

QUALITY ASSURANCE PLAN
XLPE POWER CABLES (IS:7098/PART-I/88)

S.N.	Component	Characteristic	Category Checked	Type	Extent Of Check	Acceptance Method
RAW MATERIAL						
01.	Aluminum / Copper Conductor	Diameter	Major	Measurement Test	100%	IS:8130/84
		Annealing/Tensile Strength	Major	Measurement Test	100%	IS:8130/84
		Spec. Resistance	Critical	Electrical Test	100%	IS:8130/84
		Persulphate Test	Critical	Chemical Analysis	10%	IS:8130/84
02.	XLPE Compound PVC Compound	Physical Properties	Major	Physical Test	Supplier TC	IS:7098/1/88
		T.S. & Elongation	Major	Physical Test	10%	IS:5831/84
		Thermal Stability	Major	Chemical Test	10%	IS:5831/84
03.	Test On G.I.Wire	Dia Meter	Major	Measurement Test	100%	IS:3975/79
		T.S. & Elongation	Major	Physical Test	10%	IS:3975/79
		Torsion Test	Major	Measurement Test	10%	IS:3975/79
		Mass & Uniformity of Zinc Coating	Major	Chemical Test	10%	IS:3975/79
IN PROCESS INSPECTION						
01.	Conductor Stranding	No. Of Strand/Dia of Wire	Major	Counting/Measurement	100%	GTP & IS:7098/1/88
		Conductor Resistance	Major	Electrical	Setting Start & Finish Of Each Drum	IS:8130/84
02.	Insulation XLPE	Spark Test Eccentricity	Critical	Visual	100%	IS:7098/1/88
		Core Diameter	Major	Measurement	Setting Start & Finish Of Each Drum	IS:7098/1/88
		Thickness	Major	Measurement	- do -	IS:7098/1/88
03.	XLPE Curing	Temperature of Chamber	Critical	Thermal	Continuous	TCCPL Standard
		Duration of Curing	Major	Time	Continuous	TCCPL Standard
		Hot Set Test	Major	Thermal	10%	IS:7098/1/88
		T.S. & Elongation	Major	Measurement	10%	IS:7098/1/88
04.	Core Laying	Color Sequence	Major	Visual	Setting Start & Finish Of Each Drum	IS:7098/1/88
		Lay Direction/Lay Length	Major	Visual	Setting Start & Finish Of Each Drum	IS:7098/1/88
05.	Inner Sheath PVC Sheet [Type-ST1/ST2]	Thickness	Major	Measurement	Setting Start & Finish Of Each Drum	GTP & IS:7098/1/88
06.	Armouring	Armour Dimension	Major	Measurement	100%	GTP & IS:7098/1/88
		Lay Direction/Lay Length	Major	Visual	Setting Start	IS:7098/1/88
		High Voltage	Critical	Measurement	100%	IS:7098/1/88
07.	Outer Sheath PVC [Type ST1/ST2]	Thickness	Major	Measurement	Setting Start & Finish Of Each Drum	IS:7098/1/88
		Marking &/Embossing Color	Major Major	Visual Visual	Continuous Continuous	GTP & IS:7098/1/88 GTP & IS:7098/1/88
FINAL TESTING BY QUALITY CONTROL & INSPECTION						
01.	Testing On Cable	Routine Test	Critical	Electrical Test	100%	IS:7098/1/88
		Type Test	Critical	Test	10%	IS:7098/1/88
		Acceptance Test For Inspection	Critical	Test	As per IS	IS:7098/1/88
		1. Annealing Test [Cu]	Major	Physical Test	As per IS	IS:8130/84
		2. Tensile/Wrapping Test [Al]	Major	Physical Test	As per IS	IS:8130/84
		3. Conductor Resistance Test	Critical	Electrical Test	As per IS	IS:8130/84
		4. Test for Thickness of Ins. & Sheath	Major	Physical Test	As per IS	IS:7098/1/88
		5. Hot Set Test for Insulation	Major	Thermal Test	As per IS	IS:7098/1/88
		6. T. S. & Elongation of Ins. & Sheath	Major	Physical Test	As per IS	IS:7098/1/88
7. High Voltage Test	Critical	Electrical Test	As per IS	IS:7098/1/88		
		8. Insulation Resistance [VR]	Critical	Electrical Test	As per IS	IS:7098/1/88
02.	Packing	Drum	Major	Test	100%	Wood Should be free from Knot Free
		Dust Prevention	Major	Visual	100%	
		End Sealing Of Cable	Major	Visual	100%	

[GTP : General Technical Particulars]

T C COMMUNICATION PVT. LTD.,