

CERTIFICATE OF ACCREDITATION

SACARDANDE ENGINEERS PVT LTD

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA

in the field of

CALIBRATION

Certificate Number:

CC-2558

Issue Date:

26/03/2020

• INDIA • Salid Until:

25/03/2022

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL. (To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

NOITAN

Signed for and on behalf of NABL

Chief Executive Officer





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV INDIA | IP R-158, 159, TTC IND I MUMBAI, MUMBAI SU | USTRIAL AREA, MIDC IBURBAN, |
|-------|---|--|---|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 1 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| | | | Permanent Facility | | |
| 1 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Angle Gauge Set | Using Surface Plate, Sine Bar, Slip Gauge and Digital Probe | 6 sec to 60 Deg | 46sec. of arc |
| 2 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Bore Dial Gauge (Transmission Error) L.C: 0.001 mm | Using Length Measuring Machine By Comparison Method | 0 to 1 mm | 3.65µm |
| 3 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Coating Thickness Gauge | Using Thickness Foil | 0 to 1000 µm | 24µm |
| 4 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Combination Sets L.C.: 1° | Using Angle Gauges By Comparison Method - Quadrant wise | 0 to 90 ° | 39.0 min. |
| 5 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Depth Gauge L.C.: 0.01 mm | Using Gauge Block Grade 0 Surface Plate By Comparison Method | 0 to 300 mm | 9.5 μm |





| Labo | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDO Laboratory Name : RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|---|--|---|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 2 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 6 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Depth Micrometer L.C.: 0.001 mm | Using Gauge Block Grade 0 Surface Plate By Comparison Method | 0 to 150 mm | 3.1 μm |
| 7 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Depth Gauge L.C.: 0.010 mm | Using Gauge Block Grade 0 Surface Plate By Comparison Method | Up to 300 mm | 6 μm |
| 8 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Gauge Tester L.C.: 0.0002 mm | Using Electronic probe, Slip Gauge by comparison method. | Up to 25 mm | 1.12 μm |
| 9 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Gauge Tester L.C.: 0.001 mm | Using Electronic Probe, Slip Gauge By Comparison Method | Up to 25 mm | 1.12 μm |
| 10 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Thickness Gauge L.C.: 0.001 mm | Using Gauge Block Set By Comparison Method | 0 to 25 mm | 0.8 μm |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV , INDIA | NP R-158, 159, TTC INE I MUMBAI, MUMBAI SU | DUSTRIAL AREA, MIDC JBURBAN, |
|-------|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 3 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 11 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Dial Thickness Gauge L.C.: 0.010 mm | Using Gauge Block Set By Comparison Method | 0 to 50 mm | 5.1 μm |
| 12 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Digital / Analog Bevel Protractor L.C.: 5 min | Using Angle Gauges By Comparison Method - All 4 Quadrant | 0 to 90 ° | 6.6 min. of arc |
| 13 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Digital Protractor L.C.: 0.1° | Using Angle Gauges by Comparison method | 0 to 90 ° | 6.6 min. |
| 14 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Engineers Parallels (Parallelism) | Using Lever Dial Indicator By Comparison Method | Up to 100 mm | 5.3 μm |
| 15 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.001 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 0 to 25 mm | 1.0µm |





| Labo | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MID Laboratory Name : RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|--|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 4 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 16 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.001 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 150 mm to 300 mm | 5.3 μm |
| 17 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.001 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 25 mm to 150 mm | 2.87µm |
| 18 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.01 mm | Using Gauge block set & micrometer setting standard & long slip gauge by comparisonmethod | 1000 mm to 1200 mm | 13.0µm |
| 19 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.01 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 300 mm to 400 mm | 10.8 µm |
| 20 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.01 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 400 mm to 500 mm | 11.95 μm |





| Labo | Laboratory Name : SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MID Laboratory Name : RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|--|--|---|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 5 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 21 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.01 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 500 mm to 600 mm | 12.9µm |
| 22 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.01 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 600 mm to 700 mm | 13.0µm |
| 23 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External Micrometer L.C.: 0.01 mm | Using Gauge Block set & Micrometer Setting standard & long Slip Gauge By Comparison Method | 700 mm to 800 mm | 17.1 µm |
| 24 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External micrometer L.C.: 0.01 mm | Using Gauge block Set & micrometer Setting standard & long slip gauge by comparison method. | 800 mm to 900 mm | 13.0µm |
| 25 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | External micrometer L.C.: 0.01 mm | Using gauge block set µmeter setting standard & long slip gauge by comparison method. | 900 mm to 1000 mm | 13µm |





