# National Accreditation Board for Testing and Calibration Laboratories

## SCOPE OF ACCREDITATION

**Laboratory Name :** CEMA TESTING LABORATORY, 28, AYODHYA NAGAR, NAGPUR, MAHARASHTRA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-11250 **Page No** 1 of 14

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|---|---|---|---|---|
| Permanent Facility | | | | |
| 1 | CHEMICAL- BUILDING MATERIAL | Admixture | Ash Content | IS 9103 |
| 2 | CHEMICAL- BUILDING MATERIAL | Admixture | Chloride Content | IS 6925 |
| 3 | CHEMICAL- BUILDING MATERIAL | Admixture | Dry Material Content | IS 9103 |
| 4 | CHEMICAL- BUILDING MATERIAL | Admixture | pH | IS 9103 |
| 5 | CHEMICAL- BUILDING MATERIAL | Admixture | Relative Density | IS 9103 |
| 6 | CHEMICAL- BUILDING MATERIAL | Cement | Potassium Oxide | IS 4032 |
| 7 | CHEMICAL- BUILDING MATERIAL | Cement | Sodium Oxide | IS 4032 |
| 8 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Alumina | IS 4032 |
| 9 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Calcium Oxide | IS 4032 |
| 10 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Chloride | IS 4032 |
| 11 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Ferric Oxide | IS 4032 |
| 12 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Insoluble Residue | IS 4032 |
| 13 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Loss on Ignition | IS 4032 |
| 14 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Magnesia | IS 4032 |
| 15 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Silica | IS 4032 |
| 16 | CHEMICAL- BUILDING MATERIAL | Cement (OPC, PPC, PSC) | Sulpuric Anhydride | IS 4032 |
| 17 | CHEMICAL- BUILDING MATERIAL | Coarse Aggregate | Alkali Aggregate Reactivity (Dissolved Silica) | IS 2386 (Part 7) |
| 18 | CHEMICAL- BUILDING MATERIAL | Coarse Aggregate | Alkali Aggregate Reactivity (Reduction in Alkalinity) | IS 2386 (Part 7) |

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| 19 | CHEMICAL- BUILDING MATERIAL | Coarse Aggregate | Soundness by Sodium Sulphate Method | IS 2386 (Part 5) |
| 20 | CHEMICAL- BUILDING MATERIAL | Fine Aggregate | Alkali Aggregate Reactivity (Dissolved Silica) | IS 2386 (Part 7) |
| 21 | CHEMICAL- BUILDING MATERIAL | Fine Aggregate | Alkali Aggregate Reactivity (Reduction in Alkalinity) | IS 2386 (Part 7) |
| 22 | CHEMICAL- BUILDING MATERIAL | Fine Aggregate | Soundness by Sodium Sulphate Method | IS 2386 (Part 5) |
| 23 | CHEMICAL- BUILDING MATERIAL | Fly ash | Aluminium Oxide | IS 1727 |
| 24 | CHEMICAL- BUILDING MATERIAL | Fly ash | Chloride | IS 4032 |
| 25 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Iron Oxide | IS 1727 |
| 26 | CHEMICAL- BUILDING MATERIAL | Fly ash | Loss on Ignition | IS 1727 |
| 27 | CHEMICAL- BUILDING MATERIAL | Fly ash | Silica | IS 1727 |
| 28 | CHEMICAL- BUILDING MATERIAL | Fly ash | Sulphiric Anhydride | IS 1727 |
| 29 | CHEMICAL- BUILDING MATERIAL | Silica Fume | Loss on Ignition | IS 1727 |
| 30 | CHEMICAL- BUILDING MATERIAL | Silica Fume | Moisture Content | IS 15388 |
| 31 | CHEMICAL- BUILDING MATERIAL | Silica Fume | Silicon Dioxide (SiO2) | IS 1727 |
| 32 | CHEMICAL- SOIL AND ROCK | Soil | Acid Soluble Chloride | BS 1377 (Part 3) |
| 33 | CHEMICAL- SOIL AND ROCK | Soil | Organic Matter | IS 2720 (Part 22) |
| 34 | CHEMICAL- SOIL AND ROCK | Soil | pH | IS 2720 (Part 26) |
| 35 | CHEMICAL- SOIL AND ROCK | Soil | Sulphate as SO3 | IS 2720 (Part 27) |
| 36 | CHEMICAL- WATER | Water for Construction Purpose | Chloride | IS 3025 (Part 32) |
| 37 | CHEMICAL- WATER | Water for Construction Purpose | Inorganic Matter | IS 3025 (Part 18) |
| 38 | CHEMICAL- WATER | Water for Construction Purpose | Organic Matter | IS 3025 (Part 18) |

