0 to 170 0 C Accuracy: $\pm 3\%$ of Rdg, $\pm 2\%$ of Rdg, $\pm 0.3$ 0 C, $\pm 3$ % RH Test Parameter-Air Velocity Test
Anemometer Make: TSI Model: 9515		Range: 0 -20 m/s Accuracy: $\pm 5\%$ of Rdg or $\pm 0.025$ m/s Test Parameter-Air Velocity Test

Make / Model		Parameter/ Range/ features/ specification
Photometer (SAM) Make: ATI Model: TDA 2H		Range: 0 to 6000 ft/min, -17.8 to 93.3, 0 C 0 to 95 % RH Accuracy: $\pm 3\%$ of Rdg, $\pm 0.3$ 0 C, $\pm 3$ % RH Test Parameter-Installed Filter System leakage Test
Air Flow Pattern Tester Make: TVSP Model:FPT-500		Test Parameter-Air Flow Pattern Test
Aerosol Generator Make: ATI Model: TDA-4B		Range: 840 – 8500 Test Parameter-Installed Filter System leakage Test
Photometer (SAM) Make: ATI Model: 2I		Range: 0 to 6000 ft/min, -17.8 to 93.3, 0 C 0 to 95 % RH Accuracy: $\pm 3\%$ of Rdg, $\pm 0.3$ 0 C, $\pm 3$ % RH Test Parameter-Installed Filter System leakage Test
Dew Point Meter Make: Elektronik Model:EE371		Measurement of Dew point temperature for compressed air points
Gas Detector Tubes Make: Gastec		Detection of various Gases and oil content

Make / Model	Parameter/ Range/ features/ specification	
Clean Viewer Fogger Make: Airtech ACV-500		Test Parameter - Air Flow Visualization Test
Particle Counter Make : Lighthouse, USA Model : ApexZ3, Z50		Test Parameter- Partial count test recovery test
Gas Detector Tubes Uniphos		Detection of various Gases and oil content

## List of Standard Instruments Validation Process

Make / Model		Parameter/ Range/ features/ specification
Mini temperature and humidity data logger Make: Testo Model: 174 H		Temperature Range: $-4^{\circ}$ to $158^{\circ}\text{F}$ / $-20$ to $+70^{\circ}\text{C}$ Accuracy: $\pm 0.9^{\circ}\text{F}$ ( $-4^{\circ}$ to $158^{\circ}\text{F}$ ) / $\pm 0.5^{\circ}\text{C}$ ( $-20$ to $+70^{\circ}\text{C}$ )
Kaye RF ValProbe Wireless Data Logger System Make: Model:		Internal RH Sensor: Range 0-100%RH, Accuracy 2%RH
Button Operated Make: Yokogawa Model No. DX2000		Display Real time Measured data with input Signal a DC Voltage, Thermocouple resistance or contact signal
Paperless Recorder Make: Yokogawa Model No. GP10		Display Real time Measured data with input Signal a DC Voltage, Thermocouple resistance or contact signal DC Voltage, Thermocouple, RTD, DI
Paperless Data Recorder Make: Eurotherm Model: 6100A		Display Real time Measured data with input Signal a DC Voltage, Thermocouple resistance or contact signal
Chino Corporation Make: Model: KR31A		Universal DC voltage: $\pm 13.8\text{mV}$ , $\pm 27.6\text{mV}$ , $\pm 69.0\text{mV}$ , $\pm 200\text{mV}$ , $\pm 500\text{mV}$ , $\pm 2\text{V}$ , $\pm 5\text{V}^*$ , $\pm 10\text{V}^*$ , $\pm 20\text{V}^*$ , $\pm 50\text{V}^*$ (*with built-in voltage divider) DC current: With external shunt resistor

## ENVIRONMENTAL, SAFETY, HEALTH & SUSTAINABILITY

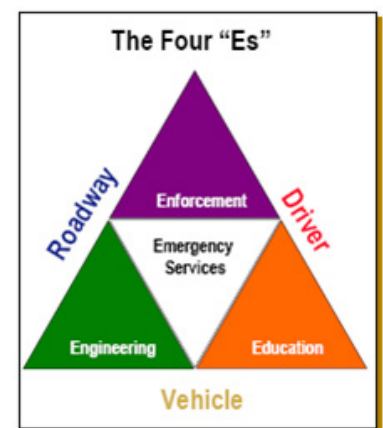
We are an Environmental, Safety, Health & Sustainability (ESH&S) consulting company engaged in providing the following services:

**Safety Transformation:** We have extensive and hands on experience in implementing Behavior Based Safety (BBS) and other interactions (including Major Hazards Observations) programs to drive cultural change across organization to improve safety ownership by workforce. Safety Leadership, Supervisor safety training/coaching and improving employees and contractors participation in safety.



**Improvement in Safety, Health & Environmental performance:** We can conduct Safety culture surveys, reviews to identify gaps, setting up vision, strategy, organization and KPIs to drive improvements and making safety a common value across the organization.

**Vehicle Safety Programs:** We has extensive experience in devising and setting up a Vehicle Safety strategy, policy and programs both for four and two wheelers driven by employees as well as contractual employees. We have the experience of managing over 500 four wheelers drivers and 1500 two wheeler riders. We not only engage the top management of the client but also involve employee's families in the vehicle safety initiatives. We have devised extensive driver safety awareness programs and backed up the same with monitoring the drivers on their compliance to vehicle safety programs and practices.



**Office Safety Programs:** This includes forming Office Safety Committees, developing policies and procedures, emergency plan and risk assessment procedures, inspection programs, safety audits for office, etc. Obtaining and maintaining an OHSAS 18001 & ISO 14001 certifications, etc. We can also device Ergonomics Programs, which involves development of policies & procedures, training, assessment of workstations and recommendations on improvements.



**Risk Management Services:** This involves Hazard identification, Risk assessment and quantification, Risk mitigation & review. Risk analysis including scenario planning, Development of risk register, change management, Job Safety Analysis and Human error identification.



**Hazard Risk Awareness and Safety Training:** We are experienced in developing and presenting training courses covering a full range of safety topics. In these training processes the Client's staff is mentored to ensure the relevant risk management knowledge is transferred in an integrated manner to enable risk management practices to be incorporated into the relevant operational process work flow. All programs are facilitated using a mixture of presentations, class discussion, practical exercises and case studies.

**Auditing:** We are also experienced in a range of plant and systems related audits. The types of audits conducted cover Regulatory Compliance Audits, Safety Management Systems Audits, Plant and Systems Audit and Safety and Operating Plans Audits and Social Responsibility and include OHSAS 18001, ISO 14001, Dakota audits, Responsible Care Audits, IS 14489, etc. Besides, we also conduct audits of prospective and existing warehouses, toll units, to assess their compliance to legal and company standards.



**ESH Due Diligence and ESH on-boarding of new companies:** We are experienced at Due Diligence and Mergers and Acquisitions and working with Joint Ventures to meet local and corporate standards. We have led due diligence and ESH/CSR on boarding for a wide range of industries with a focus on strategic change, corporate governance, leadership and culture change and safety management systems.

**Construction Safety Services:** This involves Hazard Studies, HAZOP review of design, Construction Site Safety and Environmental Management Plan, contractor safety management process, audits, training. Construction safety, completing engineering design reviews and HAZOP studies both for batch and continuous processes and equipment.



**Emergency Response Plans and Procedures:** We are experienced at facilitating the preparation of well-structured and well integrated emergency and disaster recovery plans and procedures. The scenarios cover chemical emergency, site emergency, pandemic and natural regional disasters and include desk top exercises and site drills and providing guidance on improvements.

**Off – the – Job Safety Programs (OTJ):** We specialize in making Safety a 24/7 process by also devising and conducting OTJ programs with special relevance to Home Safety viz. LPG/Piped gas safety at Home, Electrical Safety at Home, overall housekeeping and importance on safety aspects at home, and also a special emphasis on vehicle safety for families. The importance to discuss safety with children so that they can inculcate the habit of thinking about Safety in their daily routines.

**Environmental Services:** Our Core proficiencies in Environmental services include the following:

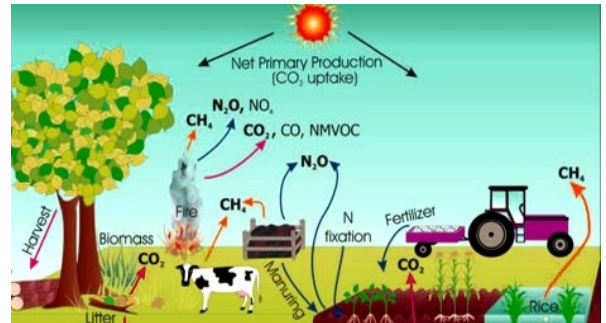
**Water Pollution Abatement:**

- Wastewater analysis to determine various pollution parameters.
- Feasibility studies of treatment system.
- Consultancy on treatment systems for wastewater.
- Detailing and designing of treatment systems.
- Basic Engineering of treatment systems.
- Detailed engineering of treatment system.
- Supply, Erection and Commissioning of treatment units.
- De-bottlenecking and revamping of existing effluent treatment plant.
- Operation and maintenance of existing effluent treatment plants.



**Air Pollution Abatement:**

- Analysis of pollution parameters of Ambient Air,
- Workplace, and Process & Utility stacks.
- Efficiency improvement of pollution control equipment.



**Noise Pollution Abatement:**

- Noise Pollution Audits.



**Others:**

- Environmental Impact Assessment (EIA) Studies.
- Setting up of analytical labs.



## AUTOCAL FAMILY...



AUTOCAL acknowledges the fact that apart from its world-class infrastructure and state of the-art technology, the most valuable resource is its human asset. It is the dedication and collaboration of its people that has helped AUTOCAL transform its dreams and ambitions into realities and achievements.

The AUTOCAL family comprises of professionals handpicked from different faculties handling an array of diverse operations. Similarly, experienced professionals steer crucial operational domains like marketing, accounts & finance and human resources together with engineering and other operational areas.

The core management team responsible for formulating the company's growth strategies comprises of innovative, entrepreneurial, and collaborative senior management members led by the Founder and Managing Director and are responsible for building AUTOCAL from a blue print project to its current global leadership position.

Collectively AUTOCAL team has built the company into a highly respectable and admired Calibration and Validation Company in the Indian Pharmaceutical industry.

Apart from the above there are 200 ITI/Diploma trained technicians and other office backup staff.

We are proud to say that we are the only calibration company in India having a strength of more than 250 people and fourteen branches.