| Laboratory Name :SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL ARILaboratory Name :RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN,MAHARASHTRA, INDIA | | | | | DUSTRIAL AREA, MIDC JBURBAN, |
|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | I | Page No | 6 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | Last Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 26 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Feeler Gauge | Using Digital probe & comparator | 0.01 mm to 1 mm | 1.8µm |
| 27 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (Dial, Digital & Analog) L.C.: 0.01 mm | Using Gauge Block Grade 0 & Caliper Checker Surface Plate By Comparison Method | 0 to 1000 mm | 21.0 µm |
| 28 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (Dial, Digital & Analog) L.C.: 0.01 mm | Using Gauge Block Grade 0 & Caliper Checker Surface Plate By Comparison Method | 0 to 300 mm | 9.12 μm |
| 29 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (Dial/Digital/Analog) L.C.: 0.01 mm | Using Slip Gauge Block Set Long Slip Gauge By Comparison Method | 0 to 600 mm | 13.9 μm |
| 30 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Inside Dial Caliper L.C.: 10 μm | Using Slip Gauge Set Grade 0, Slip Gauge Accessories, LMM By Comparison Method | 10 mm to 95 mm | 16.0 μm |





| Labo | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC Laboratory Name : RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 7 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 31 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Inside Digital Caliper L.C.: 10 μm | Using Gauge Block Set By Comparison Method | 5 mm to 17.5 mm | 16 µm |
| 32 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Internal Micrometer (Caliper Type) L.C.: 0.001 mm | Using Slip Gauge Set , Micrometer Setting standard & Plunger Dial By Comparison Method | 3 mm to 100 mm | 1.90 µm |
| 33 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Internal Micrometer (Stick Type) L.C.: 0.010 mm | Slip Gauge Set , Micrometer Setting standard & Plunger Dial By Comparison Method | 25 mm to 500 mm | 12.50 μm |
| 34 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Internal Micrometer (Stick Type) L.C.: 0.010 mm | Using Slip Gauge Set , Micrometer Setting standard & Plunger Dial By Comparison Method | 500 mm to 1000 mm | 21.1 µm |
| 35 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Lever Type Dial Gauges L.C.: 0.001 mm | Using LMM By Comparison Method | 0 to 2 mm | 1.1 μm |





| Laboratory Name :SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MLaboratory Name :RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN,MAHARASHTRA, INDIA | | | | | DUSTRIAL AREA, MIDC JBURBAN, |
|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | I | Page No | 8 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | Last Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 36 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | LVDT Probe L.C.: 0.0001 mm | Using Slip Gauge | 0 to 25 mm | 1 µm |
| 37 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Measuring Pins | Using LMM By Comparison Method | Up to 20 mm | 1.67 μm |
| 38 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Measuring Scale L.C.: 0.5 mm/1 mm | Using Scale & Tape Calibrator By Comparison Method | 0 to 2000 mm | 169 µm |
| 39 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Measuring Scale L.C.: 0.5 mm/1.0 mm | Using Scale & Tape Calibrator By Comparison Method | Up to 1000 mm | 119 µm |
| 40 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Measuring Tape L.C.: 0.5 mm/1.0 mm | Using Scale & Tape Calibrator By Comparison Method | Up to 50000 mm | 119vL μm (L in meter) |





| Labo | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC Laboratory Name : RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 9 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 41 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Head L.C.: 0.001 mm | Using Gauge Block Grade 0 and Electronic Probe By Comparison Method | Up to 25 mm | 2.8 μm |
| 42 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge, Probe DRO, Surface plate. By Comparison Method | 0 to 150 mm | 3.35 μm |
| 43 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Slip Gauge grade 0, Long slip gauge, Probe DRO and surface plate by comparison method | 1000 mm to 1200 mm | 11 µm |
| 44 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge, Probe DRO, Surface plate. By Comparison Method | 150 mm to 300 mm | 7.0 μm |
| 45 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge , Probe DRO, Surface plate. By Comparison Method | 300 mm to 400 mm | 7.5 μm |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV INDIA | NP R-158, 159, TTC IND I MUMBAI, MUMBAI SU | USTRIAL AREA, MIDC IBURBAN, |
|-------|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 10 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 46 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge , Probe DRO, Surface plate. By Comparison Method | 400 mm to 500 mm | 9.14 µm |
| 47 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge, Probe DRO, Surface plate. By Comparison Method | 500 mm to 600 mm | 10.5 µm |
| 48 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge, Probe DRO, Surface plate. By Comparison Method | 600 mm to 800 mm | 14.50 μm |
| 49 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Micrometer Setting Standard | Using Gauge Block Grade 0 & Long Slip Gauge, Probe DRO, Surface plate. By Comparison Method | 800 mm to 1000 mm | 18.7 µm |
| 50 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Outside Dial Caliper L.C.: 10 μm | Using Gauge Block Set By Comparison Method | 0 to 10 mm | 4.95 μm |





