



**National Accreditation Board for
Testing and Calibration Laboratories**

(A Constituent Board of Quality Council of India)



CERTIFICATE OF ACCREDITATION

ZWICK ROELL CALIBRATION LABORATORY

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

FLAT NO.2, A-WING, 8TH FLOOR, PARSN MANERE, NO.442, ANNA SALAI, CHENNAI, TAMIL NADU,
INDIA

in the field of

CALIBRATION

Certificate Number: CC-2081

Issue Date: 13/01/2019

Valid Until: 12/01/2021

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)

Signed for and on behalf of NABL



Anil Relia
Chief Executive Officer



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SCOPE OF ACCREDITATION

Laboratory Name ZWICK ROELL CALIBRATION LABORATORY, FLAT NO.2, A-WING, 8TH FLOOR, PARSN MANERE, NO.442, ANNA SALAI, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2081 Page No. : 1 / 4

Validity 13/01/2019 to 12/01/2021 Last Amended on -

| S.No | Discipline / Group | Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured / Instrument | Measurement range and additional parameters where applicable(Range and Frequency) | Calibration and Measurement Capability(CMC)(±) | Calibration or Measurement Method or procedure) |
|----------------------|--|--|---|--|--|
| Site Facility | | | | | |
| 1 | MECHANICAL-DIMENSION (PRECISION INSTRUMENTS) | Length calibration of extensometer system used in uniaxial testing (Type-A,B,C,E,F) | 0.01 mm to 0.1 mm | 0.35 µm | Using Extensometer Calibrator (Heidenhain) |
| 2 | MECHANICAL-DIMENSION (PRECISION INSTRUMENTS) | Length calibration of extensometer system used in uni-axial testing (Type-A,B,C,E,F) | 0.1 mm to 1.0 mm | 0.49 µm | Using Extensometer Calibrator (Heidenhain) |
| 3 | MECHANICAL-DIMENSION (PRECISION INSTRUMENTS) | Length calibration of extensometer system used in uni-axial testing (Type-A,B,C,E,F) | 1.0 mm to 50.0 mm | 7.1 µm | Using Extensometer Calibrator (Heidenhain) |
| 4 | MECHANICAL-HARDNESS TESTING MACHINES | Hardness (HBW 1/30) - Verification of Brinell hardness testing machines (indirect Verification) | HBW 1/30 | 1.23 % | Using Reference standard Hardness blocks & Brinell |
| 5 | MECHANICAL-HARDNESS TESTING MACHINES | Hardness (HBW2.5/187.5) - Verification of Brinell hardness testing machines (indirect Verification) | HBW2.5/187.5 | 1.82 % | Using Reference standard Hardness blocks & Brinell |



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|------|---|--|---|--|---|
| 6 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HBW2.5/62.5) - Verification of Brinell hardness testing machines (indirect Verification) | HBW2.5/62.5 | 1.26 % | Using Reference standard Hardness blocks & Brinell |
| 7 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HBW5/250) - Verification of Brinell hardness testing machines (indirect Verification) | HBW5/250 | 2.48 % | Using Reference standard Hardness blocks & Brinell |
| 8 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HRA) - Rockwell hardness tester (Indirect verification) | HRA to HRA | 0.5 HRA | Using Reference standard Hardness blocks & Rockwell |
| 9 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HRB) - Rockwell hardness tester (Indirect verification) | HRB to HRB | 1.3HRB | Using Reference standard Hardness blocks & Rockwell |
| 10 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HRC) - Rockwell hardness tester (Indirect verification) | HRC to HRC | 0.5 HRC | Using Reference standard Hardness blocks & Rockwell |
| 11 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV0.1) - Verification of Vickers hardness testing machines (indirect Verification) | HV 0.1 | 5.0% | Using Reference standard Hardness blocks |



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Certificate Number CC-2081 Page No. : 3 / 4

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|------|---|--|---|--|--|
| 12 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV0.2) - Verification of Vickers hardness testing machines (indirect Verification) | HV 0.2 | 5.0% | Using Reference standard Hardness blocks & Vickers |
| 13 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV0.3) - Verification of Vickers hardness testing machines (indirect Verification) | HV 0.3 | 8.3% | Using Reference standard Hardness blocks |
| 14 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV0.5) - Verification of Vickers hardness testing machines (indirect Verification) | HV 0.5 | 3.5% | Using Reference standard Hardness blocks & Vickers |
| 15 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV1.0) - Verification of Vickers hardness testing machines (indirect Verification) | HV 1.0 | 4.1% | Using Reference standard Hardness blocks & Vickers |
| 16 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV10.0) - Verification of Vickers hardness testing machines (indirect Verification) | HV10 | 2.2% | Using Reference standard Hardness blocks & Vickers |



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|------|---|---|---|--|--|
| 17 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV30.0) - Verification of Vickers hardness testing machines (indirect Verification) | HV30 | 1.5% | Using Reference standard Hardness blocks & Vickers |
| 18 | MECHANICAL- HARDNESS TESTING MACHINES | Hardness (HV5.0) - Verification of Vickers hardness testing machines (indirect Verification) | HV 5.0 | 2.5% | Using Reference standard Hardness blocks & Vickers |
| 19 | MECHANICAL- IMPACT TESTING MACHINE | Verification of Impact Testing Machine (Charpy ,Izod and Tensile Impact) by Direct Verification for Plastic Material | 0J to 50.0J | 0.46 % | Load cell, Clinometer, Bevel Protractor, Stop Watch, And Other Gauges |
| 20 | MECHANICAL- IMPACT TESTING MACHINE | Verification of Impact Testing Machine (Charpy and Izod) by Direct Verification for Metallic Material | 0 J to 750J | 0.46 % | Load cell, Clinometer, Bevel Protractor, Stop Watch, And Other Gauges |
| 21 | MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE | Force verification of static un-iaxial testing machine in tension and compression | 0.1 N to 100 N | 0.20 % | Using Dead weights |
| 22 | MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE | Force verification of static uni-axial testing machine in tension and compression | 100 N to 600000 N | 0.20 % | Using Load cell (class 0 & class 0.5) |