# WE ARE PROUD TO BE ASSOCIATED WITH.....

3 D Systems, A Star Coating, A.B & Sons, A.S. Engineering Works, A.S.Controls Pvt Ltd, A.S.Molobhoy Pvt ,Ltd, A.T.E.Envirotech Pvt Ltd, A.V.M. Laboratories, A.W.Faber Castell India Pvt Ltd, AAD Corporation Ltd, Aaditya Finechem (P) Ltd, Aakar Engineering Services, Aakash Manufacturing Company Pvt Ltd, Aalap Enterprises, Aanjaneya Biotech Private Limited, Aaradhana Plastics Pvt Ltd, Aarav Fragrances & Flavours Pvt Ltd, Aart Infosoft Pvt Ltd, Aarti Drugs Ltd., Boisar, Aarti Industries Ltd (Bharuch), Aarti Industries Ltd Boisar, Aarti Industries Ltd. Dombivali, Aarya Tek Technologies, Aayurved Biotech Pvt. Ltd, ABB Limited, ABB LTD (NASHIK), Abbott Healthcare Pvt Ltd (Goregaon), Abbott Healthcare Pvt. Ltd., Abbott Healthcare Pvt. Ltd. – Baddi, Abbott India Limited, Abhinandan Rasayan Pvt Ltd, Abigail Enterprises, Absolute Solutions, Academy of Welding & Consultancy Services, Accu Techs, Accupack Engineering Pvt Ltd, Accurate Engineering Co Pvt Ltd (S), Accurate Labs, Accutest Biologics Pvt Ltd, Accutest Research Laboratories (I) Pvt. Ltd., Aces Enterprises, ACG Associated Capsules Pvt. Ltd, ACG Inspection Systems Pvt Ltd, ACG Pam Pharma Technologies Pvt. Ltd, Acme Formulation Pvt. Ltd., ACME Generics LLP, Acme Lifescience, ACRV Aircron Projects, ACS Engineering Pvt Ltd, Action Engineers, Acumen Calibrations, Acumen Tech Sol Pvt Ltd, Adani Wilmar Ltd, Adarsh Industries, Adept Engineers, Aditi Associate/DP Interprises, Aditi Industries, Aditya Birla Retail Limited, Aditya Birla Science & Technology Co Ltd., Aditya Enterprises, Aditya Plastic, Aditya Systems, Aditya Vidyut Appliances Ltd., Adore Pharmaceuticals Pvt. Ltd., Adtech Inventions Pvt Ltd, Advance Composite Pvt Ltd, Advance Marks & Labels Pvt. Ltd., Advance Power Display Systems Ltd, Advanced Bolting Solution Pvt. Ltd. - Navi Mumbai, Advanced Bolting Solutions Pvt. Ltd, Advanced Fittings Pvt. Ltd., Advanced FluroTubes, Advanced Medtech Solutions Pvt Ltd, Advanced Power Sources Ltd, Advanced Systems Lab, Advent Engineers, Advy Chemical, Aero Interiors Pvt Ltd, Aero Pharma (Silvassa), Aero Pharma Pvt. Ltd, (Mulund), Aero Pharma Pvt. Ltd., Aeromec Marketing Co. Pvt. Ltd., Aerospace Technical Services, Aessec Coldweld Pvt. Ltd, Afriso India Pvt Ltd, Aggarwal Engineering Works, Agniraksha, Agog Pharma Ltd., Agrosurg Irradiators (I) Pvt. Ltd., AGV Systems Pvt Ltd, AIC Lab Equipments Pvt Ltd(S), Air India, Air India Limited, Air Micron Cleantech, Air Miracle, Airmistic Engineers Pvt. Ltd, Airpac Cleantech Pvt Ltd, Airtech, Airtech Systems (India) Pvt Ltd, Aishwarya Healthcare, Ajanta Agencies, Ajanta Exports, Ajanta Pharma Ltd (Chikalhana), Ajanta Pharma Ltd., Ajanta Pharma Ltd. (Kandivali), Ajanta Pharma Ltd. (Paithan), Ajanta Pharma Ltd.(Aurangabad), Ajas Components Pvt. Ltd., Ajay Syscon Pvt Ltd, Ak Pipe Fittings Pvt Ltd., Akhil Wires Pvt. Ltd, Akrom India Private Ltd, Akshaj Enterprises, Akshaj Enterprises (S), Alan Electronic Systems Pvt Ltd, Alamo Motors Pvt Ltd, Albany Molecular Research Hyderabad Research Center, Albea Betts India Pvt Ltd, Alca Lab Pvt Ltd, Alcap Electronics Pvt Ltd, Alchymars ICM SM Pvt. Ltd., Alcon Electronics Pvt Ltd, Alcon Industries, Alembic Ltd (Vadodara), Alembic Ltd. – Baddi, Alembic Pharmaceuticals Ltd, Alembic Pharmaceuticals Ltd (Sikkim), Alfa Packaging (Silvassa), Alkem Health Science, Alkem Laboratories Ltd(Taloja), Alkem Laboratories Ltd., All Measure Technologies Pvt Ltd, Allana Cold Storage Ltd, Allana Investments & Trading Co. Ltd., Allansons Ltd, Allegro Pharmachem Equipments, Allergan Healthcare Ind Pvt Ltd, Alliance Formulations, Alliance INC, Alliance Packaging, Allianz Transformers Pvt Ltd, Allied, Alloy Polymers India Pvt Ltd, Ally Pharma Options Pvt. Ltd., Almighty Auto Ancillary Pvt Ltd, Alok Industries Limited, Alot Hitek Pvt. Ltd., Alpina Enterprises, Alstom Hydro R&D India Ltd, Alumayer India Pvt. Ltd, Amar Jyot Chemicals Corporation, Ambuja Cements Ltd., Ameeja Enterprises, American Sensor Technologies Inc, Ametek Instruments India Pvt Ltd, Ametek Instruments India Pvt Ltd (Bangalore), Ametek Instruments India Pvt. Ltd. (Delhi), Amey Industries, Ami Industries, Amit Engineering, Amitronics Pvt Ltd, Amity Components, Amity Power Products Pvt Ltd, Ammunition Factory, Amod Engineering Works, Amogh Precision Tools, Amon Engineers Pvt Ltd, AMV Powder Coating and Phosetting, Analytical Testing Services, Anand Control, Anandilal & Ganesh Podar Society, Anatek Services Pvt. Ltd, Anchor Electricals Pvt Ltd, Anchor Mark Pvt. Ltd., ANG Lifesciences (I) Private Limited, Anicare Pharmaceuticals Pvt Ltd, Anika Electrotech, Anil Kumar Sunil Kumar & Company, Anisha Engineering, Anita Enterprises, Ankur Drugs And Pharma Ltd, Ankur Drugs Ltd.(H.P), ANTS Ceramics Pvt Ltd, Anu Enterprises, Anuh Pharma Ltd., Apar Industries Ltd, Apex Engineering Services, Apex Packing Products Pvt Ltd, APJ Laboratories Ltd., Aplab Limited, Apollo Soyuz Electrical Pvt. Ltd, Apothecon Pharmaceuticals Pvt. Ltd, APT Controls, Aqua Lab, Aqua Vitoe Laboratories, Aquarius Shipyard Pvt Ltd, Aquasmith Water Solution Pvt Ltd, AR Engineering, ARC Chemicals Pvt. Ltd., Arch Pharmalabs Ltd(Boisar), Arch Pharmalabs Ltd(Badlapur), Arch Pharmalabs Ltd.(Dombivali), Archroma India Pvt Ltd, Arctic Solutions, Aries Components Manufacturing Company, Arihant Gold Plast Pvt Ltd(Gujrat), Arihant Industries (S), Arihant Sales Agency, Aristo Laboratories Pvt Ltd (Baddi), Aristo Laboratories Pvt. Ltd, Aristo Pharmaceuticals Pvt Ltd (Madhyapradesh), Aristo Pharmaceuticals Pvt Ltd(Baddi), Aristo Pharmaceuticals Pvt. Ltd, Art Rubber Ind Ltd, Artech Instruments & Controls Pvt Ltd, Arun Banualiker, Arun & Co., Aruna Engineering Works, Aryameya Enterprises, Asahi India Glass Ltd, ASB International Pvt. Ltd., Arsent Techno Solutions Private Ltd, Asha Electronics Pvt. Limited, Asha Electronics Pvt. Ltd, Asha Industries, Ashapura Roadlines, Ashco Niulab Industries Ltd., Ashida Electronics Pvt Ltd, Ashirwad Hospital & Research Centre, ASHRAE Clean Room Presentations (P) Ltd, Ashtavinayak Auto, Asian Heart Institute & Research Centre Pvt. Ltd., Asian Paints Ltd, Asian PPG Limited, Associated Cables Pvt. Ltd, Associated Capsules Pvt. Ltd., Astec Valves & Fitting Pvt. Ltd, Astra Microwave Products Ltd, AstraZeneca Pharma India Ltd, Astron Research Limited, Astron Research Ltd., Atco Controls (India) Pvt Ltd, Ateindia Envirotech Pvt Ltd, Athena Drug Delivery Solutions Pvt. Ltd, Athene Laboratories, Atit Engineering Company, Atlas Copco India Pvt Ltd, Atlas Mtt India Pvt. Ltd, Atlas Fisheries Pvt Ltd, Atra Pharmaceuticals, Atra Pharmaceuticals Pvt. Ltd, Unit I, Atra Pharmaceuticals Pvt.Ltd Unit II, Attuned Polymer Group, Auro Laboratories Ltd., Auro Works, Aurochem Laboratories (I) Pvt Ltd (Unit 2), Aurochem Laboratories (I) Pvt. Ltd, Aurochem Pharmaceuticals (I) Pvt. Ltd., Auto Instrument Calibration Lab (S), Autobahn Enterprises Pvt Ltd, Autocop India Pvt Ltd, Autodata, Automatic Tiles & Marbles Inds. Pvt. Ltd, Automotive Test Systems, Autopro, Avant Garde Cleanroom & Engg Solutions Pvt Ltd, Avantor Performance Materials (RFCL Ltd), Avantor Performance Materials India Ltd, Avcon Controls Pvt. Ltd, Avi Scientific Calibration and Services, Aviza Technologies, AVL India Pvt Ltd, Avon Organics Ltd, AXA Parenterals Ltd, Axis Electrical Components(I) Pvt Ltd, Ayurchem Products, Ayushakti Ayurved Pvt. Ltd., A-Z Instrument Services, Aztek Pvt. Ltd, B.D.Bansal Steel Industries, B.G.Enterprise, B.J.Patel Surgicals, Bagai Enterprises, Bajaj Auto Ltd, Bajaj Electricals, Bajaj Health Care Pvt. Ltd., Bajaj Healthcare Ltd., Baldota Control and Equipments Pvt Ltd, Balkrishna Enterprises, BARC, Baroda Heart Institute Clinical Laboratory, Barton Firtop Engineering (I) Pvt Ltd, BASF Construction Chemicals (India) Pvt. Ltd, BASF India Limited, Baumer Technologies India Pvt Ltd (S), Bavaria Motors Pvt Ltd, Becton Dickinson India Pvt. Ltd., Bee Pharmo Labs Pvt Ltd, Behr-Hella Thermocontrol India Pvt Ltd, Beico Industries Pvt Ltd, BEL Optronic Devices Ltd, Belcon Engineers Pvt Ltd, Belimo Actuators India Pvt. Ltd., Belladona Plasters Ltd, Bellota Agrisolutions and Tools Pvt Ltd, Bengal Calibration Laboratory, Bennett and Bernard Custom Homes, Benzochem Lifesciences Pvt. Ltd., Berger Becker Coatings Pvt Ltd, Betts India Private Ltd, BGP Healthcare Pvt. Ltd, Bhsansali Precision Components, Bhsansali Techno Components, Bharat Bijlee Ltd, Bharat Biotech International Limited, Bharat Biotech International Ltd., Bharat Chemicals, Bharat Petroleum Corporation Ltd, Bharat Serum & Vaccines Ltd, Bharat Serum & Vaccines Ltd, Thane, Bharat Serum & Vaccines Ltd. (Ambarnath), Bharat Tech, Bharti Shipyard Ltd, Bhavana Chemical Industries, Bhilai Calibration Laboratory, Bhoomi Appliances Pvt Ltd, Bhoruka Logistics Pvt Ltd, Bill Industries, BIMM Technologies Centre, Bio Scientific Research Laboratories (I) Pvt. Ltd, Biocon Ltd., Biogenics (India) Limited, Biopharmax India Pvt.Ltd, Bioshields – Goa, Biosystem Company, Bipin Pharma Steel, Birla Precision Technologies Ltd, Bisleri International Pvt. Ltd, Bittu Pharmaceuticals, Biztech Services, Bliss GVS Pharma Ltd.(Andheri), Bliss GVS Pharma Ltd., Bloom Energy (India) Pvt Ltd, Blow Tech Engineers Pvt Ltd, Blue Circle Organics Pvt. Ltd, Blue Cross Laboratories Ltd., Blue Star Limited, Blue Star Limited (Chandigarh), Blue Star Limited (Daman), Boehringer Ingelheim India Pvt Ltd, Bombay Bioresearch Centre, Bombay Chemical Equipments, Bombay Chemicals Pvt Ltd, Bombay Hospital Trust, Bombay Hospital Trust – Mumbai, Bombay Metal & Steel Traders, Bombay Metal & Steel Traders, Boost Electronics, Borkar Color Packs Private Ltd, Borregaard South Asia Pvt Ltd, Brassica Pharma & Chemicals, Brassica Pharmaceutical & Chemicals, Breach Chand Hospital Trust, Brooks Laboratories Ltd., Brooks Laboratories Ltd., Baddi, BSR Technologies Pvt Ltd, Building Energy Performance Laboratory, Bumper India Pvt Ltd, Bureau of Indian Standards, C.P.Engineering Works, C.P.Tech Engineering Pvt Ltd, Cachet Pharmaceuticals Pvt. Ltd., Caculo Earthmovers Pvt Ltd, Cadila Healthcare Limited (Vadodara), Cadila Healthcare Limited(Baddi), Cadila Healthcare Ltd – Baddi, Cadila Healthcare Ltd (Goa), Cadila Healthcare Ltd., Cadila Healthcare Ltd-Changodhar, Cali Instrument & Gauge Calibration Laboratory(S), Cali Labs Private Limited, CALTECH Pvt. Ltd, Calyx Chemicals & Pharmaceuticals Ltd, Calyx Chemicals & Pharmaceuticals Ltd (Dombivali), Camlin Limited, Caprihans India Ltd, Captech Engineers, Carewell International, Carotino (India) Pvt. Ltd, Carrier Race Technologies Pvt Ltd, Castor Engineering Pvt Ltd, CCIC India Pvt Ltd, CCRT Laboratories, CEAT Limited, CEAT Limited (Gujarat), Celrich Products Pvt Ltd, Centaur Pharmaceuticals Ltd (Goa), Centaur Pharmaceuticals Pvt Ltd(Pune), Centaur Pharmaceuticals Pvt. Ltd., Central Drugs Testing Laboratory Mumbai, Central Proof Establishment, Central Railway, CG Lucy Switchgear Ltd, Chandok Automotive Manufacturers Ltd, Charak Pharma Pvt Ltd (Mumbai), Charak Pharma Pvt. Ltd(Baddi), Charak Pharma Pvt. Ltd., Chemicoat, Chemiline Inermids(India) Pvt. Ltd., Cheminnova Pharmaceuticals, Chemito Technologies Pvt Ltd, Chemiline Inermids (India) Pvt Ltd, Chemtreat India Ltd, Chemtrols Industries Ltd, Cheryl Laboratories Pvt.Ltd., Chipita India Pvt Ltd, Choksi Laboratories Ltd(S), Chowgule & Company Pvt Ltd, Christ Nishotech Water Systems Pvt Ltd, CHT (India) Pvt. Ltd. (Raigad), Churi Industries, Cinpharm, Cipla Limited – Bhivandi, Cipla Limited (Goa), Cipla Limited (Patalganga), Cipla Ltd (Indore), Cipla Ltd (Mumbai), Cipla Ltd (Pune), Cipla Ltd (Sikkim), Cipla Ltd(Vikholi), Cipla Ltd., Cipla Quality Chemical Industries Ltd, Ciron Drugs & Pharmaceuticals, Ciron Drugs & Pharmaceuticals Pvt Ltd, Citizen Scale (I) Pvt Ltd (S), Classic Retail Imaging Solution Pvt Ltd, Classic Scientific, Classic Stripes Ltd- Unit I, Classic Stripes Pvt Ltd (Vasai), Classic Strips Ltd. Unit II, Classic Strips Pvt Ltd, Classic Strips Pvt. Ltd., Cleanrooms Containments, Clear Point Instrumentation Pvt Ltd, CLICK-IN Calibration Laboratory - Pune, Clinical Medicine Infomatics India, Clion"O" Valve Systems, CMS Computers Limited, CMS-Traffic Systems Ltd, CN Tech Engineers Pvt Ltd, Coastal Marine Construction & Engineering Ltd, Cockerill Exports Pvt. Ltd, Coffee Day Global Ltd, Cold Star Logistics Pvt Ltd, Cold Weld Engineering Pvt. Ltd., Colgate Palmolive India Ltd (Goa), Colgate-Palmolive(India) Limited, Colorcon Asia Pvt Ltd, Colour Packs Pvt Ltd, Commanding Officer Ins Trupti, Con Tech CCRC Pvt Ltd, Connectwell Industries Pvt Ltd, CONTEC AIRFLOW ENGG. PVT. LTD, Continental Engineering, Convergence Centre, Conwood Pre Fab Ltd, Cool Tech Enterprises (S), Copmed Pharmaceuticals Pvt Ltd, Coral Clinical Systems, Coral Clinical Systems (Baddi), Coral Laboratories Limited, Corning Technologies India Pvt Ltd, Cosben Equipments, Cosine Calibration & Testing Laboratory, Cosme Biotech Pvt. Limited, Cosme Pharma Limited Goa, Cosme Pharmaceuticals Ltd., Cosme Remedies Ltd., Covidien Engineering Services Pvt Ltd, CPS Oil & Gas Equipments Pvt Ltd, Creative Engg & Metal Works, Creative Labels Pvt Ltd, Creative Power, Crest Healthcare, Crompton Greaves Limited, Crystal Logistics Cool Chain Pvt Ltd, CTR Manufacturing Industries Ltd, CtrlS Datacenters Ltd, CTX Life Sciences Pvt Ltd, CU Inspections & Certifications India Pvt Ltd, Curie Manavata Cancer Centre, Custom Capsules Pvt. Ltd., D - Link (India) Ltd., D - Link (India) Pvt. Ltd., D - Link (India) Pvt. Ltd., D&H Secheron Industries Private Ltd, D. P. Enterprises, D.B. Solutions, D.C.Engineers Pvt Ltd, D.G.Q.A, D.J.Electro Controls, D.K. Pharma Chem Pvt. Ltd, D.K.Pharma Chem Pvt. Ltd., D.M Pharma (Solani), Dabur India Ltd, Dabur Pharma Ltd., Daksha Engineering Company, Dana India Technical Centre Pvt. Ltd., Datar Nouveau Energietechnik Ltd, Datar Genetics Ltd, Datar Power Management Pvt Ltd, Datwyler Pharma Packaging India Pvt Ltd, Daya Lubricants Pvt. Ltd., DBM Geotechnics & Constructions Pvt. Ltd, DCI Pharmaceuticals P. Ltd., De Nora India Ltd, DEE KAY Scientific, Deejay Capacitors Pvt Ltd, Deep Instruments, Deepak Nitrite Limited, Deepali United Mfg Pvt Ltd, Delta Engineering, Delta Instruments Company, Delta Lab, Devki Devi Foundation, Dewa Electro Systems, Dhanashree Engineers, Dhanashree Polymers Pvt. Ltd, DHR Holding India Pvt. Ltd, Diamond Pipe Supports Pvt Ltd., Dicitex Furnishings Ltd., Diebold Systems Pvt Ltd, Digimet Technologies, Dinracc Integrated Systems Pvt Ltd, Dishman Pharmaceuticals & Chemicals Ltd, Doctor's Analytical Laboratories Pvt Ltd, DOL Electric Company Pvt Ltd, DOL Motors Pvt Ltd, Doors & Doors Systems (India) Pvt. Ltd, Dortmund Laboratories Pvt. Ltd., Dow Engifab LLP, Dr Reddy's Laboratories Ltd (Unit IV), Dr. Balabhai Nanavati Hospital, Dr. Fixit Institute of Structural Protection &

