

Laboratory Sterlite Power Transmission Ltd.-Testing Laboratory, Bhurkamunda,
PO-Kalimandir Road, Jharsuguda, Odisha

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5408

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Validity 31.03.2017 to 30.03.2019

Last Amended on 18.05.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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CHEMICAL TESTING

I.	METAL & ALLOYS			
1.	Galvanized Steel Wire	Mass of zinc	IS 6745 IEC 60888 ASTM B498 EN 50189	50 gm/m ² to 600 gm/m ²
2.	Galvanized Steel Wire	Uniformity of Zinc	IS:2633 EN 50189	Qualitative (1 dip/ min to 6 dip/ min)
3	Alluminium & Alluminium Alloy Conductor & Wire/Rod	Mg%	ASTM -E1251	0.005 % to 0.030 %
		Si%		0.045 % to 0.080%
		Fe%		0.055 % to 0.22%
		Cu%		0.012 % to 0.035%
		Ti%		0.012 % to 0.035%
		V%		0.015 % to 0.035%

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ELECTRICAL TESTING

I.	CONDUCTORS & CONDUCTING MATERIALS			
1.	Alluminium & Alluminium Alloy Conductor & Wire/Rod	DC Resistance	IS 398 (Pt. I),(Cl. 12.5) IS 398 (Pt. II),(Cl.13.6) IS 398 (Pt. 4), (Cl.12.4) IS 398 (Pt. 5), (Cl. 13.8) IEC 61089 , (Cl.6.2.2) ASTM B232 (Cl.11) ASTM B399, (Cl.11) EN 50182, (Cl.5.10)	0.35 mΩ to 19.999 mΩ

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MECHANICAL TESTING

I.	MECHANICAL PROPERTIES OF METALS			
1.	Aluminium & Aluminium Alloy Conductor and Wire/ Rod	a) Diameter	IS 398 (Part 1) IS 398 (Part 2)	2.5 mm to 15 mm
		b) Tensile (Breaking Load, %Elongation)	IS 398 (Part 4) IS 398 (Part 5)	01kN to 50 kN
		c) Lay Ratio		10 to 17
		d) Wrapping	IS 398 (Part 2)	1.5 mm to 5.0 mm
2.	Galvanized Steel Core / Wire	a) Diameter	IS 398 (Part 1) IS 398 (Part 2)	2.5 mm to 15 mm
		b) Tensile (Breaking Load, %Elongation)	IS 398 (Part 4) IS 398 (Part 5)	1kN to 50 kN
		c) Lay Ratio		13 to 30
		d) Torsion	IS 398 (Part 2)	3 to 50 turns
		e) Wrapping	IS 398 (Part 2)	1.5 mm to 5.0 mm