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| 39 | CHEMICAL- WATER | Water for Construction Purpose | pH | IS 3025 (Part 11) |
| 40 | CHEMICAL- WATER | Water for Construction Purpose | Sulphate as SO3 | IS 3025 (Part 24) |
| 41 | CHEMICAL- WATER | Water for Construction Purpose | Volume of 0.02 N H2SO4 used to Neutralize 100 ml of sample (Alkalinity) | IS 3025 (Part 23) |
| 42 | CHEMICAL- WATER | Water for Construction Purpose | Volume of 0.02 N NaOH used to Neutralize 100 ml of Sample (Acidity) | IS 3025 (Part 22) |
| 43 | MECHANICAL- BUILDINGS MATERIALS | Acid Resistant Bricks | Acid Resistance | IS 4860 |
| 44 | MECHANICAL- BUILDINGS MATERIALS | Acid Resistant Bricks | Compression Strength | IS 4860 |
| 45 | MECHANICAL- BUILDINGS MATERIALS | Acid Resistant Bricks | Flexural Strength | IS 4860 |
| 46 | MECHANICAL- BUILDINGS MATERIALS | Acid Resistant Bricks | Water Absorption | IS 4860 |
| 47 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Absolute Viscosity | IS 1206 (Section 2) |
| 48 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Ductility | IS 1208 |
| 49 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Flash Point | IS 1209 |
| 50 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Kinematic Viscosity | IS 1206 (Section 3) |
| 51 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Penetration | IS 1203 |
| 52 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Softening Point | IS 1205 |
| 53 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Specific Gravity | IS 1202 |
| 54 | MECHANICAL- BUILDINGS MATERIALS | Bitumen | Weight Loss on Heating | IS 1212 |
| 55 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Ductility of Residue | IS 1208 |
| 56 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Penetration on Residue | IS 1203 |
| 57 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Residue on 600 micron IS Sieve | IS 8887 (Annexure B) |

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| 58 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Solubility in Trichloroethylene | IS 8887 |
| 59 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Stability to mix with Cement | IS 8887 (Annexure G) |
| 60 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Storage Stability after 24 hours | IS 8887 (Annexure D) |
| 61 | MECHANICAL- BUILDINGS MATERIALS | Bitumen Emulsion | Test on Residue - Residue by Evaporation | IS 8887 (Annexure J) |
| 62 | MECHANICAL- BUILDINGS MATERIALS | Bituminous Mix | Binder Content | ASTM D2172 |
| 63 | MECHANICAL- BUILDINGS MATERIALS | Bituminous Mix | Marshall Flow | ASTM D6927 |
| 64 | MECHANICAL- BUILDINGS MATERIALS | Bituminous Mix | Marshall Stability | ASTM D6927 |
| 65 | MECHANICAL- BUILDINGS MATERIALS | Burnt Clay Bricks | Compressive Strength | IS 3495 (Part 1) |
| 66 | MECHANICAL- BUILDINGS MATERIALS | Burnt Clay Bricks | Dimension (Height) | IS 1077 |
| 67 | MECHANICAL- BUILDINGS MATERIALS | Burnt Clay Bricks | Dimension (Length) | IS 1077 |
| 68 | MECHANICAL- BUILDINGS MATERIALS | Burnt Clay Bricks | Dimension (Width) | IS 1077 |
| 69 | MECHANICAL- BUILDINGS MATERIALS | Burnt Clay Bricks | Efflorescence | IS 3495 (Part 3) |
| 70 | MECHANICAL- BUILDINGS MATERIALS | Burnt Clay Bricks | Water Absorption | IS 3495 (Part 2) |
| 71 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC) | Fineness by Blaine Air Permeability Method | IS 4031 (Part 2) |
| 72 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Compressive Strength | IS 4031 (Part 6) |
| 73 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Density | IS 4031 (Part 11) |
| 74 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Fineness by Dry Sieving | IS 4031 (Part 1) |
| 75 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Setting Time (Final) | IS 4031 (Part 5) |
| 76 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Setting Time (Initial) | IS 4031 (Part 5) |