Dr. L.H. Hiranandani Hospitals, Dr. Lal's Path Lab Pvt. Ltd, Dr. Reddy's Laboratories Ltd (Unit VI)CTO, Dr. Reddy's Laboratories Ltd (Baddi), DR. Reddy's Laboratories Ltd (Bachupally), Dr. Reddy's Laboratories Ltd., Dr. Reddy's Laboratories Ltd.(Sez Area), Dr. Reddy's Laboratories Ltd.,(Unit-1), Dr.Batra's Positive Health Products Ltd., Dr.Reddy's Laboratories Ltd - AP, Dr.Reddy's Laboratories Ltd - Baddi, Dribits Internationals Pvt Ltd, Drugs Controls Laboratory, DSM Sinochem Pharmaceuticals (India) Pvt Ltd, D-Tech Industries, Dupen Laboratories Pvt Ltd, Duralabel Graphics Pvt Ltd, Durga Udyog, Dynamic Gauge Pvt Ltd.(Vasai), Dynamic Pumps & Projects (I) Pvt. Ltd., Dynomer Controls, E.I.Dupont India Pvt. Ltd, Earth Care Enviro Solutions Pvt Ltd, Earth Metallurgical Services Pvt Ltd, Eastern Steel Industries, Eco Laboratories, Ecologic Chemicals Ltd, Ecological Laboratories Pvt Ltd, Edelweiss Integrated Commodity Management Ltd, Efacec India Pvt Ltd, Efacec Switchgear India Pvt Ltd, Efficient Consulting Pvt Ltd, Efficient Toroidal Coil Corporation, Ehara Industries, Eisai Pharmatechnology & Mfg. Pvt. Ltd., Elca Laboratories, Elcome Integrated Systems Pvt Ltd, Elcome Marine Services Pvt Ltd, Elder Pharmaceuticals Ltd. (Deheradun), Electro- Diagno Systems Pvt. Ltd., Electro Plasma Equipment Pvt. Ltd, Electro Protection System & Services, Electro Tech Integrators Pvt Ltd, Electrocraft (India) Pvt. Ltd, Electro-Fab Hoists & Cranes Mfg Co, Electroforce (India) Pvt Ltd, Electrolab India Pvt Ltd, Electromag Devices Pvt. Ltd, Electromet Projects, Electronet Equipments Pvt. Ltd., Electropneumatics Motor Power Company Pvt Ltd, Electrocraft (India) Pvt. Ltd, Eli Lilly & Co. (I) Pvt Ltd, Elind Induction Furnaces Pvt Ltd, Elite Food Specialities Pvt Ltd, Eljay Industries, ELM Enterprises Pvt Ltd, Elmehc Engineers, Elster Metering (P) Ltd, Eltec, Eltek Equipment (Bombay) Pvt. Ltd., Eltek Systems, Emami Ltd, Embedded Power Automation, Emco Dynatorq Private Ltd, Emco Electronics, Emco Limited, Emcure Pharmaceuticals Limited, Emcure Pharmaceuticals Ltd., Emerald Calibration Labs Pvt Ltd, Emerson Electric Company India Pvt Ltd, Emerson Network Power India Pvt Ltd, EMET Controls Pvt Ltd, Emil Pharmaceutical Inds. Pvt. Ltd, Emil Pharmaceuticals Pvt. Ltd., Emvoi Pharma, Emzor Pharmaceuticals Industries Ltd, Enaltec Labs Pvt. Ltd, Enam Casting Pvt Ltd, Encube Ethicals Pvt. Ltd. (Goa), Endee Engineers Pvt Ltd, Enem Nostrum Remedies Pvt. Ltd, Engineers Combine, Enicar Pharmaceuticals Pvt. Ltd., Enpal Aircon Private Ltd, Enpay Transformer Components (I) Pvt Ltd, Ensave Devices Pvt Ltd, Enterprise Logistics Pvt. Ltd, Entraco BKS Bus Ducts Pvt Ltd, Enviro Analysts & Engineers Pvt Ltd, Enviro Technologies, Enviro Laboratories Pvt Ltd, EOS Power India Pvt Ltd, EPC Industries Limited, EPCOS India Pvt Ltd, Epttrans Electricals (P) Ltd, EPoint Technologies, Epsilon Pharmaceuticals , Pvt Ltd, Equinox Solutions, Erection & Instrumentation Engineers, Ericson Transformer, Ersten Electric, Erweka India Pvt. Ltd., Escobio Pvt. Ltd., Escobio Pvt. Ltd., Escobio Pvt. Ltd. - Malad, Ess Dee Aluminium Ltd., Ess Dee Aluminium Ltd.-Goa, Essar Projects (I) Ltd, Essel Propack Ltd, Ethypharma LL Private Limited(Ambernath), Eurolife Healthcare Pvt Ltd-Roorkee, Evergreen Engineering Co. Pvt. Ltd. (Works V), Evergreen Group of Company, Eversendai Construction Pvt Ltd, Evolute Solutions Pvt Ltd, Excel India, Excel Industries Limited, Excellent Airconditioning, Exide Industries Ltd, Fab Tech Engineers, Fablab India Pvt Ltd, Fabrizio Industries Pvt Ltd, Fabtech Technologies Africa Ltd, Fabtech Technologies International Ltd., Facade India Testing Inc., Fag Bearings India Ltd, Fairdeal Electricals & Engineering Pvt Ltd, Famy Care Limited, Famy Care Limited(Ahmedabad), Fazlani Exports Pvt. Ltd., FDC Limited, Ferring Pharmaceuticals Pvt. Ltd, Fertin Pharma Research & Development I (P) Ltd., Fiat India Automobiles Ltd, Fine Airsys, Fine Finishes Organics Pvt Ltd, Fine Line Circuits Ltd, Finebiotics Pharma Ltd, Finecure Pharmaceuticals Ltd, Finiks Engineering Company, Finolex Cables Limited, Finorch Chemicals India Pvt. Ltd., Flamingo Pharmaceuticals Limited, Flash Point Equipment Pvt Ltd, Fledon Engineering Works, Flex Art Foils Pvt. Ltd.,Goa, Flexo Braid India, Flint Group India Pvt Ltd, Flo Rite Engineering Corporation, Flocon Industries, Flora International, Florite Engineering Corporation - Vasai, FLSmith Pfister India Ltd, Fluidmac Hose Industries, Flyjac Logistic Pvt Ltd, FM Instrumentation, Foremost Industrial Products, Fortis Healthcare Ltd, Fortis Hospital, Fortis Hospitals Ltd (Banglore), Foundation For Innovative New Diagnostics, Fox Solutions, Franco Indian Pharmaceuticals Pvt. Ltd., Fredun Pharmaceuticals Ltd., Fresenius Kabi India Pvt Ltd, Fresenius Kabi India Pvt Ltd (Goa), Fresenius Kabi India Pvt Ltd (Pune), Fresenius Kabi Oncology Ltd - Baddi, Fresenius Kabi Oncology Ltd (Gurgaon), Fresenius Kabi Oncology Ltd (Kalyani), Fresenius Kabi Oncology Ltd., FTS Building Systems LLC, Fuchs Lubricants Pvt Ltd, Fuelpac Boilers & Engineering Company Pvt. Ltd, Fuji Electric India Pvt Ltd, Funksool India Ltd, Furnace Fabrica (India) Ltd., Fusion Scientific Laboratories Pvt Ltd, G Amphray Laboratories, G.D.Instrument Calibration Centre, G3 Motors Ltd, Gactel Turkey Projects Ltd., Gadark Lab Pvt. Ltd, Galaxy Industries, Galaxy Instrumentation, Galaxy Surfactants Ltd, Galaxy Transmissions Pvt Ltd, Galpa Laboratories Ltd (Ankleshwar), Galpha Laboratories Ltd(H.P), Galmon India Limited, Ganesh Multitech Engineering Pvt Ltd, Gauges Bourdon India Pvt Ltd, GBC Packaging, GE India Exports Pvt Ltd, Gear Pneumatics, Geecy Engineering Pvt Ltd, Geekays India (S), Geetee Carriers Pvt Ltd, Gemini Instratech Ltd, Gemini International Pvt. Ltd, Gemini International Pvt. Ltd., General Auto Electric Corporation, General Foundries Pvt. Ltd., General Motors India Pvt. Ltd., Genova Biopharmaceuticals Ltd., Geno Pharmaceuticals Ltd, Genom Biotech Pvt Ltd, Genova Biopharmaceutical Ltd, George Philips Medical Engineering Pvt Ltd, Getinge India Pvt. Ltd, Getz Pharma Research Pvt. Ltd., GIC INSU-FLEX Conductors Pvt Ltd, Giava India Pvt Ltd, Gilbert & Maxwell Electricals Pvt Ltd, Gilbert & Maxwell Transformer Pvt Ltd, Girish Industries, Girnar Associates, Gland Pharma Limited-Sez, Glass Pharma Ltd., Glass Wall Systems (India) Pvt Ltd, Glasstech Industries (I) Pvt. Ltd, Glaxo Infrastructure, Glaxo Smithkline Pharmaceuticals Ltd.- Nashik, Glaxosmithkline Asia Pvt Ltd, GlaxoSmithKline Consumer Pvt Ltd, GlaxoSmithkline Pharmaceuticals Ltd, Glaxosmithkline Pharmaceuticals Ltd (Bhiwandi), Glenmark Generic Ltd (Indore), Glenmark Generic Ltd (GOA), Glenmark Generics Ltd (Mumbai), Glenmark Pharmaceuticals Ltd., Glenmark Pharmaceuticals Ltd (Baddi), Glenmark Pharmaceuticals Ltd., Glenmark Pharmaceuticals Ltd. (Sikkim), Glenmark Research Centre, Global Hospitals, Global Electronics- Hyderabad, Global Healthcare Products, Global Lab, Global Lab - Mira Road, Global Medikit Limited, Global Vectra Helicorp Ltd, Globatronic (Bombay) Pvt. Ltd., Globotech Bio Analytica, Globotronic (Bombay) Pvt. Ltd., Globus International, GMP Technical Solutions Pvt Ltd, Goa Antibiotics & Pharma Ltd., Goa Antibiotics & Pharmaceuticals Ltd, Goa Carbon Limited, Goa Coastal Resorts & Recreation Pvt Ltd, Goa Glass Fibre Ltd, Goa Instruments Industries Pvt Ltd, Goa Invescast Ltd, Goa Medicare Devices Pvt. Ltd., Goa Paints & Allied Products, Goa Roller Flow Mills Pvt Ltd, Goa Sintered Products Pvt Ltd, Goa Syntehic, Godfrey Philips India Ltd, Godrej & Boyce Mfg Co. Ltd(S), Godrej Memorial Hospital,Gogate Electrosystems(N) Pvt Ltd, Gohil Industries, Gol Ship Repair Ltd, Golden Cross Pharma Pvt Ltd, Goldwin Medicare Ltd (Plant-I), Goldwin Medicare Ltd (Plant-II), Goldy Finepacks Pvt