| Laboratory Name : | | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------------------|---|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | | | |
| Certi | ficate Number | CC-2558 | F | Page No | 11 of 24 | | |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 | | |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) | | |
| 51 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Pie Tape | Using scale and tape calibrator by comparison method | Up to dia 50000 mm | (363 x sqrt(L)) μm (L in m) | | |
| 52 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Pistol Caliper L.C.: 100 μm | Using Gauge Block Set By Comparison Method | 0 to 50 mm | 35.1 μm | | |
| 53 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plain Plug Gauge | Using LMM100 master ring gauge By Comparison Method | Ø 100 mm to 300 mm | 4.6µm | | |
| 54 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plain Plug Gauge | Using LMM 100 master ring gauge By Comparison Method | Ø Up to 100 mm | 2.1µm | | |
| 55 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plain Ring Gauge | Using LMM master ring gauge by comparison method. | 100 mm to 300 mm | 3.4µm | | |





| Labo | Laboratory Name : SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIL Laboratory Name : RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|--|--|---|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 12 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 56 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plain Ring Gauge | Using LMM 100 Master Ring Gauge By Comparison Method | 3 mm to 100 mm | 2.1µm |
| 57 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plunger Type Dial Gauges L.C.: 0.0005 mm | Using LMM 100 Dial Gauge Tester By Comparison Method | 0 to 0.025 mm | 0.80 μm |
| 58 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plunger Type Dial Gauges L.C.: 0.0005 mm | Using LMM 100 Dial Gauge Tester By Comparison Method | 0 to 0.10 mm | 0.80 µm |
| 59 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plunger Type Dial Gauges L.C.: 0.0010 mm | Using LMM 100 Dial Gauge Tester By Comparison Method | 0 to 1 mm | 0.90 µm |
| 60 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plunger Type Dial Gauges L.C.: 0.0010 mm | Using LMM 100 Dial Gauge Tester By Comparison Method | 0 to 50 mm | 1.1 μm |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV INDIA | AP R-158, 159, TTC IND /I MUMBAI, MUMBAI SU | DUSTRIAL AREA, MIDC JBURBAN, |
|-------|---|--|---|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 13 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 61 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Plunger Type Dial Gauges L.C.: 0.010 mm | Using LMM 100 Dial Gauge Tester By Comparison Method | 0 to 50 mm | 3.9 µm |
| 62 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Protractor L.C. 1° | Using profile projector by comparison method. | 0 to 360 ° | 3 min. |
| 63 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Radius Gauge (Convex and Concave) | Using profile projector by comparison method | 0.4 mm to 25 mm | 23 μm |
| 64 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Scale & Tape Calibrator L.C.: 0.001 mm | Using Gauge Block Set Micrometer Setting standard By Comparison Method | 0 to 1000 mm | 13.0 μm |
| 65 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Sine Bar | Using Surface plate, Slip gauge, angle gauge and digital probe | 300 mm | 60 sec. |





| Laboratory Name : | | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------------------|---|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | | | |
| Certi | ficate Number | CC-2558 | F | Page No | 14 of 24 | | |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | Last Amended on | 14/04/2020 | | |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) | | |
| 66 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Snap Gauge | Using Gauge Block Set, ULM By Comparison Method | 2 mm to 160 mm | 1.9 µm | | |
| 67 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Step Block (Thickness) | Using Gauge Block Set, Plunger Dial By Comparison Method | 0 to 100 mm | 6.2 μm | | |
| 68 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Straight Edge | Using Lever Dial Indicator By Comparison Method | Up to 500 mm | 15.0 µm | | |
| 69 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Taper Scale | Using Profile Projector by Comparison method. | 0 to 100 mm | 18.0µm | | |
| 70 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Taper Thread Plug Gauge (Effective Diameter Only) | Using ULM, FCDM, Thread Measuring Wire By Comparison Method | Ø Up to 100 mm | 12.3µm | | |





