Laboratory	**Material Testing Laboratory - KEC International Limited, B-190/215, MIDC Industrial Area, Butibori, Dist.- Nagpur, Maharashtra**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Mechanical Testing**	**Issue Date**	**13.01.2015**
Certificate Number	**T-3269**	**Valid Until**	**12.01.2017**
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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.	**MECHANICAL PROPERTIES OF MATERIALS**			
1.	**Structural Steel**	Yield Stress	IS 1608: 2005 (RA 2011) BSEN 10002-1:2001/ ASTM E8M-2013a	220 N/mm^2 to 540 N/mm^2 (12 kN to 600 kN)
		Tensile Strength		320 N/mm^2 to 680 N/mm^2 12 kN to 600 kN
		% Elongation		1 % to 50 %
		Bend	IS 1599:2012 ASTM A370-2014	2 mm to 40 mm thick 180^o bend Qualitative (Mandrel Diameters : 7. 5, 8, 9, 10. 5, 12, 13.5, 14, 15, 16, 16.5, 18, 19.5, 20, 21, 22.5, 24, 27, 28, 30, 32, 33, 37.5, 36, 40, 42, 45, 48, 60) mm
		Charpy Impact (V-notch)	IS 1757:1988 (RA 2009) BSEN 10025-2:2004 ASTM E23-2012c ASTM A370-2014	5 J to 300J (-20^{o}C)
		Weight per meter	IS 1786: 2008 (RA 2011) BSEN 10056-1:1999 ASTM A6M-2014	1 kg to 15 kg 1 kg/m to 150 kg/m
2.	**Galvanized Structural Steel** (Angle: (25 x 25 x 3) mm to (250 x 250 x35) mm Plate: (0.5 to 40) mm	Embrittlement	IS 2629:1985 (RA 2001) BSEN ISO 1461:2009 ASTM A143M-07(2014)	Qualitative

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	Galvanized Structural Steel (Angle: (25 x 25 x 3) mm to (250 x 250 x35) mm Plate: (0.5 to 40) mm	Adhesion	IS 2629:1985 (RA 2001) BSEN ISO 1461:2009 ASTM A123M-2013	Qualitative
		Zinc coating thickness	IS 4759:1996 (RA 2006) BSEN ISO 1461:2009 ASTM A123M-2013	23.4 µm to1015.7 µm
3.	**Overhead Line Structures**	Loading Test (Full scale)	IEC 60652 : 2002 IS 802 (Part III)-1978	Maximum Load 0.15 to160t per point; Maximum 52 points ; Width (Square-base) -1m x 1m to 35m x 35m; Width (Rectangular-base) - 4mx3m to 30mx24m; Uplift : 50 to1250t per leg; Pulley Levels (Longitudinal Mast): 25m,45m,65m, & 90m; Pulley Levels (Transverse Mast): 5.5m to 87.5m Maximum Height of Tower: 100m

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