Ltd, Gopaladas Vishram & Co. Ltd., Gopani Metal Industries Pvt Ltd, Govind Industries, Govt of Jharkhand, GP Petroleums Ltd, GPR Engineering Pvt Ltd, Grand Hyatt Goa, Graphite India Ltd, Grauer & Well India Ltd, Grindwell Norton Ltd, Group Pharmaceutical Ltd., Group Pharmaceuticals Ltd., Groynetech, GSC Glass Ltd, Guala Closures India Pvt Ltd, Guardwel Industries Pvt Ltd, Gufic Biosciences Ltd., Gujaral Enterprises, Gujarat Themis Biosyn Limited,Gulf Oil Corporation Ltd, Gulf Petrochem, GWS Engineers & Fabricators Pvt Ltd, Haffkind Bio-Pharmaceuticals Corporation Ltd, Haffkine Bio-Pharmaceuticals Corporation Ltd, Hager Electro Pvt Ltd, Hakimi Enterprises, Haldex India Limited, Hallmark Automotive Pvt Ltd, Hallmark Honda, Hana Impex, Harihar Electricals, Harman Plastic Industries, Harman Plastics Industries, Harmony International, Harshita Electricals, Haryana Test House & Cons Services, Hava Valves (India) Pvt. Ltd, Health Biotech (P) Ltd., Health Secure (India) Pvt Ltd, Healthcare Pharmaceuticals Ltd, Heatex Tools Pvt Ltd, Heft Engineers, Heinz India Pvt Ltd, Heligo Charters Pvt Ltd, Hella India Automotive Pvt Ltd, Hema Laboratories Pvt. Ltd, Hemant Tools Pvt Ltd, Herman Plastic Industries, Herman Research Products & Laboratories Pvt Ltd, Herman Rubber Products Pvt Ltd, Hetero Drugs Ltd., Hetero Lab (Hydrabad), Hetero Lab. Ltd., Hexa Analytical Laboratories, Hexa Analytical Laboratories-Kandivali, Hexatech Instruments Pvt. Ltd, Hi Tech Calibration, Hi Tech calibration - Vapi, Hi Tech Electronic Services (S), Hi-Tech Laboratory & Services (S), High Rise Fire Protection Systems, Highclean Ultrasonics, Hillman Gears Pvt Ltd, Himadri Foods Pvt Ltd, Himedia Laboratories Pvt. Ltd., Hind Rectifiers Ltd, Hindalco Industries Ltd, Hindustan Aeronautics Ltd, Hindustan Coca-Cola Bev. Pvt. Ltd., Hindustan Coca-Cola Beverages Pvt. Ltd., Hindustan Constuction Co. Ltd., Hindustan Hardy Spicer Ltd, Hindustan Laboratories(Palghar), Hindustan Paints & Products, Hindustan Petroleum Corporation Ltd, Hindustan Petroleum Corporation Ltd (Goa), Hindustan Platinum Pvt Ltd, Hindustan Uni Lever Ltd., Hindustan Unilever Ltd(Silvasa), Hindustan Unilever Limited, Hindustan Unilever Limited (Airoli), Hindustan Unilever Limited (Goa), Hindustan Unilever Ltd, Hindustan Unilever Ltd (Andheri), Hiranandani Healthcare Pvt. Ltd, Hitech Engineers, Hi-Tech Laboratory & Services, Hiteck Brass Products Pvt Ltd, HK Tempensors India. HLL Lifecare Limited, Holiday Inn Resort Goa, Hollister Medical India Pvt. Ltd, Hometrail Buildtech Private Limited, Hometrail Estate Pvt Ltd, Honeycomp International INC, Honeywell Automation India Ltd., HRJ Surgicals, Hugopharm Technologies Pvt Ltd, Huphen Electromech Pvt Ltd, Huphen Fabricator Pvt. Ltd, Hydac India Pvt Ltd, Hyva(India) Pvt. Ltd, I B Scientific, I Kay Mould Tech, I.P.W.T.Corporation, Ichalkaranji Agro Foods, ICS Technologies, Ideal Cures Pvt Ltd (Goregaon), Ideal Cures Pvt Ltd (Khambhat), Ideal Cures Pvt Ltd (Vasai), Ideal Cures Pvt. Ltd (Jammu), IFB Industries Ltd, IFE Foods, IG Petrochemicals Limited, Iglvo Dairy Services Pvt. Ltd., IIT Bombay, IMA-PG India Pvt Ltd, Immacule Lifesciences Pvt Ltd, Immunic Lifesciences Pvt Ltd, IMP Powers Ltd, Impress Container Co., Impress Containers Co., Impulse Pharma Pvt. Ltd., INCA Carbon Products (India) LLP, Indagro Foods Pvt Ltd, Indamer Aviation Pvt Ltd, Indchemie Health Specialities Pvt. Ltd (Baddi), Indchemie Health Specialities Pvt.Ltd., Indcoil Transformers Pvt. Ltd, Indecon Equipments & Instruments Co, Indeus Life Sciences Pvt. Ltd, Indian Immunologicals Limited (Ooty), Indian Immunologicals Limited -Hydrabad, Indian Institute of Geomagnetism, Indian Institute of Technology, Indian Oil Corporation Limited, Indian Oil Corporation Ltd (Goa), Indian Oil Corporation Ltd (Taloja), Indian Oil Corporation Ltd (Wadala), Indian Oil Corporation Ltd(Pune), Indian Pens and Stationary, Indian Red Cross Society, Indian Rubber Manufacturers Research Association, Indian Technical Services, Indian Writing Instruments Pvt Ltd, Indigenous Services, Indo Bakels Pvt Ltd, Indoco Remedies Goa (P - II), Indoco Remedies Goa (Plant - I), Indoco Remedies Ltd (Rabale), Indoco Remedies Ltd (Unit III), Indoco Remedies Ltd. - Aurangabad, Indoco Remedies Ltd. (Baddi), Indoco Remedies Ltd. (P-I), Indoco Remedies Ltd.(P-II), Indocount Industries Ltd., Indoline Industries Pvt Ltd, Indovax Pvt Ltd, Indswift Laboratories Ltd., Ind-Swift Ltd, Ind-Swift Ltd- Global Business Unit, Indus Chemicals, Indus Medical Centre, Indus Seafarers Clinic, Industrial Carbons (Virar), Industrial Engineering Syndicate, Industrial Rubber Products Pvt. Ltd, Infexn Laboratories Pvt Ltd, Infinite Plastics, Innova Pharmaceut Pvt Ltd, Innovative Engineers, Inox Air Products Ltd., Inspector General of Police, Inspectorate Griffith (I) Pvt Ltd, Inspectorate Griffith India Pvt.Ltd., Insta Exhibitions Pvt Ltd, Instil Technologies Pvt Ltd, Instrumentation and Control Solutions, Insu Tech Corporation, Intas Pharmaceuticals Ltd, Intech Pharma Pvt Ltd, ntegrate Techno Trade, Integrated Cleanroom Technologies Pvt Ltd, Integrated Electronics Technology P Ltd, Interglobe Hotels Pvt Ltd, Intertech Technologies Pvt Ltd, Intertek India Pvt. Ltd, Intertek India Pvt. Ltd - Bangalore, Intertek India Pvt. Ltd. - Gurgaon, Intertek India Pvt. Ltd.-Tirupur, Invent Bio Med Pvt. Ltd., Invent Bio -Med Private Limited(Surat), Invent Farma Pvt. Ltd., Inventia Healthcare Pvt. Ltd, Inventia Healthcare Pvt. Ltd., Invochem Laboratories Ltd., Invotec, Invotec Automation Pvt Ltd, INX International UK Ltd, ION Electricals Pvt Ltd, ION Exchange (India) Ltd, Ipea Laboratories Limited (Ratlam), IPCA Laboratories Limited (Sikkim), Ipea Laboratories Limited kandivali, IPCA Laboratories Ltd, IPCA Laboratories Ltd (Kandivali), IPCA Laboratories Ltd (MP), IPCA Laboratories Ltd(Silvasa), Ipea Laboratories Ltd. (Athal), Ipea Laboratories Ltd. (Dehradun), IRD Mechanalysis Limited, IRD Mechanalysis Limited - Andheri., Ishwari Healthcare Pvt Ltd, Isovalta(India) Pvt Ltd, IVP LIMITED, Iwai Electronics Private Limited, J Do Hardware Products, J J Glastronics Pvt Ltd, J. B Electropaters Pvt Ltd, J. B. Chemicals & Pharma. Thane, J. B. Chemicals & Pharma., Kadaiya, J.B.Chemicals & Pharmaceuticals - Thane, J.B.Chemicals & Pharmaceuticals Ltd -Kadaiya, J.B.Engineering Corporation, J.K.Cement Ltd., J.K.Mark- Con, Jabal Circuit India Pvt Ltd, Jabs International Pvt Ltd, Jadhav Engineering Works, Jadhav Switchgear Service, Jagadish Pharmaceutical, Jaguar Land Rover Workshop, Jaibalaji Instrumentation & Services, Jairamdas Khushiram Impex Pvt Ltd, Janssen-Cilag (Johnson & Johnson Ltd), Jaslok Hospital and Research Centre, Jasubhai Engineering Pvt. Ltd., Jayant Furnishers Pvt Ltd, Jayant Scientific Industries, Jayashree Polymers Pvt. Ltd. Unit - 1, Jaypee Healthcare Ltd, Jayshree Electron Pvt Ltd, Jen Hotel, Jesons R & D Technology Center, Jhunkam Lighting Sys. Pvt. Ltd., Jindal Saw Ltd, JKT Enterprises Pvt Ltd - Navi Mumbai, JKT Enterprises Pvt. Ltd, JMD Auto India (P) Ltd, Joel Electricals, Johnson & Johnson Limited (Aurangabad), Johnson & Johnson Limited (Mulund), Johnson & Johnson Ltd (Dharavi), Johnson & Johnson Ltd. -Baddi, Johnson & Johnson Medical, Johnson & Johnson Medical Ltd. (H.P), Johnson & Johnson Medical., HP, Johnson & Johnson Pvt Ltd -Baddi, Johnson Control (I) Pvt. Ltd., Jol Electronic Instrumentation, Joseph Leslie & Co. LLP, JRS Associates, JSW Energy Ltd, Jubilant Foodworks Ltd, Jubilant Generics Limited, Jubilant Life Sciences Limited, Jubilant Life Sciences Ltd (Ambernath), Jubilant Organosys Ltd., Jubilant Pharma & Chemical Lab, Jumo India Pvt Ltd, Jupiter Electronics (S), Jupiter Hospital, Jupiter Integrated Sensor Systems Pvt. Ltd (S), JVM Industries, JVM Industries (S), Jyoti Switchgear Pvt.



