National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : FASTENERS TESTING LABORATORY, SUNDRAM FASTENERS LIMITED, MITTAMANDGAPET, VILLUPURAM, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6057 **Page No** 1 of 2

Validity 01/08/2022 to 31/07/2024 **Last Amended on** 19/08/2022

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	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Fasteners	Coating thickness (Magnetic Method)	ASTM B499
2	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Fasteners - Bolt, screw & stud	Torque tension test - clamping force at specified torque (Torque - 1500 Nm to 15000 Nm)	ISO 16047
3	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Fasteners - Bolt, screw & stud	Torque tension test - clamping force at specified torque (Torque - 200 Nm to 2000 Nm)	ISO 16047
4	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners - Bolt & screw	Tensile test under wedge loading	ISO 898-1 (CI 9.1)
5	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners - Bolt, screw & stud	Proof load test	ISO 898-1 (CI 9.6)
6	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners - bolt, screw and stud	Axial tensile test on full fasteners	ISO 898-1 (CI 9.2&9.5)
7	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners - Nut	Proof Load Test	ISO 898-2 (CI 9.1)
8	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners of bolt, screw, stud & nuts	Presence of decarburization & carburization by micro hardness method	ISO 898-1 (CI.9.10 & 9.11)/ ASTM F2328
9	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & fasteners	Rockwell hardness	ASTM E18
10	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & fasteners (Machined specimen)	% Elongation	898-1 (CI 9.7)
11	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & fasteners (machined specimen)	% Reduction in area	ISO 898-1 (CI 9.7)
12	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & fasteners (machined specimen)	0.2% proof stress (Rp)	ISO 898-1 (CI 9.7)
13	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & fasteners (machined specimen)	Tensile strength	ISO 898-1 (CI 9.7)

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14	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Brinell hardness (Load 5/750)/ 1HBW	ISO 6506-1
15	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Brinell hardness (Load 10/3000)/ 1 HBW	ISO 6506-1
16	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Charpy impact V notch test	ISO 148-1 (KV2)
17	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Micro Vickers hardness (0.3 kgf)	ASTM E384
18	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Micro Vickers hardness (0.5 kgf)	ASTM E384
19	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Vickers hardness (10 kgf)	ISO 6507-1
20	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Vickers hardness (30 kgf)	ISO 6507-1
21	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel semi's & steel fasteners	Vickers Hardness (5 kgf)	ISO 6507-1
22	MECHANICAL-METALLOGRAPHY TEST	Bolt, screw & stud	Laps on thread	ISO 6157-3 (Cl 3.6)
23	MECHANICAL-METALLOGRAPHY TEST	Bolt, screw, stud & nut	Depth of decarburization by microscopy method	ISO 898-1 (Cl.9.10.2)/ ASTM F2328
24	MECHANICAL-METALLOGRAPHY TEST	Steel semi's & steel fasteners	Grain size by comparison method	ASTM E112
25	MECHANICAL-METALLOGRAPHY TEST	Steel semi's & steel fasteners	Microstructural examination	ASM Handbook Vol 9
26	MECHANICAL-METALLOGRAPHY TEST	Steel semi's & steel fasteners	Steel inclusion rating	ASTM E45 (Method A)