Laboratory	**Technical Center, Sterling Tools Limited, 49 km, Mathura Road, Vill. Prithla, Distt. Palwal, Haryana**
Accreditation Standard	**ISO/IEC 17025: 2005**
Certificate Number	**TC-7604** **Page 1 of 1**
Validity	**25.07.2018 to 24.07.2020** **Last Amended on --**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection

MECHANICAL TESTING

I.	**MECHANICAL PROPERTIES OF METALS**			
1.	**Bolt, Screw, Stud and Nuts of the Ferrous Alloys**	Rockwell Hardness B–Scale C–Scale	IS 1586 (Part 1)	 20 HRC to 65 HRC 65 HRBW to100 HRBW
		Microvicker Hardness	IS 1501 (Part 1)	300 $HV_{0.3}$ to 700 $HV_{0.3}$ 300 HV_1 to 700 HV_1
		Tensile Strength	IS 1367 (Part 3)	12 kN to 600 kN
		Proof Load - (Bolt)	IS 1367 (Part 3)	Upto 0.1 mm
		% Elongation	IS 1367 (Part 3)	2 % to 25 %
		% Reduction Area	IS 1367 (Part 3)	2 % to 75 %
		Fatigue	DIN 969	25 kN to 225 kN / 0.47 N
		Torque Tension	ISO 16047	10 Nm to 1000 Nm 0 to 300 kN
II.	**METALLOGRAPHY TEST**			
1.	**Bolt, Screw, Stud and Nuts of the Ferrous Alloys**	Microstructure	ASM Handbook (Volume 9)	Qualitative (100X to 1000X)
		Decarburisation Depth	IS 6396 (by Microscopic Method)	0.01 mm to 1 mm (at 100X Magnification)
		Laps on Thread	IS 1367 (Part 9) (by Microscopic Method)	Qualitative (100X Magnification) (M5 to M24 Bolts)

Naveen Jangra
Convenor

Anuja Anand
Program Manager