Ltd, K.D.Instruments Services, K.D.R. Electronics, K.G.N.Diabetes & Endocrinology Centre, K.K.Engineering, Kaisha Manufacturer Pvt.Ltd., Kaisha Mfg. Pvt. Ltd., Kaizen International, Kalapi Printing Press, Kalashri Electronics Pvt. Ltd., Kalika Instruments & Services, Kalki Chemical Industries, Kalpataru Organics Private Ltd, Kalpataru Organics Pvt. Ltd., Kalyani Industrial Services, Kamal Motors, Kamala Engineering, Kamaths Ourtimes Icecreams Pvt Ltd, Kanan Knitwear, Kanara Industrial Corporation, Kanekar Consulting Engineers Pvt Ltd, Kankan Engineers, Karuna Pharma Pvt Ltd, Kashyap Engineering Company, Kaynes Technology India Pvt Ltd, KD Building Solutions Pvt Ltd, Kedar Industries, KEM Hospital, Kemwell Biopharma Pvt Ltd, Keshava Organics (Boisar), Keshrup Systems Pvt Ltd, Key Organics Pvt. Ltd. (Mahad), Keyur Industries, Keyur Pharmachem India Pvt Ltd, Kg Project & Equipment Marketing Co. Pvt. Ltd., Khandelwal Associates Prakash Chambers, Khandelwal Laboratories Pvt. Ltd., Khurana Oleo Chemicals, Kilitch Drugs (India) Ltd.- H.P. Kilitch Drugs(India) Ltd, Kimplas Piping System Ltd, Kineco Pvt Ltd, Kiran Jewelry, Kirti Industries, Kohinoor Hospitals Pvt Ltd, Kokilaben Dhirubhai Ambani Hospital, Kokuyo Camlin Ltd, Komal Scientific Company, Konzept Engineers, Konkann Techno Services, Kool Ex Cold Chain Ltd, Kool Solutions, Kortan Pharmaceuticals Pvt Ltd, Koso India Pvt Ltd, Koyna Engineers Pvt Ltd, Kraft Foods, Kraft Foods – Thane, Kreepa Steel Industries, Krishna & Company, Krishna International, Krupa Tech Pvt Ltd, KRYFS Power Components Ltd, Kumar Sales Corporation, Kumud Metal Foundry Pvt. Ltd, Kundan Industries Limited, Kusam Electrical Industries Ltd, Kusam Mecco Import Export Pvt. Ltd., Kusum Electrical Industries Ltd, Kusumgar Corporates Pvt.Ltd., L&T Construction, L&T Technology Services Limited, Lab Equip (I) Pvt Ltd, Lab House, Labcon Scientific Instruments Pvt. Ltd., Labindia Analytical Instruments Pvt. Ltd, Labindia Instruments Pvt Ltd, Laboratories Griffon Pvt. Ltd., Labtop Instruments Pvt Ltd, Lafil Engineering & Associates, Lakshmi Drugs Store, LAMFA Projects Pvt. Ltd., Landmark Consultants & Engg Technology, Larsen & Toubro Automation Ltd, Larsen & Toubro Pvt Ltd, Larsen & Toubro Ltd (Goa), Lasons India Pvt Ltd, Lasons India Pvt. Ltd., Lawkim Motors Group, Lawrence Powertech(S), Laxmi Fire Service, Laxmi Industries (Vasai), Laxmi Narayan Industries, Laxmi Plastic Industries, Le Electronics Pvt Ltd, Leon Engineers & Contractors Pvt Ltd, Leebro Metals Pvt. Ltd., Leebro Metals Pvt. Ltd.-Daman, Leena Powertech Engineers Pvt Ltd, Leica Microsystems, Leo Circuit Boards Pvt. Ltd., Lesanto Laboratories, Lifesant Clinical Research, Lilavati Hospital & Research Centre, Linux Machines Incorporation, Logie Embedded Systems India Pvt. Ltd, Lotus Lab Pvt. Ltd., Lotus Techno Trade, Lourencia Marine, Loyal Industries, LTMCC & GH Medical College, Lupin Limited – PUNE, Lupin Limited (Boisar), Lupin Limited (Goa), Lupin Limited (Indore), Lupin Ltd (Mumbai), Lupin Ltd (Nagpur), Lupin Ltd (Vadodra), Lupin Ltd (Zirakpur), Lupin Pharmaceut Ltd,Indore, Luxmi Ply & Hardware Mill Store, M S Switchgear Pvt Ltd, M. J. Lab Pvt. Ltd., M. R. Healthcare Pvt. Ltd, M.G.M.Medical College & Hosp Central Laboratory, M.S.E.D.C.L, M/s. Asmi Enterprises, M/s. Emsons, CHW, Maad Building Innovations Pvt Ltd, Mabpharm Private Limited, Mac Engineering Industries, Mac Systems, Macbrot Engineering Pvt Ltd, Mac-Chem Products(India) Pvt Ltd, Machine House India Pvt Ltd, Machine Tool Prototype Factory, Machinfabrik Industries Pvt Ltd, Macleods Pharma Ltd. (Andheri), Macleods Pharma Ltd. (R & D), Macleods Pharmaceuticals Ltd(Sikkim), Macleods Pharmaceuticals Ltd, R & D, Macleods Pharmaceuticals Ltd. (Andheri), Macleods Pharmaceuticals Ltd. (Sarigam), Macleods Pharmaceuticals Ltd., Baddi, Macleods Pharmaceuticals Ltd., Palghar, Madus Pharmaceuticals Pvt. Ltd, Magna Laboratories (P) Ltd., Mahalaxmi Enterprises, Mahanagar Gas Limited – Mumbai, Mahanagar Gas Ltd, Maharashtra Elec-Mech Works Pvt. Ltd, Maharashtra Pollution Control Board (Chandrapur), Maharashtra Pollution Control Board (Nashik), Maharashtra Pollution Control Board (Thane), Maharashtra Pollution Control Board Regional Lab, Maharashtra Pollution Control Board(Aurangabad), Maharashtra Pollution Control Board(Mahape), Maharashtra Pollution Control Board(Nagpur), Maharashtra Pollution Control Board(Pune), Maharashtra Pollution Control Board(Ratnagiri), Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit, Maharashtra State Electricity Dist Co Ltd, Mahavir Plastic Ind, Mahindra & Mahindra Ltd, Mahindra & Mahindra Ltd – Nashik, Mahindra & Mahindra Ltd (Igatpuri), Mahindra & Mahindra Ltd (Nasik), Mahindra EPC Services Pvt Ltd, Mahindra Heavy Engines Pvt Ltd, Mahindra Sona Ltd, Mahindra Ugin Steel Co Ltd, Makjai Laboratories, Mallya's General Foundries Pvt. Ltd., Manasvi Industries, Manancare Pharmaceuticals Pvt Ltd, Mandovi Dry Docks, Mandovi Motors Pvt Ltd, Mangalam Drugs & Org. Ltd. Unit-I, Mangalam Drugs Unit II, Mangaru Agro, Manja Pharmaceutical Pvt Ltd, Mankind Pharma Ltd, Mankind Pharma Ltd., Manohar Packaging Pvt Ltd, Manomay Interiors Pvt Ltd, Maquet Medical India Pvt. Ltd., Maral Overseas Limited, Marine Automation, Marine Electricals (I) Pvt Ltd, Marine Electronics and Navigation Systems Pvt Ltd, Maritime Engine Heli Air Services Pvt Ltd, Marksans Pharma Ltd., Mars Enterprises, Maruti Hydraulics Pvt. Ltd., Mascasts, Mast Aviation, Mast Aviation Pvt Ltd, Master Tech Engineering, Material Testing Machines Services, Matrix Lab(S), Matrix Laboratories Limited, Nashik, Matrix Laboratories Ltd., Max Energy Pvt Ltd, Max Healthcare Institute Ltd, Max Signage Industries Pvt Ltd, Max Super Speciality Hospital, Maxeff Engineering Pvt. Ltd., Mayfair Clinical Education & Research Centre Pvt. L, Mayuresh Industries, Mazgaon Dock Ltd, Mccoy Pharma Pvt. Ltd., McGeoch Marine Electricals Pvt. Ltd., MCK Kuty Engineers Pvt Ltd, Measurements International LLP, Measuretest Corporation, Measurewell Technologies, Mee Well Pharma Machinery Co, Mecord Systems & Services Pvt. Ltd, Medhavi Industries, Medi Sales Agencies, Medibios Laboratories (P) Ltd., Medical Products Of India, Medicef Pharma, Medico Remedies Pvt. Ltd., Medicare Laboratories Pvt. Ltd., Mediforce Healthcare Pvt. Ltd, Medigrah Pharmaceuticals Pvt Ltd, Medipius (India)Limited.(Haryana), Medispec (I) Ltd, Medispray Laboratories Pvt Ltd, Medispray Laboratories Pvt Ltd(Satara), Meditab Specialities Pvt Ltd, Medopharm – Chennai, Medopharm Pvt Ltd, Medopharm-Chennai, Medore Equipments (India) Pvt. Ltd., Meena Elastomers Pvt Ltd, Meet Instruments and Calibration Services, Mega Engineering Pvt Ltd, Mega Rubber Technologies Pvt Ltd, Mehru Electrical & Mechanical (P) Ltd, Mehta API Pvt Ltd, Melody Healthcare Pvt. Ltd, Merck Limited-Goa, Merck Ltd Goa, Mercury Pneumatics Pvt Ltd, Mescro Tools & Components, Mesha Pharma Pvt. Ltd., Meta Lab Scientific Industries, Metal Analysis & Services Pvt Ltd, Metal Fabrik India, Metal Form, Metal Power Analytical (I) Pvt. Ltd, Metamorph Engineering (I) Pvt Ltd, Metro Cash & Carry India, Mettler Toledo India Pvt Ltd, Mevish Pharma Machineries (I) Pvt Ltd, Meyer Healthcare Pvt. Ltd., Meyer Organics Pvt Ltd, MFR Electronic Components Pvt Ltd, MFR Electronics Test Laboratory, MG Electrica, MGM Hospital, MGM New Bombay Hospital, MI Enterprise India Private Limited, Micro Interconnexon Pvt Ltd, Micro Lab Ltd., Micro Labs Limited – Sikkim, Micro Labs Ltd (GOA), Micro Measures, Micro Screw Mfg Co. Pvt Ltd, Microchem Laboratory Private Limited, Microchem Silliker Private Ltd, Microexpress-(Goa), Micron Calibration Lab, Micron Wires & Polymers Pvt. Ltd., Microsys Technology, Microexpress, MIDCO Ltd, Millennium Toyota, Millennium Agro Dynamic Pvt. Ltd, Minceo India Pvt Ltd, Mini Electronic Industries Pvt Ltd, Miss Elina Dawoodani, Miss Swetha Jain, Miss. Priyanka, Miss. Stuti Shah, Minispharma Logistics (I) Pvt. Ltd, Mitra S.K.Pvt. Ltd, Mitsu Chem Pvt. Ltd., Mittal Enterprises, MKS Commercial Pvt Ltd, Mobile System Complex, DRDO, Model Bucket & Attachments Pvt. Ltd., Model Buckets & Attachments Pvt. Ltd., Model Infra Corporation Pvt. Ltd, Mohan Singh Pharmaceuticals Formulations, Monarch Pharmalines(HYD)/Pvt Ltd, Mondelez India Foods Ltd, Mondelez India Foods Pvt Ltd, Monk Automation Pvt Ltd, Moonlite Electricals, Morepen Laboratories Ltd., Mosdorfer India Pvt Ltd, Motifff Laboratories Pvt. Ltd, Goa, Motion Drivetrionics Pvt Ltd, Motion Metriks Components Pvt Ltd, Mr. Shri K V S, MSN Laboratories Pvt Ltd, MSS India Pvt Ltd, MSS India Pvt.Ltd. – Nashik, MTAR Technologies Pvt Ltd, Mukand Engineering Company, Muktar Automobile Pvt Ltd, Multi Tech Engineers, Multiflo Instruments Pvt. Ltd, Multiquadrant Ind Controls (I) Pvt Ltd, Mumbai Port Trust, Mumbai Waste Management Ltd, Mutual Industries Ltd., My Biotech Pvt Ltd, Mylan Pharmaceuticals Pvt Ltd, N Gandhi & Co, Naanolab India, Nagesh Enterprises, NAI Karanja Naval Station, Naik Seafood Pvt Ltd.(Ratnagiri), Naminath Engineering Pvt. Ltd, Nanda Transformers (India) Pvt Ltd, Nano - Mag Technologies Pvt. Ltd., Naprod Life Science Private Ltd, NAQIL Express, Nareesh Marketing, Narkhede Udyog, Narmada Offshore Constructions Pvt Ltd, NASH Robotics & Automation Pvt. Ltd., Nashik Engineering Cluster (S), Nashik Insulation Pvt Ltd, Nasik Metalust Pvt Ltd, Nat Steel Equipment Pvt Ltd, NATCO Pharma Limited, National Bulk Handling Corporation Ltd, National Centre for Disease Control, National Engineering Corporation, National Steel Traders, National Test House, Naval Dockyard, Naval Materials Research Laboratory(NMRL), Navin Corporation, Navin Corporation, Ghatkopar, Navkar Fittings & Forgings Pvt. Ltd, Navnet Publications India Ltd, Navnidhi Pharma Lab, Navraj Enterprises, Navrattan Enterprises, Naxpar Lab Pvt. Ltd, Naxpar Pharma Pvt. Ltd., Nayan Trade Corporation, NBZ Pharma Ltd, Nectar Lifesciences Ltd, Neel Beverages Pvt. Ltd., Neela India Pvt. Ltd., Neela Systems Limited, Neelay Metal Industries, Neha Enterprises, Nem Laboratories (P) Ltd., Neon Laboratories Limited, Neotronics Pvt Ltd, Neptune Enterprises, Netal (India) Ltd, Netel (India) Ltd, New Heaven Steel Ball Co. Pvt. Ltd., New Heaven Steel Ball Corporation Pvt. Ltd., New Krishna Metal Arts, New Ray Engineering Power and Automation System, New Simla Dairy, New Standard Calibration Laboratory, Newtronic Equipment Company Pvt. Ltd., Newtronic Lifecare Equipment Pvt Ltd – Kandivali, Newtronic Lifecare Equipments Pvt Ltd, Next Wave (India) Ltd, NGL Fine - Chem Ltd., NGL Fine Chem Limited (Pawane), NGL Fine - Chem Limited-Boisar, Nihaar Equipment Private Limited, Nilkamal Ltd, Nilkan Nishotech Systems Pvt Ltd, Nimbus Industries, Nimbus Industries – Nashik, Nishaka Pneumatics, Nishika Pneumatics, Nitin Engineering Works, Nitin Life Sciences Ltd (Paonta Sahib), Niton Valve Industries Pvt. Ltd, Noble Geo Strucuts, Noble Micro Services, Nobechem Enterprise, Nocil Limited, Noor Engg Works, Norris Medicines Ltd, North 16, Nova Integrated Systems Limited, Novartis Health Care Pvt Ltd-Hyderabad, Novartis Healthcare Pvt Ltd, Novartis Healthcare Pvt. Ltd (AP), Novartis Healthcare Pvt. Ltd., Novartis Healthcare Pvt. Ltd. (OTC (R & D) India Lab, Novartis India Limited, Novateur Electrical & Digital Systems Pvt Ltd, Novel Pharma Distributors, Novell Exports Pvt. Ltd., Novotel Hotel, NRH Electronics & Controls, Offshore Marinetechn Pvt. Ltd, Offshore Testing & Insp. Services (I) P.Ltd (S), OHASBAN INDIA, Ohmkar Equipments, Oil Field Supplies, Oil Natural Gas Corporation Limited, Okasa Pvt Ltd, Okasa Pvt Ltd (Satara), Om Creations Trust, Om Engineers, Om Enterprises, Om Venture, Omega Accurate Forgeingem, Omega Biomedical Services, Omega Kemix Pvt. Ltd, Omega Products Pvt Ltd, Omega Rolling Mills, Omega Rolling Mills Pvt. Ltd., Omega Service, Omkar Electricals, Omkar Enterprises, Omkar Industries, Omkar Plastotech Pvt Ltd, Omkar PufInsulation Pvt Ltd, Omkar Realtors & Developers Pvt Ltd, Omkar Speciality Chemicals Ltd., Omkar Speciality Chemicals Pvt. Ltd., OPAL HVAC Engineers Pvt. Ltd, Optima Weighttech Pvt Ltd, Orchid Biomedical Systems, Orchid Chemicals & Pharmaceuticals Ltd., Ordnance Factory, Oriental Export Corporation, Oswal Valves (P) Ltd(Boisar), Oyster Medisafe Pvt Ltd, P. I. Drugs & Pharmaceuticals Ltd., P.Chhototal Distributors, P.D.Hinduja National Hosp& Medical Reasearch Centre, P.K.Composites Pvt Ltd,P.M. Electro-Auto Pvt. Ltd, Pace Engg. Industries Pvt. Ltd., Pacific Systems, Pacific Tools Pvt. Ltd., Padmaja Aerobiologicals Pvt Ltd, Pams HVAC Controls, Panacea Biotech Ltd (Delhi), Panacea Biotech Ltd., Panacea Biotech Ltd.(Mahape), Panchal Automobiles, Panchal Engineering Works, Panchal Roll Forming, Panera Biotech Pvt. Ltd, Par Filters Pvt Ltd, Parabolic Drugs Ltd, Paradigm Enterprises, Param Offshore Services Pvt Ltd, Paras Pharmaceuticals Ltd., Parazelus India Pvt. Ltd, Parco Engineers M Pvt Ltd, Parekh Integrated Services Pvt Ltd, Paresh Engineering Ind., Parker Hannifin India Pvt. Ltd, Parksan Filter Pvt. Ltd., Parle Agro Private Limited, Parle Elizabeth Tools Pvt. Ltd., Parle Global Technologies Pvt. Ltd., Parle International, Parle Products (P) Ltd, Parle Tablet Tools Pvt. Ltd., Parnax Lab Pvt. Ltd, Parveen Industries Pvt Ltd, Paschim Banga Pharmaceutical, Patni Engineers, Patton International Limited, Pavnai Industries, Paxchem Ltd, Payal Engineers, PCI Analyticals Pvt. Ltd. – Bhandup, PCI Analytics Pvt. Ltd, PCL Suma Air Technology Pvt Ltd, PDP Life Science Logistics (I) Pvt. Ltd, Peco Valves Pvt. Ltd., Pelltech Healthcare Pvt. Ltd, Pentagon Electronics Pvt. Ltd., Pentair Water India Pvt Ltd, Perfect Circle India Ltd, Perfect Instrument Corporation, Perfect Instrumentation Systems & Controls, Performance Analyst Pvt Ltd, Periclave, Permanent Magnets Limited, Permod Richard India Pvt Ltd, Perpetual Technologies, Perrigo API India Pvt Ltd, Perrigo Laboratories India Pvt Ltd, Pest Control (I) Pvt Ltd, Pest Control (I) Pvt Ltd (Delhi), Pest Control (I) Pvt Ltd (Vadodra), Pest Control (I) Pvt Ltd- Amritsar, Pest Control (I) Pvt Ltd(Pune), Pest Control (India) Pvt Ltd (Bhopal), Pest Control(India) Pvt. Ltd, Pfizer Pharmaceutical (I) P.Ltd, PFS Courage, Pharma - Medico (I) Pvt Ltd(Jogeshwari), Pharma Air Control Engineers, Pharma Base (I) Pvt Ltd.(Ambernath), Pharma Force Lab, Pharma Force Laboratories, Pharma Logistics, Pharma Logistics Ltd., Pharma Logistics Ltd. (Panchkula), Pharmafilliates Analytics & Synthetics Pvt. Ltd, Pharmakem Enterprises, Pharmakem Enterprises – Andheri, Pharamza Herbal Pvt Ltd, Pharmax India Pvt Ltd, Phoenix Enterprises, Photon Controls India Pvt Ltd, Photon Instruments, Physi Chem Material Testing Laboratory, Piano Prestelit, PIL Pharmaceuticals Pvt. Ltd, Pioneer Agro Industries, Pioneer Chicory, Piralma Healthcare Ltd (Chennai), Piralma Healthcare Ltd., Piralma Pharmaceuticals Development Ser. Pvt. Ltd, Plasdchem Instruments, Plasdchem Instruments (S), Plastech Thermosensor (S), Plastrofab Pvt. Ltd., Plastech Industries, Plathema Pharmaceutical Ltd., PMP Auto Components Pvt Ltd, PN NJ Industries Pvt Ltd (Daman), PN-NJ Industries Pvt. Ltd,Polestar Coils Pvt Ltd, Poly Products, Poly Weights, Polycab Wires Pvt Ltd,Polydrug Laboratories Pvt. Ltd., Polynova Industries Ltd, Polypeptide Laboratories Pvt. Ltd, Poonawala Scale Repairing Works, Popular Rubber Products, Portescap India Pvt. Ltd., POSCO-Maharashtra Steel Ltd, Power Control Technology & System Pvt Ltd, Power Electronical, Power Matrix Solutions Pvt