| Laboratory Name : | | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------------------|---|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | | | |
| Certi | ficate Number | CC-2558 | F | Page No | 15 of 24 | | |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 | | |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) | | |
| 71 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Test Mandrel | Using profile projector by comparison method. | Up to 10 mm | 9 µm | | |
| 72 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Test Sieves(Aperture Size) | Using Profile Projector, caliper by comparison method. | 0.02 mm to 100 mm | 7 μm | | |
| 73 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thickness Foils | Using Digital probe & comparator | 0 to 25 mm | 1.8 μm | | |
| 74 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread pitch Gauge Linear & Included | Using Profile Projector by comparison method | Linear 0.3 mm to 6 mm Ang | Linear 12 µm Angular 10.5 min. | | |
| 75 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread Plug Gauge (Effective Diameter only) | Using ULM, FCDM, Thread Measuring Wire By Comparison Method | Ø 1.6 mm to 100 mm | 4.49µm | | |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV INDIA | NP R-158, 159, TTC IND I MUMBAI, MUMBAI SU | USTRIAL AREA, MIDC IBURBAN, |
|----------------------------|---|--|---|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 16 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 |
| S.No Discipline / Group or | | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 76 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread Plug Gauge (Effective Diameter only) | Using LMM, Thread Measuring wire by comparison method | Ø 100 mm to 300 mm | 3.5µm |
| 77 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread Ring Gauge (Effective Diameter Only) | Using ULM and Master Ring Gauge by comparison method | Ø 100 mm to 300 mm | 4.0µm |
| 78 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Thread Ring Gauge (Effective Diameter Only) | Using LMM 100 Master Ring Gauge By Comparison Method | Ø 3 mm to 100 mm | 2.1µm |
| 79 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Ultrasonic Thickness Gauge LC 0.010mm | Using Thickness Step Block By Comparison Method | Up to 100 mm | 32.2 μm |
| 80 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | V Block (Symmetricity , Parallelism of faces & V axis to base) | Using Cylindrical Mandrels Lever Dial Indicator By Comparison Method | Up to 300 mm | 6.40 μm |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|---|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | ard ISO/IEC 17025:2017 | | | | |
| Certi | ficate Number | CC-2558 | F | Page No | 17 of 24 | | |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 | | |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) | | |
| 81 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Vernier Calipers (Dial/Digital/Analog) L.C.: 0.010 mm | Using Gauge Block Grade '0' & Caliper Checker By Comparison Method | 0 to 1000 mm | 15.6 µm | | |
| 82 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Vernier Calipers (Dial/Digital/Analog) L.C.: 0.010 mm | Using Gauge Block Grade '0' & Caliper Checker By Comparison Method | 0 to 300 mm | 12.46 μm | | |
| 83 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Weld Gauge (Scale/ Depth) L.C: 0.001 mm | Using Profile Projector, Tape & Scale Calibrator and Slip Gauge by comparison method | Up to 35 mm | 19.0 µm | | |
| 84 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Weld Gauge(Angle) L.C: 1' | Using Profile Projector, Tape and Scale Calibrator and Slip Gauge By comparison method | Up to 90 ° | 13.4min | | |
| 85 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Welding Chamfer Gauge | Using Profile projector | 0 to 90 Deg | 13.4 min. | | |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV INDIA | AP R-158, 159, TTC IND /I MUMBAI, MUMBAI SU | USTRIAL AREA, MIDC IBURBAN, |
|-------|---|--|--|--|--|
| Accr | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | ſ | Page No | 18 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | Last Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 86 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Welding Fillet Radius Gauge | Using profile Projector by comparison method | 0 to 25 mm | 23 µm |
| 87 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Wire Gauge | Using profile projector by Comparison method. | Up to 10 mm | 9.5 μm |
| 88 | MECHANICAL- DIMENSION (PRECISION INSTRUMENTS) | Profile Projector Angular L.C. 1" | Using linear Graticule , glass angular graticule, measuring scale glass digital caliper by comparison method | up to 360 Degrees | 9.62 sec. of arc |
| 89 | MECHANICAL- DIMENSION (PRECISION INSTRUMENTS) | Profile Projector Linear L.C.: 0.001 mm | Using linear Graticule , glass angular graticule, measuring scale glass digital caliper by comparison method | up to 200 mm | 6.25 μm |
| 90 | MECHANICAL- DIMENSION (PRECISION INSTRUMENTS) | Profile Projector magnification | Using linear Graticule , glass angular graticule, measuring scale glass digital caliper by comparison method | Up to 50 X | 0.1 % |