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| 77 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Soundness by Le-Chatelier Method | IS 4031 (Part 3) |
| 78 | MECHANICAL- BUILDINGS MATERIALS | Cement (OPC, PPC, SPC) | Standard Consistency | IS 4031 (Part 4) |
| 79 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | 10 % Fines Value | IS 2386 (Part 4) |
| 80 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Abrasion Value (Los Angles) | IS 2386 (Part 4) |
| 81 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Bulk Density | IS 2386 (Part 3) |
| 82 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Crushing Value | IS 2386 (Part 4) |
| 83 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Elongation Index | IS 2386 (Part 1) |
| 84 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Flakiness Index | IS 2386 (Part 1) |
| 85 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Impact Value | IS 2386 (Part 4) |
| 86 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Impact Value (Soft Coarse Aggregate) | IS 5640 |
| 87 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Sieve Analysis (Grading) (Sieve Size: 4.75 mm to 63 mm) | IS 2386 (Part 1) |
| 88 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Specific Gravity | IS 2386 (Part 3) |
| 89 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Stripping Value Test | IS 6241 |
| 90 | MECHANICAL- BUILDINGS MATERIALS | Coarse Aggregate | Water Absorption | IS 2386 (Part 3) |
| 91 | MECHANICAL- BUILDINGS MATERIALS | Concrete Beam | Flexural Strength | IS 516 |
| 92 | MECHANICAL- BUILDINGS MATERIALS | Concrete Cube/ Core | Compressive Strength | IS 516 |
| 93 | MECHANICAL- BUILDINGS MATERIALS | Fine Aggregate | Air Voids | IS 2386 (Part 3) |
| 94 | MECHANICAL- BUILDINGS MATERIALS | Fine Aggregate | Bulk Density | IS 2386 (Part 3) |
| 95 | MECHANICAL- BUILDINGS MATERIALS | Fine Aggregate | Materials Finer than 75 micron | IS 2386 (Part 1) |

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|---|---|---|---|---|
| 96 | MECHANICAL- BUILDINGS MATERIALS | Fine Aggregate | Sieve Analysis (Grading) (Sieve Size: 75 µm to 4.75 mm) | IS 2386 (Part 1) |
| 97 | MECHANICAL- BUILDINGS MATERIALS | Fine Aggregate | Specific Gravity | IS 2386 (Part 3) |
| 98 | MECHANICAL- BUILDINGS MATERIALS | Fine Aggregate | Water Absorption | IS 2386 (Part 3) |
| 99 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Final Setting Time | IS 4031 (Part 5) |
| 100 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Initial Setting Time | IS 4031 (Part 5) |
| 101 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Moisture Content | IS 3812 (Part 1) |
| 102 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Residue on 45 micron (Wet Sieving) | IS 1727 |
| 103 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Soundness by Le-Chatelier | IS 4031 (Part 3) |
| 104 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Specific Gravity | IS 1727 |
| 105 | MECHANICAL- BUILDINGS MATERIALS | Fly Ash | Specific Surface by Blaine Air Method | IS 1727 |
| 106 | MECHANICAL- BUILDINGS MATERIALS | Fly ash Bricks | Compressive Strength | IS 3495 (Part 1) |
| 107 | MECHANICAL- BUILDINGS MATERIALS | Fly ash Bricks | Dimension (Height) | IS 13757 |
| 108 | MECHANICAL- BUILDINGS MATERIALS | Fly ash Bricks | Dimension (Length) | IS 13757 |
| 109 | MECHANICAL- BUILDINGS MATERIALS | Fly ash Bricks | Dimension (Width) | IS 13757 |
| 110 | MECHANICAL- BUILDINGS MATERIALS | Fly ash Bricks | Efflorescence Test | IS 3495 (Part 3) |
| 111 | MECHANICAL- BUILDINGS MATERIALS | Fly ash Bricks | Water Absorption | IS 3495 (Part 2) |
| 112 | MECHANICAL- BUILDINGS MATERIALS | Precast Concrete Paving Block | Compressive Strength | IS 15658 |
| 113 | MECHANICAL- BUILDINGS MATERIALS | Precast Concrete Paving Block | Dimension (L x W x H) | IS 15658 |
| 114 | MECHANICAL- BUILDINGS MATERIALS | Precast Concrete Paving Block | Water Absorption | IS 15658 |