Ltd, Powerdot (S), POWERINST, Powerinst Electromagnets Pvt Ltd, Powermaster Engineers Pvt Ltd., Powertel Engineering Pvt. Ltd., Powertrackanalysers Pvt Ltd, PPG Asian Paints Pvt Ltd, Prabha Engineering Pvt Ltd, Prabhat Dairy Pvt. Ltd., Pradako Fasteners, Pragati Biotech And Life Science, Pragati Electricals Pvt Ltd, Pragati Industries, Pragati Switchgear (Vasai), Pragati Udyog, Praj HiPurity Systems Ltd, Prajyo Instrument & Maintenance Services, Prakash Industries, Prama Instruments Pvt. Ltd., Pranav Engineering, Prasad Enterprises, Prasad Industries, Prasanna Electromech, Prasanna Electrotech, Prashi Pharma Pvt. Ltd, Prathamesh Electricals & Co., Prayog Electricals Pvt Ltd, Prayasha Automation, Precikot Pharma Pvt Ltd.(Vasai), Precise Analytics, Precise Analytics Lab, Precise Chempharma Pvt.Ltd, Precise Electricals, Precision Engineers, Precision Engineers & Fabricators India Pvt Ltd, Precision Plastic Industrieis (P-97), Precision Plastic Industries (P-99), Precision Plastic Industries Pvt. Ltd, Precision Rubber Industries Pvt. Ltd, Precision Rubber Industries Pvt. Ltd (Thane), Precision Rubber Industries Pvt. Ltd. - Thane, Preci-Tech Weighing Systems, Precium Engineering Pvt Ltd, Premium Plast Pvt Ltd, Premium Tools Pvt Ltd, Press Tech (India) Pvt Ltd, Prestige Electronics, Prestige Industries, Presto Switchgears Pvt Ltd, Prijai Heat Exchangers Pvt Ltd, Prime Engineers,Prime Enterprises, Prince Aly Khan Hospital, Prinz Engineers, Prism Calibration Centre, Process Precision Instruments, Procter & Gamble Home Products Ltd, Procter & Gamble Home Products Pvt Ltd, Procter & Gamble Hygiene Health Care Ltd, Prof. & Head, Proficient Industries, Progressive Engineering, Progressive Engineering Works, rogressive Engineering Works (Dahisar), Progressive Surface Systems Pvt. Ltd., Prolific Chemical Pvt Ltd, Prolific Chemicals Pvt. Ltd., Promas Engineers Pvt Ltd, Propack Technologies Pvt Ltd, Prosperity 6 Pharmaceuticals, Pro-Tech Engineers & Fab Pvt Ltd, Protego India Pvt. Ltd, Providence Industries (S), PRS Permacel Private Ltd, PS Coatings Pvt Ltd., Psychotropics India Limited (Haridwar), Psychotropics India Limited,(Faridabad), PTS Packers and Providers Pvt Ltd, Putzmeister India Pvt Ltd, PV Powertech Pvt Ltd, Qrics Calibration Lab, Quadrant Measurements Pvt Ltd, Qualitek Instruments, Quality Calibration Centre, Quality Health Management System, Quality Windings, Qualpro Diagnostics, Quick Industrial Supplier, Quick Industrial Suppliers, R.K.Industries, R.N.Laboratories Pvt Ltd.(Gujarat), R.P.Khedkar Calibration & Testing Center, R.R.Powder Coats, Radhakrishna Foodland Pvt. Ltd., Radiological Precision Labs (India) Pvt Ltd, Rainbow Deco Plas Pvt Ltd, Rainbow Teco Plas Pvt Ltd, Raj Biotech (India) Pvt. Ltd, Raj Instrument Service, Raj Sathyan Analytical Laboratory, Rajason Engineering, Rajasthan Antibiotics Limited, Rajendra Mechanical Ind. Ltd., Rajendra Mechanical Industries Ltd., Rajendra Plastics, Rajeshwar Enterprises, Rajiv Plastics Industries(UNIT-1)-VALSAD, Rajyog Safety & Health Pvt Ltd, Rakyan Beverages Pvt Ltd, Ramelex Testing & Research Institute, Ranbaxy Laboratories Limited, Ranbaxy Laboratories Limited - Bangalore, Ranbaxy Laboratories Limited (Barotiwala), Ranbaxy Laboratories Limited (Malanpur), Ranbaxy Laboratories Limited -R&D Plant (Gurgaon), Ranbaxy Laboratories Ltd (Zirakpur), Ranbaxy Laboratories Ltd(Toansa), Ranbaxy Laboratories Ltd. - Batamandi, Ranbaxy Laboratories Ltd. - Ganguwala(Poanta), Ranbaxy Laboratories Ltd. (Dewas), Ranbaxy Laboratories Ltd. (HP), Ranbaxy Laboratories Ltd. (Mohali), Ranbaxy Laboratories Ltd. -Paonta, Rane Elastomer Processors, Raptakos, Brett & Company Ltd, Raptim Research Ltd, Rashtriya Industries, Ratna Pharma Distributor, Ratnagiri Gas & Power Pvt. Ltd, Ratnagiri Krishi Prakriya Sahakari Sanstha Maryadit, Ratnaparkhi Electronics Ind Pvt Ltd, Raut Uri Tech Pvt Ltd, Ravian Life Science Pvt. Ltd, Ravindra Enterprises, Raychem RPG (P) Ltd, Raychem RPG Pvt Ltd(Pune), Raymond Limited, R-Bio Lab Solutions, RCH Orthopaedics, Real Cool, Real Drinks Pvt Ltd, Reckitt Benckiser Healthcare India Ltd, Redilens, Reema Transport Pvt. Ltd., Reinvent Technologies, Relax Pharmaceuticals Pvt.Ltd, Reliable Analytical Laboratories Pvt Ltd (S), Reliance Biopharmaceuticals Pvt Ltd.(Rabale), Reliance Infrastructure Limited, Reliance Life Sciences Pvt.Ltd., Reliance Power, Remi Electrotechnik Ltd, Remi Sales & Engineering Ltd, Research Center Sustainable Solutions Pvt Ltd, Retort Chemical Pvt. Ltd. (Plant - I), Retort Chemicals, Retort Chemicals Pvt. Ltd.(PlantII), Revathi Enterprises, Rexam HTW Beverage Can (India) Ltd, Rexcin Pharmaceuticals Pvt. Ltd., Rich Flora, Richter Themis Medicine (India) Pvt. Ltd, Riddhi Siddhi Plastic, Riden SPC, Rinac India Limited, Ring Plus Aqua Ltd, Rishabh Instruments Pvt Ltd, Rishichem Research (P.) Ltd., RLC Engineers Pvt. Ltd., Rochem Separation Systems (India)P.Ltd., Rochem Separation Sys. (India) Pvt. Ltd., Roehching Engineering Plastics (India) Pvt Ltd, Rolex Lanoline Products Ltd., Roll Master Engineers, Rolls-Royce Marine India Pvt. Ltd, Rolch Polymers Pvt Ltd, Royal Arc Electrodes Ltd., Royal Plastic Industries Pvt. Ltd, RPG Life Sciences Ltd., Rubby Electrical Corporation, Rucha Pharma, Rushabha Entrepreneur, Rutek Scientific Solutions Pvt Ltd, S A Encon Pvt Ltd, S G Automation, S J Enterprise, S K Logistics, S. D. Fine Chem Ltd., S. Zhaveri Pharmakem Pvt. Ltd., S.B.Instruments Services, S.B.Panchal & Co., S.C.Engineering, S.K.Technical Engg. S.L.Raheja Hospital, S.M.Systems, S.N.Enterprises, S.N.Instruments, S.P. Instruments & Services, S.S.K. Engineering Works(India) Pvt. Ltd, S.V.Scientific, Sacardande Engineers (S), Sachin Precise Tools Service & Calibration Centre, Sachin Precision Tools Service, Saena Plastic, SA-FORD, Sah Petroleum Limited, Sahney Kirkwood Pvt Ltd, Sahyadri Chemicals Pvt Ltd, Sai Coaters & Fabricators, Sai Enterprises, Sai Fertilizers and Phosphates Pvt Ltd, Sai Life Sciences Limited, Sai Meena Calibration Lab, Sai Meena Calibration Laboratory Pvt Ltd(S), Sai Service, Sai Services Pvt Ltd, Sai Sun Pharma Pvt Ltd, Saifee Hospital, Sainath Packaging, Saini Electrical & Engineering Co Pvt Ltd, Saiprasad Engineers Pvt Ltd, Saitech Hvac Project Pvt Ltd, Saijan India Limited, Sakav Ovens Dryers & Furnaces, Sakav Roasters, Sakra World Hospital, Saksham Technologies Pvt Ltd (New Delhi), Saksham Technologies Pvt. Ltd, Salgaocar Medical Research Centre, Salvi Chemical Industries Ltd, Samanta Organics Pvt. Ltd., Samarth Enterprises, Samartha Services (S), Samba Electronics Pvt Ltd, Samrat Packaging, Samriddhi International Inc., Samriddhi Enterprises, Samrudh Packaging Pvt. Ltd., Samrudh Pharmaceare Pvt Ltd, Samrudh Pharmaceuticals P. Ltd.D, Samrudh Pharmaceuticals Pvt. Ltd, Sams Techno Mech Pvt. Ltd., San Instruments, Sanchita Marine Products Pvt. Ltd., Sandoz Pvt Ltd-Kalwa, Sandoz Pvt. Ltd (Kanjurmed), Sandoz Pvt. Ltd. (Kalwe), Sandoz Pvt. Ltd. (Kolshet), Sandoz Pvt. Ltd. (Mahad), Sandoz Pvt. Ltd. (Turbhe), Sanika Chemicals Pvt. Ltd, Sanjivani Parenteral Limited(Rabale), Sanjivani Parenteral Limited (Dehradun), Sanjivani Sahakari Sakhar Karkhana Ltd, Sankalp Hi Tech Corporation (S), Sanofi India Ltd, Sanofi Pasteur India Pvt. Ltd., SAP Filter Pvt Ltd, Saptashringi Aluminium Pvt Ltd, Saptronics Services, Saraswati Dynamics Pvt Ltd, Sarbi Engineering & WHG Pvt. Ltd, Sarex International, Sarex Overseas, Sarjena Foods Pvt. Ltd., Sarman Engineering Pvt. Ltd., Sarvotham Care, Sarvotham Care Ltd., Satguru Stamping Industries, Sava Healthcare Limited, Savannah Surfactants, Savera Pharma Pvt. Ltd., Savera Pharmaceuticals Pvt. Ltd., Savita Oil Technologies Ltd, Saybolt Inspection Services India Pvt Ltd, SBS Testing Studio, Schindler India Pvt Ltd, Schneider Electric India Pvt. Ltd, Schott Kaisha Pvt Ltd.-Nan Daman, Scorpion Container (P) Ltd(Sikkim), Scorpion Container (P) Ltd., Scott-Edil Pharmacia Ltd, SCR Elektroniks, Sea Linkers Pvt Ltd, Seasons Polymers Pvt. Ltd., Seigneur Medipack, Selec Controls Pvt Ltd, Semikron Electrics Pvt. Ltd, Semikron Electronics Pvt. Ltd, Senator Motors, Sercon Electro Systems Pvt Ltd, Serum Institute of India Ltd - EOU, Serum Institute of India Ltd (Pune), Service One, Servo - Med Industries Pvt. Ltd, Servotech India Ltd, SES Engineering Works, Sesa Mining Corporation Ltd, Sesa Sterile Limited, Seven Hills Hospital Healthcare Pvt Ltd, SEW Engineering (India) Pvt Ltd, SG Pharma Pvt Ltd, SGS India Pvt. Ltd, Shakti Bearings Ball Pvt. Ltd., Shaktii Enterprises (Andheri), Shakuntala Wire Industries Pvt Ltd, Shalimar Valves Pvt Ltd, Shapoorji Poojji Co Ltd, Sharada Electricals, Shareen Auto Pvt Ltd, Sharon Bio Medicine Ltd (Taloja), Sharon Bio-Medicine Ltd., Sharp Tank & Structural Pvt. Ltd, Sharpflex Filters (India) Pvt Ltd, Sharvani Plastic Industry, Shavo Norgren Pvt Ltd, Sheetal Vahan, Shegfried S.V.(India), Sherry Speciality Papers Pvt. Ltd, Shilpa Medicare Ltd, Shirke Electro (P) Ltd, Shirpur Gold Refinery Limited, Shirsat Electronics, Shiv Enterprise, Shiva Enterprise, Shiva Farms, Shivalp Vidyut & Engineers, Shivprasad Enterprises, Shlok Engineering, Shlok Industries, Shodhana Laboratories Limited, Shradha Engineering Works, Shraman Engineers, Shree Ambika Rubber Products, Shree Chehar Fabricators, Shree Conmat Engineering Services, Shree Electricals & Engineers, Shree Engineering Corporation, Shree Ganesh Industries, Shree Krishna Controls Pvt Ltd, Shree Logistics, Shree Radhey Technologies, Shree Rubberplast Co. Pvt. Ltd., Shree Sainath Electro Cote Pvt. Ltd, Shree Salespack Pvt Ltd, Shree Sankalpa Industries, Shree Satya Minerals Pvt Ltd, Shree Sayaji General Hospital, Shree Siddhi Vinayak Industries,Shree Trading Company, Shreedhar Instruments, Shreeji Enterprises (S), Shreeji Marketing Corporation, Shreeji Safetime Appliances Pvt. Ltd. (S), Shreeneath Chemicals, Shreesai Enterprises, Shri Bhavani Pharmaceuticals, Shri Ganesh Packaging Company, Shri Hari Industries, Shri Harilal Bhagwati Municipal General Hospital, Shri Jai Enterprises, Shrihans Electricals Pvt. Ltd, Shrihans Electricals Pvt. Ltd. - Mulund, Shrinath Prestressed Pvt Ltd, Shrinivas Chemical Industries Pvt. Ltd., SHROFF TEXTILES LIMITED - Tarapur, Shubhada Polymers Products Pvt Ltd, Shubham Electronics and Electricals, Shubhline Services, Shweta Winding Services, SI Group India Limited, Siddhakala Engineering, Siddharth Chemicals, Siddharth Material Handling Pvt Ltd, Siddhi Distributors, Siddhi Equipments Pvt Ltd, Sidhivinayak Enterprises, Sidmak Laboratories (I) Pvt. Ltd.-Dehradun, Sidmak Laboratories (India) Pvt. Ltd. (Valsad), Siemens Building Technologies Pvt Ltd(Wadala), Siemens Building Technologies Pvt Ltd.(Ahmedabad), Siemens Building Technologies Pvt. Ltd, Siemens Building Technologies Pvt. Ltd. (Pune), Siemens Limited (Nashik), Siemens Ltd ( Vadodara), Siemens Ltd (Aurangabad), Siemens Ltd (Chennai), Siemens Ltd (Delhi), Siemens Ltd (Goa), Siemens Ltd (Worli), Siemens Ltd(Thane), Siemens Ltd, Siemens Ltd-Bangalore, Sigma Engineers, Sigma Institute of Welding Services, Sigma Laboratories, Silkaans Electricals Manufacturing Co. Pvt. Ltd., Silvax Associates, Silveroak Commercial Ltd, Simco Calibration Laboratory, Simplex Plast, Sinex Primemovers, Singla Cables, Sirmaxo Chemicals Pvt. Ltd., Sisco Research Laboratories Pvt. Ltd, Sitaram Industries, Sitec Labs Pvt Ltd, Sivananda Electronics, Size Masters Calibration Services, SK Formulations India Pvt Ltd, Skanem Interlabels Industries (P) Ltd, Skant Health Care Ltd, SKM Constra A/c Cut & Bend, SKM Metal Processors, Small Industries Testing & Res. Centre, Smart I Electronics Systems Pvt. Ltd, Smartech INC, Smartlink Network System Ltd, SMB Corporation of India, SMI Coated Products Pvt. Ltd, Smita Industries, Smith & Nephew Healthcare Pvt Ltd, Smith & Sharks Projects (I) Pvt Ltd, Smt. Lilavatibai Podar Senior Secondary High School, SNDT Women's University, Snehsagar Enterprises, Snowbell Machines, Snowbell Machines Pvt Ltd, Soham Analytical Services, Soham Industries, Soham Calibration Service, Sohams Foundation Engg. Pvt. Ltd, Solid State Physics Laboratory, Solitaire Honda, Solrex Pharmaceutical Company-Baddi, Solrex Pharmaceuticals Company, Sonak Surface Technologies Pvt Ltd, Sonata Rubber Pvt Ltd.(Vasai), Sonodyne International Pvt Ltd, South India Cashew Corporation, Southern Electronics(Banglore) Pvt Ltd, Sovereign Pharma Pvt Ltd - Daman, Sovereign Pharma P. Ltd., Nani Daman, Sozin Flora Pharma, Spa Pharmaceuticals Pvt. Ltd., Span Diagnostics Ltd., Spanol Chemical Pvt Ltd(Rabale), Spar Coats & Polymers, Sparklet Engineers Pvt. Ltd, Sparkline Welders, Spartan Electricals, Spartan Quality Laboratory, Speciality Polyfilms (I) Pvt. Ltd., Spectris Technologies Pvt Ltd, Spectro Analytical Labs Ltd, Spectro SSA Labs Pvt. Ltd, Spectrum Controls Pvt Ltd, Spectrum Scan Pvt. Ltd., Spink Controls, Spring India Pvt Ltd (Dahisar), Sri Sai Precision Instrumentation & Research Centre, Srinidhi Engineers, SSA Logistic, Staff and Research Society, Stallion Dyestuff Pvt Ltd (Boisar), Standard Engineering Corporation, Star Diagnostics Pvt. Ltd., Starlite Components Ltd, Starlite Lighting Ltd, Steelstrong Valves (I) Pvt Ltd, Stelmec Ltd., Stelmec Limited - Virar, Stelmec Ltd., Sterling Hospital, Sterling Rotating Systems Pvt Ltd, Stripco Spring, Struet Geotech Research Laboratories (P) Ltd, Structural Solutions Pvt Ltd, STULZ-CHSPL(INDIA) PVT. LTD, Subal Electronics, Subodh Technologies, Suburban Diagnostics, Success Solution, Sudal Industries Ltd, Sudarshan Chemical Industries Limited, Sudhir Switchgears Pvt. Ltd, Sudhir Trade Links, Suketu Organics, Sukiba Groups, Suma Industries, Sumgo Engineering Industries Pvt Ltd, Sun Pharma Advanced Research Co. Ltd, Sun Pharma Advanced Research Co. Ltd - Makarpura, Sun Pharma Industries (Samba), Sun Pharma Laboratories Ltd (Gujarat), Sun Pharma Laboratories Ltd (Samba), Sun Pharma Laboratories Ltd (Sikkim Unit 1), Sun Pharma Laboratories Ltd(Jammu), Sun Pharma Medication Pvt Ltd, Sun Pharma Medication Pvt Ltd - Dadra, Sun Pharma Medication Pvt Ltd (Samba), Sun Pharma Medication Pvt. Ltd., Sun Pharmaceutical Ind Ltd- Sez (Dahje), Sun Pharmaceutical Ind Ltd- Sez Unit, Sun Pharmaceutical Industries (259), Sun Pharmaceutical Industries (259-Dadra), Sun Pharmaceutical Industries Ltd, Sun Pharmaceutical Industries Ltd (Barotiwala), Sun Pharmaceutical Industries Ltd (Batamandi) , Sun Pharmaceutical Industries Ltd (Ganguwala), Sun Pharmaceutical Industries Ltd (Karkhadi), Sun Pharmaceutical Industries Ltd(Dewas), Sun Pharmaceutical Industries Ltd(Malanpur), Sun Pharmaceutical Industries Ltd(Mohali), Sun Pharmaceutical Industries Ltd(Toansa), Sun Pharmaceuticals Industries (214), Sun Pharmaceuticals Industries Ltd (Ahmednagar), Sun Pharmaceuticals Industries Ltd (Ankleshwar), Sun Pharmaceuticals Industries Ltd (Goa), Sun Pharmaceuticals Industries Ltd (Tamilnadu), Sun Pharmaceuticals Industries Ltd(Panolli), Sun Pharmaceuticals Industries Ltd(Tandlaja), Sun Pharmaceuticals Industries Ltd. - Silvassa, Sun Pharmaceuticals Industries Ltd.(214- Silvassa), Sun Pharmaceuticals Industries Ltd.(Halol), Sun Pharmaceuticals Industries Ltd.-Silvassa, Sunchem Trading Company, Sunil Services, Sunita Hospital, Sunpharma Laboratories Ltd, Sunpro Instruments (India) Pvt Ltd, Sunrise Exports International, Sunrise Exports International - Vasai, Sunrise Multitech Fasteners Pvt. Ltd, Sunrise Process Equipment, Sunrise Process Equipments, Sunshine Corporation, Sunshine Organics Pvt. Ltd., Sunshine Worldwide Secondary School, Super Automats, Super Dairy Farm, Super Enterprises, Super Packs, Super Star Metal Works, Super Tech Supply, Supernova