| Laboratory Name : | | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------------------|--|--|---|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | | | |
| Certi | ficate Number | CC-2558 | F | Page No | 19 of 24 | | |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 | | |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) | | |
| 91 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Hydraulic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 160 bar | 0.15 bar | | |
| 92 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Hydraulic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 350 bar | 0.17 bar | | |
| 93 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Hydraulic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 700 bar | 0.46 bar | | |
| 94 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Pneumatic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 20 bar | 0.011 bar | | |
| 95 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Pneumatic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 35 bar | 0.04 bar | | |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV . INDIA | NP R-158, 159, TTC INE I MUMBAI, MUMBAI SU | DUSTRIAL AREA, MIDC JBURBAN, |
|-------|--|--|---|---|--|
| Accr | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 20 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | asurand or Reference rial/Type of instrument aterial to be calibrated measured / Quantity Measured /Instrum | | * Calibration and Measurement Capability(CMC)(±) |
| 96 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Pneumatic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 6 bar | 0.08 bar |
| 97 | MECHANICAL- PRESSURE INDICATING DEVICES | Vacuum Gauge (Dial / Digital) | Using Digital Pressure Gauge and Vacuum Pump By Comparison Method | -0.90 bar to 0 bar | 0.08bar |
| 98 | MECHANICAL- TORQUE GENERATING DEVICES | Torque Wrench (Type I Class A to Class E) and (Type II Class A to Class G) | Using Electronic Torque Wrench Calibration (Mechanized) by Comparison Method as per ISO 6789:2017 | 0.1 Nm to 1 Nm | 1.65 % of rdg. |
| 99 | MECHANICAL- TORQUE GENERATING DEVICES | Torque Wrench (Type I Class A to Class E) and (Type II Class A to Class G) | Using Electronic Torque Wrench Calibration (Mechanized) by Comparison Method as per ISO 6789:2017 | 1 Nm to 5 Nm | 1.65 % of rdg. |
| 100 | MECHANICAL- TORQUE GENERATING DEVICES | Torque Wrench (Type I Class A to Class E) and (Type II Class A to Class G) | Using Electronic Torque Wrench Calibration (Mechanized) by Comparison Method as per ISO 6789:2017 | 20 Nm to 100 Nm | 0.93 % of rdg. |





| Laboratory Name : | | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------------------|--|---|--|---|--|--|
| Accr | editation Stand | ard | ISO/IEC 17025:2 | 017 | | |
| Certi | ificate Number | | CC-2558 | F | Page No | 21 of 24 |
| Valic | lity | | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Meas Materi or mat or m M | surand or Reference al/Type of instrument terial to be calibrated neasured / Quantity easured /Instrum | Calibration or Measurement Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 101 | MECHANICAL- TORQUE GENERATING DEVICES | Torq (Type Class Class | ue Wrench e I Class A to s E) and (Type II s A to Class G) | Using Electronic Torque Wrench Calibration (Mechanized) by Comparison Method as per ISO 6789:2017 | 4 Nm to 20 Nm | 0.96 % of rdg. |
| 102 | MECHANICAL- TORQUE GENERATING DEVICES | Torqı (Type Class Class | ue Wrench e I Class A to s E) and (Type II s A to Class G) | Using Electronic Torque Wrench Calibration (Mechanized) by Comparison Method as per ISO 6789:2017 | 400 Nm to 2000 Nm | 1.06 % of rdg. |
| 103 | MECHANICAL- TORQUE GENERATING DEVICES | Torqı (Type Class Class | ue Wrench e I Class A to s E) and (Type II s A to Class G) | Using Electronic Torque Wrench Calibration (Mechanized) by Comparison Method as per ISO 6789:2017 | 80 Nm to 400 Nm | 1.10 % of rgd. |





