

QUALITY ASSURANCE PLAN
POWER / CONTROL CABLES [IS:1554/PART-I/1988]

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.	PVC / HR Compound	Thermal Stability	Critical	Chemical Test	10%	IS:5831/84	
		T.S. & Elongation	Major	Physical 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:1554/I/88	
		Conductor Resistance	Major	Electrical	Setting Start & Finish Of Each Drum	IS:8130/84	
02.	Insulation PVC [Type - A / C]	Spark Test Eccentricity	Critical	Visual	100%	IS:1554/I/88	
		Core Diameter	Major	Measurement	Setting Start & Finish Of Each Drum	IS:1554/I/88	
03.	Core Laying	Thickness	Major	Measurement	- do -	GTP, IS:1554/I/88	
		Color Sequence	Major	Visual	Setting Start & Finish Of Each Drum	Uniform & IS:1554/I/88	
04.	Inner Sheath PVC [Type - ST1 / ST2]	Lay Direction/Lay Length	Major	Visual	Setting Start & Finish Of Each Drum	IS:1554/I/88	
		Thickness	Major	Measurement	Setting Start & Finish Of Each Drum	GTP, IS:1554/I/88	
05.	Armouring	Armour Dimension	Major	Measurement	100%	GTP, IS:1554/I/88	
		Lay Direction/Lay Length	Major	Visual	Setting Start	IS:1554/I/88	
		High Voltage	Critical	Measurement	100%	IS:1554/I/88	
06.	Outer Sheath PVC [Type - ST1 / ST2]	Thickness	Major	Measurement	Setting Start & Finish Of Each Drum	GTP, IS:1554/I/88	
		Marking &/Embossing Color	Major Major	Visual Visual	Continuous Continuous	GTP, IS:1554/I/88 GTP, IS:1554/I/88	
FINAL TESTING BY QUALITY CONTROL & INSPECTION							
01.	Testing On Cable	Routine Test	Critical	Electrical Test	100%	IS:1554/I/88	
		Type Test	Critical	Test	10%	IS:1554/I/88	
		Acceptance Test For Inspection					
		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. Insulation/I-Sheath/Outer Sheath Thickness Test	Major	Physical Test	As per IS	IS:1554/I/88	
		5. T. S. & Elongation of Ins. & Sheath	Major	Physical Test	As per IS	IS:1554/I/88	
		6. High Voltage Test	Critical	Electrical Test	As per IS	IS:1554/I/88	
		7. Insulation Resistance [VR]	Critical	Electrical Test	As per IS	IS:1554/I/88	
		Flammability Test	Major	FRLS Test	As per IEC	IEC 332/Part-1	
		Oxygen Index & Temperature Index	Major	FRLS Test	As per IS Plan	ASTMD-2863	
		HCL Gas Generation	Major	Chemical Test	As per IS Plan	IEC754/I	
		Smoke Density Rating	Major	FRLS Test	As per IS Plan	ASTMD-2843	
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.,