

Laboratory Central Laboratory, Hindustan Aeronautics Limited (Koraput Division),
P.O. Sunabeda, District- Koraput, Odisha

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Testing **Issue Date** 29.10.2015

Certificate Number T-2409 **Valid Until** 28.10.2017

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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. METAL & METAL PRODUCTS				
1.	Metallic (Ferrous and Non-Ferrous) Materials at Controlled atmosphere Including Nimonic and Titanium Alloys	Tensile Testing UTS 0.2% Proof Stress % Elongation Reduction In Area	IS 1608: 2005 (RA 2012)	500 N to 10 KN & 10 KN to 100 KN 10 ~ 300 kg/mm ² (1~ 3000 Mpa) 10 ~ 300 kg/mm ² (1~ 3000 Mpa) 1 % to 50 % 1 % to 90 %
2.	Metals and Alloys (Ferrous & Non-Ferrous)	Hardness Test Vickers Rockwell Brinell	ASTM E 384 -11 ^{ε1} ASTM E 18: 2015 IS 1586 (Part 1): 2012 IS 1500 (Part 1): 2013	400 HV to 730 HV 0.5 30 HRC to 65 HRC 200 HBW to 400 HBW 10/3000 150 HBW to 300 HBW D5/750
3.	Metals and Alloys (Ferrous & Non-Ferrous)	Grain Size Measurement by Comparison Method Intercept Method	ASTM E 112: 2013 ASTM E 1382- 97 (Re approved 2010)	ASTM Grain Size. 00 to 10 / 100x Ferrous & Aluminium 75x-Copper 100x – Ferrous & Aluminium 75x-Copper
4.	Metals and Alloys (Ferrous)	Case Depth Measurement of Steel (Carburizing, Nitriding)	IS 6416 : 1988, (RA 2007)	0.05 mm to 1.5 mm (Microscopic Method) 0.1 mm to 1.5 mm (Traverse method)

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