Laboratory	**Sterling Tools Limited, 5-A, DLF Industrial Estate, Faridabad, Harayana**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Mechanical Testing**	**Issue Date**	**02.12.2016**
Certificate Number	**T-0994**	**Valid Until**	**01.12.2018**
Last Amended on	**09.12.2016**	**Page**	**1 of 1**

S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	**MECHANICAL PROPERTIES OF METALS**			
1.	**Bolt, Screw, Stud and Nut**	Rockwell Hardness "C" Scale	IS 1586 (Part 1): 2012	20 HRC to 70 HRC
		Rockwell Hardness "B" Scale	IS 1586 (Part 1): 2012	60 HRBW to 100 HRBW
		Vickers Hardness	IS 1501 (Part 1): 2013	50 HV to 550 HV (Load: 5 kg & 30 kg)
2.	**Bolt, Screw and Stud (Machined Test Piece)**	Tensile Strength	IS 1367 (Part 3): 2002 (RA 2013)	8 kN to 600 kN
		% Elongation	IS 1367 (Part 3): 2002 (RA 2013)	2 % to 25 %
		% Reduction Area	IS 1367 (Part 3): 2002 (RA 2013)	2 % to 75 %
		Charpy Impact Test (U-Notch)	IS 1499: 1977 (RA 2015)	Upto 300 J (Temperature.: Ambient)
3.	**Bolt, Screw And Stud (Full Size)**	Tensile Strength	IS 1367 (Part 3): 2002 (RA 2007)	8 kN to 600 kN
		Proof Load	IS 1367 (Part 3): 2002 (RA 2013)	Qualitative
II.	**METALLOGRAPHY TEST**			
1.	**Bolt, Screw, Stud and Nut**	Microstructure	ASM Handbook, Vol. 9: 2004	Qualitative
		Depth Of Decarburization	IS 6396: 2000 (RA 2012) (Microscopic Method)	0.01 mm to 1.0 mm (Magnification: 100X)
		Laps On Thread	IS 1367 (Part 9/Sec II): 1993 (RA 2014)	Qualitative (M 5 to M 24)
			ASTM F835: 2013	Qualitative (1/4 inch to 1 inch)

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