Electrotech Pvt Ltd, Supertech Exports, Supreme Micronizing, Supreme Petrochem Ltd, Supremo Metal Industries, Suraksha Packneal Pvt. Ltd., Sure Resistors, Surelock Plastics Pvt Ltd, Surgimedik Healthcare, Surgimedik Healthcare India Pvt.Ltd, Suru Chemicals & Pharmaceuticals Pvt. Ltd, Surya Fasteners, Surya Pharmaceutical Limited, Surya Switchgear, Sushil Auto Products, Sushma Engineers Pvt Ltd, Suspens - Citi Bank Credit Card Exp, Sutaria Brothers, Suvidha Engineers India Ltd. (Andheri), Suvidha Engineers India Pvt Ltd, Suvidha Engineers India Pvt Ltd - Andheri, Suvidha Engineers India Pvt Ltd (GOA), Suvidha Engineers India Pvt Ltd(Kolkata), Suvidha Engineers India Pvt Ltd. (UP), Suvidha Engineers India Pvt. Limited, Suvidha Engineers India Pvt. Ltd (Bangalore), Sush Instrument(S), Suzlon Energy Limited, Suzlon Energy Ltd(Nashik), Suzlon Global Services Ltd, Swani Spice Mills Pvt. Ltd, Swanson Plastics (India) Pvt Ltd, Swaptul Enterprises, Swastik Flexipack Pvt Ltd, Swati Dry Fruits Pvt. Ltd., Swayamsiddha Indl. Prod. Co.Op. Soc. Ltd., Swiss Garnier Genexia Sciences, Synbiotics Limited, Syndicate Engineering Industries, Syndicate Wiper Systems Pvt. Ltd, Synergy Techno Support & Solutions LLP, Syngene International Ltd, Syngenta India Ltd, Systematic Calibration Services, Taj Sats Air Catering Limited, Takshasila Hospital Operating Pvt Ltd, Tanay Industries, Tapasya Engineering Works Pvt Ltd, Target Innovations, TAS Power Tek Pvt Ltd., TAS PowerTek Pvt. Ltd. - Nashik, Tata Consultancy Service Limited, Tata Hitachi Construction Machinery Co. Pvt. Ltd., TATA Motors Limited, Tata Motors Ltd (CRS), Tata Motors Ltd (Pune), Tata Power Company Limited, Tatsuno India Pvt Ltd, TCR Engineering Services Pvt Ltd, TE Connectivity India Pvt Ltd, Team CNG Pvt. Ltd, Technical Resources, Technocrats Engg. Services, Technofour Combines Pvt Ltd, Technosys Control Solutions, Technovision Instruments Solutions Pvt Ltd, Techstar Precision Components Pvt. Ltd., Teknic Electric (I) Pvt Ltd, Technocrats Controls Systems (I) Pvt. Ltd., Tektronix India Pvt Ltd, Telawne Power Equipments Pvt. Ltd., Temp Tech, Tempo Instruments & Equipments(I)Pvt. Ltd, Tempo Instruments Pvt Ltd, Terna Sahyadri Speciality Hospital & Research Centre, Testing & Calibration Lab (S), Teva Api India Ltd, Teva API India Ltd (Malanpur), Teva India Pvt. Ltd, Teva Pharma India Pvt Ltd, Texanlab Laboratories Pvt Ltd, Thane Municipal Corporation, The Automotive Research Association of India (S), The Bombay Textile Research Association, The Freyssinet Prestressed Concrete Co Ltd, The Lalit Golf & SPA Resort, The Motwane Manufacturing Company Pvt Ltd, The Muthoof Skychef, The Rubber Products Ltd, The Synthetic & Art Silk Mills Research Association, Thea Tex Healthcare (India) Pvt Ltd, Themepark Design House, Themis Medicare Limited, Therapeutics Chemical Research Corporation, Thermo Limited, Thermo Fisher Scientific India Pvt Ltd, Thyrocare Technologies Ltd, Thyssenkrupp Electrical Steel India Pvt Ltd, Tien Yuan India Pvt Ltd, Tijare Associates, Tijare Engineers & Consultants Pvt Ltd, TIL Limited, Tinita Engineering Pvt Ltd, Tirupati Engineering, Tisun-Edes Solar (India) Pvt Ltd, TIT -BIT Foods (India) Pvt. Ltd., TLR India, Top Tech Biomedicals, Topworth Pipes & Tubes Pvt Ltd, TOROTRANS R, Torque Pharmaceuticals Pvt Ltd.(Derabassi), Trans Electric, Trans Tech Turnkey Pvt. Ltd., Trans Thane Creek Waste Management Association, Transcal Measurement of Perfection, Transpower India Electronics Pvt. Ltd., Transweigh (I) Ltd, Tree Top Enterprises, Trinity Ventures, Trio Metrological Laboratory (S), Triochem Products Ltd., Trishul Equipment, Tritech Corporation, TSA Process Equipments Pvt Ltd, TTE Engineers (Bombay) Pvt. Ltd., TTL Technologies Pvt Ltd (S), Tubefit Engineers, Tulip Diagnostics (P.) Ltd., Tulsa Gas Technologies India Pvt Ltd, Turbocam (India) Pvt Ltd, Tushar Industrial Corporation, TUV India Private Limited, TUV SUD South Asia Pvt. Ltd, Twilight Litaka Pharma Ltd., Tyco Fire Protection Products, Tyco Safety Products (I) Pvt Ltd, Tyre Soles Ind. Pvt. Ltd., U Med Laboratories, Ukay Remedies Pvt. Ltd., UL India Pvt Ltd, Ultimate Techniques, Ultra Tech Specially Chemical, Ultratech India Ltd., Umang Pharmaceuticals Pvt. Ltd., Umang Pharmatech Pvt. Ltd., Umiya Instruments, Umiya Instruments - Ankleshwar, Umrao Hospital, Uni Deritend Ltd, Uni Medicolabs (Dehradun), Unichem Laboratories Limited (Goa), Unichem Laboratories Ltd (Sikkim), Unichem Laboratories Ltd., Unicare Remedies Pvt. Ltd, Unik Gauges & Tools, Unilever India Exports Ltd, Unimax Chemicals Pvt. Ltd., Unimed Technologies Ltd, Unique Chemicals, Unique Engineering Testing & Advisory Services, Unique Engineers Pvt Ltd, Unique Healthcare Product, Unique Healthcare Products, Unique Industrial Handlers Pvt Ltd, Unique Pharmaceutical Labs(Panolli), Unique Pharmaceuticals Laboratories, Unique Pharmaceuticals Laboratories (Daman), Unique Pharmaceuticals Laboratories(Thane), Unique Pharmaceuticals Labs(Panolli), Unisto India Pvt. Ltd., Unitech Instruments, Unitech Instruments(Vasai), United Drill Tools, United Marine Products, United Phosphorus Ltd, United Polymer & Chemicals Pvt Ltd, United Rubber Industries (I) Pvt Ltd, United Technomech Engineers Pvt Ltd, United Tecsta, Unitools Industries, Unity Electrotech, Universal Testing Lab, Upadhyay Construction Pvt Ltd, Urjayant Engineering Pvt Ltd, USV Limited, Usv Limited (Govandi), USV Ltd (Nerul), USV Ltd. (Baddi), Usv Ltd. (Daman), Uttam Scientific Instruments, V V F (India) Ltd, V V F Ltd, V.K. Pump Industries Pvt Ltd, Vaibhav Enterprises, Vaibhavi Enterprises, Vaidya Group of Industries, Vako Seals Pvt. Ltd, Valfit Engineers, Valvoline Cummins Limited, Valvoline Cummins Pvt Limited, Vanson Engineering Pvt Ltd, Vardhaman Remedies Pvt. Ltd., Varun Beverages Ltd, Varun Earthmovers, Vats & Vessels (I) Pvt Ltd, Vautid Shah Hardface Pvt Ltd, V-Care Impex, V-Chem Metal Testing Laboratory, VDA Technologies, Vedanta Limited, Veelex Elektrikals Pvt Ltd, Vehicle Research & Development Establishment, V-Ensure Pharma Technologies Pvt. Ltd, V-Ensure Pharma Technologies Pvt.Ltd. - Navi Mumbai, Venus Electronics & Controls Pvt. Ltd., Venus Remedies Ltd, Vergo Clinicals, Vergo Pharma Research, Vertex Grinding Master, VHB Medi Sciences Limited, Vibha Corporation Pvt Ltd, Vicco Laboratories (Goa), Victory Luminaires (Works II), Victory Luminaries (Works-I), Vidarbha Industries Power Ltd, Vidyut Udyog, Vifor India Pvt. Ltd., Vifor Pharma Pvt. Ltd., Vifore India, Vighneshwar Airconditioning Pvt Ltd, Vinayak Corporation, Vineeth Chemicals, Vineeth Precious Catalysts Pvt Ltd, Vinjoh Healthcare Pvt Ltd, Vintage Hospital & Medical Research Centre Pvt Ltd, Vintech Enterprises, VIP Industries Limited, Virchow Biotech Pvt. Ltd., Vishal Electro Industries Pvt Ltd, Vishal Industries, Vishwakarma Engineering, Vision Safety India, Visionary Technologies, Vista Packaging Pvt. Ltd., Vista Packaging Pvt.Ltd., Vista Packings Pvt. Ltd, Vital Diagnostics Pvt Ltd, Vital Healthcare Pvt. Ltd., Vital Neutrachemical Pvt Ltd, Vitech Service, Vitek Medisystems, Vitronics (India), Vivajay Brushes (Goa), Vivid Metrawatt, VKL Seasoning Pvt Ltd, VKR Industries, VNS Industries Pvt. Ltd, Volkswagen India Private Limited, Voltas Limited, VVF India Ltd(Daman), VWR Lab Products Pvt Ltd, Wam India Pvt Ltd, Wanbury Ltd, Warkembiotech Pvt Ltd, Watson Pharma Ltd. Goa Unit-IV, Watson Pharma Pvt Ltd - Belapur, Watson Pharma Pvt. Ltd - Belapur CRO, Watson Pharma Pvt. Ltd (N-15), Watson Pharma Pvt. Ltd. Ambernath K7, Weighup Instruments, Weiss Technik India Pvt Ltd, Welx Laboratories Pvt. Ltd., Welspun Syntex Ltd., West Coast Shipyard, Western India Shipyard, Western Refrigeration Pvt. Ltd., Western Regional Instrumentation Centre, Western Steel Drums Pvt. Ltd., Wheels India Ltd, Whirlpool of India Ltd, Wibro Construction Company, Wimpy Electronics Pvt. Ltd., Wind World (India) Limited, Windlas Healthcare (P) Ltd, Winmet Technologies Pvt Ltd, Winner Electronics, WMI Cranes Ltd, Wockhardt Hospitals Limited-Kalyan, Wockhardt Hospitals Ltd (Nasik), Wockhardt Limited Bhandup, Wockhardt Ltd (Ankleshwar), Wockhardt Ltd (Bandra), Wockhardt Ltd. (B-15/2), Wockhardt Ltd. (L1), Wockhardt Ltd.-H.P, Wockhardt Ltd.R & D Center(Aurangabad), Wool Research Association, Yadni Campro, Yak Group, Yaksh Technologies, Yapp India Automotive Systems Pvt Ltd, Yash Capacitors Pvt Ltd, Yash Enterprise, Yash Enterprises, Yash Industries, Yashraj Biotechnology Ltd, Yashtec Instrumentation & Engg Source, Yazaki India Ltd., Yenkey Instruments and Controls Pvt Ltd, YMC India Pvt Ltd, Yogeshwar Engineering Pvt Ltd, Yogeshwari Engineering, Zaveri Bros Silver Platers Pvt Ltd, Zazen Pharma Pvt. Ltd., Zeal Medical Pvt Ltd, Zealtek Calibration Laboratory, Zeiss Pharmaceuticals Pvt. Ltd., Zen Pharma Pvt Ltd.(Gujarat), Zenith Industrial Rubber Products Pvt. Ltd, Zephyr Biomedical, Zephyr Biomedicals (Goa), Zoetis Pharmaceutical Research Pvt Ltd, Zoventus Healthcare Ltd, Zyclus Takeda Healthcare Pvt Ltd, ZYDUS HEALTHCARE, Zyclus Nycomed Healthcare Pvt. Ltd, Zylong Plastalloys Pvt Ltd, Zytek Corporation