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|---|---|---|---|---|
| 115 | MECHANICAL- BUILDINGS MATERIALS | Tiles (Ceramic/ Vitrified) | Water Absorption | IS 13630 (Part 2) |
| 116 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Round and Square Bar) | Dimension- Diameter & Side Width | IS 1732 |
| 117 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloy, Ti-Ti Alloy | Tensile Test (0.2% PS) | IS 1608 (Part 1) |
| 118 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt & Stud) | Tensile Test (% E) | ISO 898 (Part 1) |
| 119 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt & Stud) | Tensile Test (% RA) | IS 1367 (Part 3) |
| 120 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt & Stud) | Tensile Test (% RA) | ISO 898 (Part 1) |
| 121 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt & Stud) | Tensile Test (UTS) | IS 1367 (Part 3) |
| 122 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt & Stud) | Tensile Test (UTS) | ISO 898 (Part 1) |
| 123 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt & Stud) | Tensile Test (YS) | IS 1367 (Part 3) |
| 124 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt) | Wedge Test | IS 1367 (Part 3) |
| 125 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt, Stud & Nuts) | Proof Load Test | IS 1367 (Part 3) |
| 126 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Bolt, Stud & Nuts) | Proof Load Test | IS 1367 (Part 6) |
| 127 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Nut) | Rockwell Hardness (HRC) | ISO 898-2 |
| 128 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Fasteners (Nut) | Rockwell Hardness (HRC) | IS 1367 (Part 6) |

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| 129 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products | Charpy Impact Test | IS 1757 (Part 1) |
| 130 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products | Izod Impact Test | IS 1598 |
| 131 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Brinell Hardness Test (10 mm/ 3000 kgf) | ASTM E10 |
| 132 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Brinell Hardness Test (10 mm/3000 kgf) | IS 1500 (Part 1 & 2) |
| 133 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Brinell Hardness Test (5 mm/750 kgf) | ASTM E10 |
| 134 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Izod Impact Test | IS 1598 |
| 135 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Rockwell Hardness Test (HRBW) | ASTM E18 |
| 136 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Rockwell Hardness Test (HRBW) | IS 1586 (Part 1) |
| 137 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Rockwell Hardness Test (HRC) | ASTM E18 |
| 138 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products - Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Rockwell Hardness Test (HRC) | IS 1586 (Part 1) |
| 139 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous & Non-Ferrous Materials & Products- Steel, Steel Alloy, Cast Iron, Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloys, Ti-Ti Alloys | Brinell Hardness Test (5 mm/ 750 kgf) | IS 1500 (Part 1) |
| 140 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Materials & Products - Steel, Steel Alloy, S.S. | Rockwell Hardness Test (HRBW) | ASTM A370 |
| 141 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Materials & Products- Steel, Steel Alloy, S.S. | Rockwell Hardness Test (HRC) | ASTM A370 |
| 142 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Product - Steel, Steel Alloy, S.S | Brinell Hardness Test (5 mm/750 kgf) | ASTM A370 |

