



NABL

SCOPE OF ACCREDITATION

Laboratory Crystal Metallurgical Services & Solutions, Hyderabad, Block No. 3A, Phase-V, IDA Cherlapally, E.C Nagar Junction Main Road, Dist. Rangareddy, Telangana

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Testing

Issue Date 20.10.2016

Certificate Number T-4203

Valid Until 19.10.2018

Last Amended on -

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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.	Ferrous & Non-Ferrous alloys	Rockwell Hardness Test	IS 1586 (Part 1): 2012 ASTM A 370: 2016 ASTM E 18: 2016	20 HRC to 80 HRC Load: 150 kgf Indenter: Diamond cone 20 HRBW to 90 HRBW Load: 100 kgf Indenter: 1/16" ball indenter
		Brinell Hardness Test	IS 1500 (Part 1): 2013 ASTM E 10: 2016 ASTM A370: 2016	50 HBW to 600 HBW Load: 187.5 kgf Indenter: 2.5 mm Ball indenter
2.	Ferrous Alloys	Charpy-'V' Notch	IS 1757 (Part 1): 2014	2 to 300 Joules Temperature : (-) 50 °C to 25 °C
		Izod Room	IS 1598: 1977	2 J to 170 J Temperature : 25(±)2° C
3.	Ferrous (Steel, Stainless Steel) & Non ferrous Materials: Aluminium Alloys, Nickel Alloys, Titanium Alloys	Avg. Grain Size By Comparison Chart Method Planimetric Method	ASTM E 112-13 (Plate I,II,III,IV) IS 4748: 2009	ASTM No. 1 to 10 100X
	Ferrous Materials (Steel)	Non-Metallic Inclusion Method 'A'	ASTM E 45 Method A IS 4163: 2010	Thin: 0.5 to 3 Heavy:0.5 to 3 100 x

Jitendra B. Vispute
Convenor

N. Venkateswaran
Program Manager



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4.	Ferrous (Steel, Stainless Steel) & Non ferrous Materials: Aluminium Alloys, Copper Alloys, Nickel Alloys, Titanium Alloys	Microstructure Examination	ASM Metal Hand Book-Vol-9- Metallography & Microstructure ASTM-E 407: 2015	100 x, 200 x, 500 x, 1000 x & 2000 x
		Macrostructure Examination	ASTM E340: 2016 ASTM-E-381-01	12.5 x to 50 x

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