National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : CENTRAL MATERIAL TECHNOLOGY LABORATORY, CENTRAL RAILWAY LOCOMOTIVE WORKSHOP, DR. BABASHEB AMBEDKAR ROAD, WARD F SOUTH, PAREL, MUMBAI, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 01/06/2021 to 31/05/2023 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	BIOLOGICAL- ENVIRONMENT AND POLLUTION	EFFLUENT WASTE WATER	FAECAL COLIFORM BACTERIAL COUNT	APHA 23rd Edition 9221 E
2	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	COPPER	IS 11035, IS 7658
3	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	IRON	IS 11035, IS 7658
4	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	MAGNESIUM	IS 11035, IS 7658
5	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	MANGNESE	IS 11035, IS 7658
6	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	SILICON	IS 11035, IS 7658
7	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	TITANIUM	IS 11035, IS 7658
8	CHEMICAL- METALS & ALLOYS	ALUMINIUM ALLOY	ZINC	IS 11035, IS 7658
9	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	ALUMINIUM	BS EN 15079
10	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	BISMUTH	BS EN 15079
11	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	COPPER	BS EN 15079
12	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	IRON	BS EN 15079
13	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	LEAD	BS EN 15079
14	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	NICKEL	BS EN 15079
15	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	SILICON	BS EN 15079
16	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	TIN	BS EN 15079
17	CHEMICAL- METALS & ALLOYS	COPPER ALLOY	ZINC	BS EN 15079
18	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	CARBON	IS 8811

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19	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	CHROMIUM	IS 8811
20	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	COBALT	IS 8811
21	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	COPPER	IS 8811
22	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	MANGANESE	IS 8811
23	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	MOLYBDENUM	IS 8811
24	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	NICKEL	IS 8811
25	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	PHOSPHOROUS	IS 8811
26	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	SILICON	IS 8811
27	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	SULPHUR	IS 8811
28	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	TITANIUM	IS 8811
29	CHEMICAL- METALS & ALLOYS	LOW ALLOY STEEL	VANADIUM	IS 8811
30	CHEMICAL- METALS & ALLOYS	Stainless Steel	CARBON	IS 9879
31	CHEMICAL- METALS & ALLOYS	Stainless Steel	CHROMIUM	IS 9879
32	CHEMICAL- METALS & ALLOYS	Stainless Steel	COPPER	IS 9879
33	CHEMICAL- METALS & ALLOYS	Stainless Steel	MANGNESE	IS 9879
34	CHEMICAL- METALS & ALLOYS	Stainless Steel	MOLYBDENUM	IS 9879
35	CHEMICAL- METALS & ALLOYS	Stainless steel	NICKEL	IS 9879
36	CHEMICAL- METALS & ALLOYS	Stainless Steel	PHOSPHOROUS	IS 9879
37	CHEMICAL- METALS & ALLOYS	Stainless Steel	SILICON	IS 9879