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| 143 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Product - Steel, Steel Alloy, S.S. | Brinell Hardness Test (10 mm/3000 kgf) | ASTM A370 |
| 144 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Products - Steel, Steel Alloy, Cast Iron | Tensile Test (% E) | IS 1608 (Part 1) |
| 145 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Products - Steel, Steel Alloy, Cast Iron | Tensile Test (% RA) | IS 1608 (Part 1) |
| 146 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Products - Steel, Steel Alloy, Cast Iron | Tensile Test (0.1% PS) | IS 1608 (Part 1) |
| 147 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Products - Steel, Steel Alloy, Cast Iron | Tensile Test (UTS) | IS 1608 (Part 1) |
| 148 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Ferrous Products - Steel, Steel Alloy, Cast Iron | Tensile Test (YS) | IS 1608 (Part 1) |
| 149 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Flat/Pack Washer | Dimension (Diameter, Thickness) | BS 4320 |
| 150 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Flat/Pack Washer | Dimension (Diameter, Thickness) | IS 2016 |
| 151 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Flat/Pack Washer | Dimension (Diameter, Thickness) | IS 5369 |
| 152 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Bend Test | IS 1599 |
| 153 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Re-bend Test | IS 1786 |
| 154 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Tensile Test (% E) | IS 1608 (Part 1) |
| 155 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Tensile Test (UTS) | IS 1608 (Part 1) |
| 156 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Tensile Test (YS) | IS 1608 (Part 1) |

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| 157 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Dimension (Length, Diameter) | IS 1786 |
| 158 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Mass/ unit Length | IS 1786 |
| 159 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High Strength Deformed Steel Bars, Reinforcement Bar, TMT | Tensile Test ( 0.2% PS) | IS 1608 (Part 1) |
| 160 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Beam, Column, Channel, Angle) | Dimension - Angle | IS 808 |
| 161 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Beam, Column, Channel, Angle) | Dimension - Linear | IS 808 |
| 162 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Beam, Column, Channel, Angle) | Dimension - Radius | IS 808 |
| 163 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Beam, Column, Channel, Angle) | Mass per meter | IS 808 |
| 164 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Bulb Angle) | Dimension - Linear | IS 1252 |
| 165 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Bulb Angle) | Mass per meter | IS 1252 |
| 166 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Channel Section) | Dimension - Angle | IS 3954 |
| 167 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Channel Section) | Dimension - Linear | IS 3954 |
| 168 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Channel Section) | Dimension - Radius | IS 3954 |
| 169 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Channel Section) | Mass per meter | IS 3954 |
| 170 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Parallel Beam and Column Section) | Dimension - Linear | IS 12778 |

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|---|---|---|---|---|
| 171 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Parallel Beam and Column Section) | Dimension - Radius | IS 12778 |
| 172 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Parallel Beam and Column Section) | Mass per meter | IS 12778 |
| 173 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Plate, Sheet Strips and Flats) | Dimension - Length | IS 1730 |
| 174 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Plate, Sheet Strips and Flats) | Dimension - Thickness | IS 1730 |
| 175 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Plate, Sheet Strips and Flats) | Dimension - Width | IS 1730 |
| 176 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Plate, Sheet, Strips and Flats) | Mass per meter | IS 1730 |
| 177 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hot Rolled Steel (Round and Square Bar) | Mass per meter | IS 1732 |
| 178 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Metal and Alloys (Plate, Rod & Sheet) | Bend Test | ASTM A370 |
| 179 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Metal and Alloys (Plate, Rod & Sheet) | Bend Test | IS 1599 |
| 180 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Non-Ferrous Products - Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloy, Ti-Ti Alloy | Tensile Test (% E) | IS 1608 (Part 1) |
| 181 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Non-Ferrous Products - Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloy, Ti-Ti Alloy | Tensile Test (% RA) | IS 1608 (Part 1) |
| 182 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Non-Ferrous Products - Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloy, Ti-Ti Alloy | Tensile Test (0.1% PS) | IS 1608 (Part 1) |
| 183 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Non-Ferrous Products - Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloy, Ti-Ti Alloy | Tensile Test (UTS) | IS 1608 (Part 1) |
| 184 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Non-Ferrous Products - Cu-Cu Alloy, Al-Al Alloy, Ni-Ni Alloy, Ti-Ti Alloy | Tensile Test (YS) | IS 1608 (Part 1) |