## QUALITY OBJECTIVES

Our quality objectives are:

- On-time completion of calibrations in 95% of cases.
- Error-free reporting within the committed time in 95 % cases.
- Assuring quality of the calibration results through satisfactory participation in Inter Laboratory Comparison for all Calibration Parameters Once in every 4 years.
- Acceptance criteria for supplier evaluation to be 70 % minimum.
- Customer satisfaction index to be 80% minimum
- Increase in customer base by 10% every year

## QUALITY POLICY

We, at AUTOCAL SOLUTIONS PVT. LTD are committed to:

- Provide calibration services as per our documented Quality Management System laid down in line with ISO/IEC 17025:2005 and the requirements of NABL Specific Criteria to the satisfaction of our Customers.
- Assure Reliability of our calibration result by ensuring traceability to National or International standards.
- Train all members of the Laboratory to exhibit competency while performing calibrations and to encourage them to maintain impartiality, integrity and a high degree of credibility in their work.
- Improve the quality of our services and continually improve the effectiveness of management system.
- Ensure good professional laboratory practices are established and followed.
- Ensure that all personnel concerned with calibration activities within laboratory familiarize themselves with the Quality documentation and implement the policies and procedures in their work.



## BRIEF ABOUT AUTOCAL TRAINING MODULE

Autocal has conducted several training programs, in- house and at customer's premises.

ASPL offers training courses to help individuals gain the skills that they require in the field of Measurement and Calibration.

These training programs are also tailor made as per customer's needs at ASPL offices or at customer's site on request. The instructor is an expert in their field and has extensive experience of more than 15 years in measurement and calibration.

Understanding the principles of measurement and calibration can lead to better decisions on product purchasing, reduced need for expensive technical support and reduced operational mistakes with expensive consequences.

We have already conducted Calibration Metrology awareness training, ISO/IEC: 17025:2005, measurement uncertainty training as per NABL 141 for below clients:

- ✚ Jubilant Organosys Ltd
- ✚ Regent Drugs Ltd (Teva Group)
- ✚ Sun Pharmaceuticals industries Ltd
- ✚ D.Y. Patil College of Engineering (Pune)
- ✚ L&T, Pune
- ✚ Western Pharma, Goa
- ✚ Johnson & Johnson, Aurangabad
- ✚ MSEB Nashik (Testing division)
- ✚ Aditya Vidyut Appliances Pvt. Ltd.



## CONSULTANCY SERVICES

✚ We are consulting with experienced firm **B. G. Kini** for below services:

- **Training**-All your training needs will be covered by ASPL Professional and Industry Experts staff.
- **Audit**- Whether its Pharmaceutical- API, GMP, GLP or Oncology Audit Autocal shall nurture you to successfully qualify your audit.
  - Pharma API
  - GMP GLP
  - Oncology
- **Trouble Shooting**- ASPL provides the right methods for all your trouble shooting whether it's Quality, Pharma System, Out of Specification/ Out of Trend, Deviation Management, Change Control Management, Quality Risk Management & Root Cause Analysis.
  - Quality Pharma System
  - Out of Space/Out of Trend
  - Deviation Management
  - Change Control Management
  - Quality Risk Management
  - Root Cause Analysis
- **Inspection**-Inspection of Pharmaceutical Plants.

### ✚ Consultancy services as per ISO/IEC 17025:2005, ISO 15189:2012

We are extending consulting services in set up of new calibration lab and guidance to get NABL accreditation for calibration & testing laboratories according to ISO/IEC 17025:2005 in which we cover following points:

- Initial Gap Analysis of your existing system.
- Help in getting your equipment's calibrated from NABL Laboratory.
- Preparation of quality manual and other quality system related documents.
- Preparation of standard operating procedures.
- Planning and conducting of internal audit.
- Help in conducting the Proficiency Testing and ILC
- Finalizing the NABL Testing calibration scope & application to NABL.
- Guidance for the readiness for the pre-assessment.
- Guidance to the closure of the pre-assessment, non-conformities.
- Help in getting prepared for final audit.
- Guidance for the closure of non-conformities.



**WE BELIEVE THAT A GOOD SERVICE  
IS A GOOD BUSINESS**

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Providing services for Calibration, Validation & Testing

For Calibration Accredited by NABL as per ISO / IEC 17025: 2005  
For high precision calibration in **CC-2382**