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38	CHEMICAL- METALS & ALLOYS	Stainless Steel	SULPHUR	IS 9879
39	CHEMICAL- METALS & ALLOYS	TOOL STEEL	CARBON	JIS G 1253
40	CHEMICAL- METALS & ALLOYS	TOOL STEEL	CHROMIUM	JIS G 1253
41	CHEMICAL- METALS & ALLOYS	TOOL STEEL	COBALT	JIS G 1253
42	CHEMICAL- METALS & ALLOYS	TOOL STEEL	MANGNESE	JIS G 1253
43	CHEMICAL- METALS & ALLOYS	TOOL STEEL	MOLYBDENUM	JIS G 1253
44	CHEMICAL- METALS & ALLOYS	TOOL STEEL	NICKEL	JIS G 1253
45	CHEMICAL- METALS & ALLOYS	TOOL STEEL	SILICON	JIS G 1253
46	CHEMICAL- METALS & ALLOYS	TOOL STEEL	SULPHUR	JIS G 1253
47	CHEMICAL- METALS & ALLOYS	TOOL STEEL	TUNGSTEN	JIS G 1253
48	CHEMICAL- METALS & ALLOYS	TOOL STEEL	VANADIUM	JIS G 1253
49	CHEMICAL- POLLUTION & ENVIRONMENT	WASTE WATER	CHEMICAL OXYGEN DEMAND (COD)	IS 3025 (Part 58)
50	CHEMICAL- POLLUTION & ENVIRONMENT	WASTE WATER	pH	IS 3025 (Part 11)
51	CHEMICAL- POLLUTION & ENVIRONMENT	WASTE WATER	TOTAL DISSOLVED SOLIDS (TDS)	IS 3025 (Part 16)
52	CHEMICAL- POLLUTION & ENVIRONMENT	WASTE WATER	TOTAL SOLIDS	IS 3025 (Part 15)
53	CHEMICAL- POLLUTION & ENVIRONMENT	WASTE WATER	VOLATILE RESIDUE	IS 3025 (Part 18)
54	MECHANICAL- MECHANICAL PROPERTIES OF METALS	FERROUS & NONFERROUS METALS	BRINELL HARDNESS (HBW10/500)	IS 1500 PART 1
55	MECHANICAL- MECHANICAL PROPERTIES OF METALS	FERROUS MATERIALS	% REDUCTION IN AREA	IS 1608 PART 1

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56	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS MATERIALS	BRINELL HARDNESS (HBW 10/3000)	IS 1500 PART 1
57	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS MATERIALS	BRINELL HARDNESS (HBW 5/750)	IS 1500 PART 1
58	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS MATERIALS	ROCKWELL HARDNESS TEST (HRA)	IS 1586 PART 1
59	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	% OFFSET PROOF STRESS	IS 1608 PART 1
60	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	BEND TEST	IS 1599
61	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	ELONGATION	IS 1608 PART 1
62	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	ROCKWELL HARDNESS TEST (HRBW)	IS 1586 PART 1
63	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	ROCKWELL HARDNESS TEST (HRC)	IS 1586 PART 1
64	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	UTS	IS 1608 PART 1
65	MECHANICAL-MECHANICAL PROPERTIES OF METALS	FERROUS METALS	YIELD STRRSS	IS 1608 PART 1
66	MECHANICAL-METALLOGRAPHY TEST	STEEL	AVERAGE GRAIN SIZE BY MICROSCOPIC METHOD	IS 4748
67	MECHANICAL-METALLOGRAPHY TEST	STEEL	DECARBURIZATION DEPTH BY MICROSCOPIC METHOD	IS 6396
68	MECHANICAL-METALLOGRAPHY TEST	STEEL	INCLUSION RATING	IS 4163
69	MECHANICAL-METALLOGRAPHY TEST	STEEL	MACRO ETCH TESTING	IS 13015
70	MECHANICAL-METALLOGRAPHY TEST	STEEL	MICROSTRUCTURE	ASM HANDBOOK VOL.9

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71	MECHANICAL-METALLOGRAPHY TEST	STEEL	VISUAL EXAMINATION	BS EN 13018 & ASM HANDBOOK VOL.12
72	NON-DESTRUCTIVE-METALS & ALLOYS	ROLLING STOCK AXLES	UST (CONTACT & BACKWALL METHOD)	ASTM E 114 & ASTM E 587 & Relevant Code of Procedure (COP) isssued by Railway Regulatory Board -RDSO / Lucknow.
73	NON-DESTRUCTIVE-METALS & ALLOYS	WELDED JOINTS AND OTHER NON WELDED COMPONENTS	LPT (FLUORESCENT / NON FLUORESCENT, SOLVENT & WATER WASHABLE TEST)	IS 3658
74	NON-DESTRUCTIVE-METALS & ALLOYS	WELDED JOINTS, GEAR, PINION, BUFFER CASING & OTHER NON WELDED COMPONENTS	MPT (USING MAGNETIC YOKE VISIBLE WET)	IS 3703