| Labo | ratory Name : | SACARDANDE ENGINEERS PVT LTD, PAP R-158, 159, TTC INDUSTRIAL AREA, MIDC RABALE, PIPELINE ROAD, RABALE, NAVI MUMBAI, MUMBAI SUBURBAN, MAHARASHTRA, INDIA | | | | |
|-------|---|---|---|-------------------|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | | |
| Certi | ficate Number | CC-2558 | F | Page No | 22 of 24 | |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 | |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Measurand or Reference laterial/Type of instrument r material to be calibrated or measured / Quantity Measured /Instrum | | * Calibration and Measurement Capability(CMC)(±) | |
| | | | Site Facility | | | |
| 1 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (Dial, Digital & Analog) L.C.: 0.01 mm | Using Gauge Block Grade 0 & Caliper Checker Surface Plate By Comparison Method | 0 to 1000 mm | 21.0 µm | |
| 2 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (Dial, Digital & Analog) L.C.: 0.01 mm | Using Gauge Block Grade 0 & Caliper Checker Surface Plate By Comparison Method | 0 to 300 mm | 9.12 μm | |
| 3 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Height Gauge (Dial/Digital/Analog) L.C.: 0.01 mm | Using Slip Gauge Block Set Long Slip Gauge By Comparison Method | 0 to 600 mm | 13.9 µm | |
| 4 | MECHANICAL- DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.) | Scale & Tape Calibrator L.C.: 0.001 mm | Using Gauge Block Set Micrometer Setting standard By Comparison Method | 0 to 1000 mm | 13.0 µm | |
| 5 | MECHANICAL- DIMENSION (PRECISION INSTRUMENTS) | Profile Projector Angular L.C. 1" | Using linear Graticule , glass angular graticule, measuring scale glass digital caliper by comparison method | up to 360 Degrees | 9.62 sec. of arc | |





| Labo | ratory Name : | SACARDANDE E RABALE, PIPELIN MAHARASHTRA, | NGINEERS PVT LTD, PA NE ROAD, RABALE, NAV INDIA | AP R-158, 159, TTC IND /I MUMBAI, MUMBAI SU | USTRIAL AREA, MIDC IBURBAN, |
|-------|--|--|--|--|--|
| Accre | editation Stand | ard ISO/IEC 17025:2 | 2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 23 of 24 |
| Valid | lity | 26/03/2020 to 2 | 5/03/2022 L | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrum | Measurand or Reference aterial/Type of instrument · material to be calibrated or measured / Quantity Measured /Instrum | | * Calibration and Measurement Capability(CMC)(±) |
| 6 | MECHANICAL- DIMENSION (PRECISION INSTRUMENTS) | Profile Projector Linear L.C.: 0.001 mm | Using linear Graticule , glass angular graticule, measuring scale glass digital caliper by comparison method | up to 200 mm | 6.25 μm |
| 7 | MECHANICAL- DIMENSION (PRECISION INSTRUMENTS) | Profile Projector magnification | Using linear Graticule , glass angular graticule, measuring scale glass digital caliper by comparison method | Up to 50 X | 0.1 % |
| 8 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Hydraulic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 160 bar | 0.15 bar |
| 9 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Hydraulic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 350 bar | 0.17 bar |
| 10 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Hydraulic Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | Using Digital Pressure Gauge By Comparison Method | 0 to 700 bar | 0.46 bar |





SCOPE OF ACCREDITATION

| Laboratory Name : | | SACARDANDI RABALE, PIPE MAHARASHTI | E ENGINEERS PVT LTD, PA LINE ROAD, RABALE, NAV RA, INDIA | NP R-158, 159, TTC IND I MUMBAI, MUMBAI SU | DUSTRIAL AREA, MIDC JBURBAN, |
|-------------------|--|---|--|--|--|
| Accr | editation Stand | ard ISO/IEC 1702 | 5:2017 | | |
| Certi | ficate Number | CC-2558 | F | Page No | 24 of 24 |
| Valid | lity | 26/03/2020 to | o 25/03/2022 | ast Amended on | 14/04/2020 |
| S.No | Discipline / Group | Measurand or Reference Material/Type of instrum or material to be calibrat or measured / Quantity Measured /Instrum | e ent ed Method or procedure | Measurement range and additional parameters where applicable(Range and Frequency) | * Calibration and Measurement Capability(CMC)(±) |
| 11 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Pneumati Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | c Using Digital Pressure Gauge By Comparison Method | 0 to 20 bar | 0.011 bar |
| 12 | MECHANICAL- PRESSURE INDICATING DEVICES | Pressure Pneumati Digital/Analog Pressure Gauge , Indicator, Pressure Transmitter, Pressure Switches | C Using Digital Pressure Gauge By Comparison Method | 0 to 6 bar | 0.08 bar |

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

