

Laboratory	Ramkrishna Forgings Limited, Plot M6, Phase VI, Gamahria, Jamshedpur, Jharkhand		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	21.12.2013
Certificate Number	T-2102	Valid Until	20.12.2015
Last Amended on	07.01.2014	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
METAL & METAL PRODUCTS				
1.	Steel	Brinell Hardness	IS: 1500-2005	101BHN to 600BHN
		Rockwell hardness	IS: 1586-2000 (RA2006)	20HRC to 70HRC 20HRB to 1000HRB
		UTS	IS: 1608-2005	0 to 600kN
		Yield Strength	IS: 1608-2005	0 to 540kN
		% Elongation	IS: 1608-2005	-
		% Reduction in area	IS: 1608-2005	-
		Microstructural Examination	ASTM E3-95 ASM Handbook, VOL -9	50X, 100X, 200X, 400X and 1000X magnification
		Grain Size	IS: 4748-2009 ASTM E112-2010	ASTM No. 1 to 8
		Inclusion Rating	IS: 4163-2004 ASTM E45-2011A	ABCD in Thin & Thick series magnification 100x
		Macro Examination	IS: 7739 part V-1976, ASTM E381-2001 (RA 2006)	10x magnification
		Jominy Hardenability	IS: 3848-1981	Dia 25mm