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|---|---|---|---|---|
| 185 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Dimension (Diameter, Thickness, Width, Free Height) | BS 4464 |
| 186 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Dimension (Diameter, Thickness, Width, Free Height) | DIN-128 |
| 187 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Dimension (Diameter, Thickness, Width, Free Height) | IS 3063 |
| 188 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Permanent Load Test | BS 4464 |
| 189 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Permanent Load Test | DIN 267 - 5 |
| 190 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Permanent Load Test | IS 3063 |
| 191 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Permanent Set Test | IS 3063 |
| 192 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Twist Test | BS 4464 |
| 193 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Twist Test | DIN-127 |
| 194 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Spring Washer | Twist Test | IS 3063 |
| 195 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Steel, Steel Alloy, Cast Iron | Tensile Test (0.2% PS) | IS 1608 (Part 1) |
| 196 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Steel, Steel Alloy, Cast Iron | Tensile Test (YS) | ISO 898 (Part 1) |
| 197 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Weld Metal (Ferrous) | Face Bend (Butt Weld) | ASME Section IX (Clause 462.3) |
| 198 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Weld Metal (Ferrous) | Root Bend (Butt Weld) | ASME Section IX (Clause 462.3) |

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|---|---|---|---|---|
| 199 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Weld Metal (Ferrous) | Side Bend (Butt Weld) | ASME Section IX (Clause 462.2) |
| 200 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Welded Metal | Tensile Test (UTS) | ASME Section IX |
| 201 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Welded Metal | Tensile Test (UTS) | BS EN ISO 15614 |
| 202 | MECHANICAL-METALLOGRAPHY TEST | Ferrous Products - Steel, Steel Alloy, Cast Iron | Coating Thickness Measurement (By Microscopic Method) | IS 3203 |
| 203 | MECHANICAL-METALLOGRAPHY TEST | Ferrous Products - Steel, Steel Alloy, Cast Iron | Coating Thickness Measurement (by Magnetic Method) | IS 3203 |
| 204 | MECHANICAL-METALLOGRAPHY TEST | Ferrous Products - Steel, Steel Alloy, Cast Iron | Micro Examination (By Microscope) | ASM Volume 9 |
| 205 | MECHANICAL-METALLOGRAPHY TEST | Metal and Alloy | Coating Thickness Measurement (by Microscopic Method) | ASTM B487 |
| 206 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | California Bearing Ratio | IS 2720 (Part 16) |
| 207 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Free Swell Index | IS 2720 (Part 40) |
| 208 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Grain Size Analysis (Sieve Size: 2 µm to 63 mm) | IS 2720 (Part 4) |
| 209 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Heavy Compaction (MDD) | IS 2720 (Part 8) |
| 210 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Heavy Compaction (OMC) | IS 2720 (Part 8) |
| 211 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Light Compaction (MDD) | IS 2720 (Part 7) |
| 212 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Light Compaction (OMC) | IS 2720 (Part 7) |
| 213 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Liquid Limit | IS 2720 (Part 5) |
| 214 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Moisture/ Water Content | IS 2720 (Part 2) |
| 215 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Plastic Limit | IS 2720 (Part 5) |

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|---|---|---|---|---|
| 216 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Shrinkage Limit | IS 2720 (Part 6) |
| 217 | MECHANICAL- SOIL AND ROCK | Soil/ Murrum | Specific Gravity | IS 2720 (Part 3) |
| 218 | MECHANICAL- SOIL AND ROCK | Stone/ Rock | Saturated/ Dry Density | IS 13030 |
| 219 | MECHANICAL- SOIL AND ROCK | Stone/ Rock | Uniaxial Compressive Strength | IS 9143 |
| 220 | MECHANICAL- SOIL AND ROCK | Stone/ Rock | Water Content | IS 13030 |
| 221 | MECHANICAL- SOIL AND ROCK | Stones/ Rock | Porosity | IS 13030 |
| 222 | MECHANICAL- WOOD AND WOOD PRODUCTS | Particle Board | Density | IS 2380 (Part 3) |
| 223 | MECHANICAL- WOOD AND WOOD PRODUCTS | Particle Board | Moisture Content | IS 2380 (Part 3) |
| 224 | MECHANICAL- WOOD AND WOOD PRODUCTS | Particle Board | Swelling in Water | IS 2380 (Part 17) |
| 225 | MECHANICAL- WOOD AND WOOD PRODUCTS | Particle Board | Water Absorption | IS 2380 (Part 16) |
| 226 | MECHANICAL- WOOD AND WOOD PRODUCTS | Timber | Moisture Content | IS 1708 (Part 1) |
| 227 | MECHANICAL- WOOD AND WOOD PRODUCTS | Timber | Specific Gravity | IS 1708 (Part 2) |