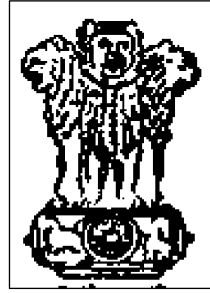


Page 1 of 5	Effective from 06/04/2013	Doc No. TCQ 0109	RDSO/SPN/TC/45/2013 Rev. 2.0	Revision 0
Document Title: STR for Permanently Lubricated HDPE Duct				



**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
TELECOM DIRECTORATE**

**SCHEDULE OF TECHNICAL REQUIREMENT (STR)
FOR
PERMANENTLY LUBRICATED HDPE DUCT**

Research Designs and Standards Organisation
Manak Nagar, Lucknow – 226011

PERMANENTLY LUBRICATED HIGH DENSITY POLYTHENE (PLB-HDPE) DUCT

SPECIFICATION NO. RDSO/SPN/TC/45/2013 (REV.-2.0)

I. SCOPE:

The Schedule of Technical Requirement covers machinery & plants, testing equipments and quality assurance plan required for manufacturing of Permanently Lubricated High Density Polythene (PLB-HDPE) Duct as per RDSO specification No. RDSO/SPN/45/2013 Revision 2.0 or latest.

Vendor shall also comply norms issued by RDSO time to time in this connection and other relevant laws of the country.

This STR shall be applicable to all vendors applying for registration.

II. ESSENTIAL MACHINERY & PLANT REQUIRED FOR PRODUCTION:

S. N.	Description	Qty. Required.	Qty. Available	Make & Sr. No.	Year of Installation	Remarks
1.	High Output Extruder Plant suitable for 40/33mm PLB-HDPE Duct with automatic Hopper Loaders, Dryers and all other complete attachments.	01				
2.	Dies, Pins, Bushes, Sizers & Sizing sleeves.	01				
3.	Automatic Pipe Cutter with TIP table	01				
4.	Raw material Drier & Hopper system for pre-heating.	01				
5.	Grinder with Motor	01				
6.	Round Saw with Motor	01				
7.	Air Compressor	01				
8.	Pump	01				
9.	Balance	01				
10.	Cooling Tower	01				
11.	Water Softener	01				
12.	Hot embossing machine with printing stereos (On line marking machine)	01				

13.	Crane	01				
14.	Weighing scale	01				
15.	Raw material mixer	01				
16.	DG Set	01				
17.	HDPE Pipe cutting machine	01				
18.	Online Thickness Gauge	01				
19.	Reel Drives	01				
20.	Gravimetric Blender	01				

III. ESSENTIAL TEST & MEASURING EQUIPMENTS REQUIRED FOR QUALITY ASSURANCE:

S. N.	Description	Qty. Required.	Qty. Available	Make & Sr. No.	Year of Installation	Remarks
1	Melt Flow Rate Tester	01				
2	Differential Scanning calorimeter. (OIT Tester)	01				
3	Deep freezer	01				
4	Tensile & Elongation Tester along with Coefficient Of Friction (COF) testing Accessories.	01				
5	ESCR Tester	01				
6	Hydraulic Tester	01				
7	Hot Air Oven	01				
8	Digital Vernier Calipers	02				
9	Pie Tape	01				
10	Digital Micrometer	01				
11	Ash Content Tester	01				
12	Hydraulic Press	01				
14	Analytical Weighing Scale with Density determination kit.	01				
15	Density tester with hydrometer & gravity jar	01				
17	Traveling microscope	01				
18	Measuring tape.	01				
19	Impact tester	01				
20	Steel Scale	01				
21	Hot plates with temperature controller.	01				
22	Coupler testing Equipment	01				
23	Cable blowing equipment with	01				

	OFC Feeder attachment.					
24	Bending Test Apparatus	01				
25	Mandrel with Mandrel Test Jig for 40mm & 32mm.	01				
26	Project microscope	01				
27	Kipp's Apparatus for Colour Fading Test	01				
28	Crush Resistance Tester with 50 KG weight.	01				
29	Muffle Furnace with Quartz Crucible & Desicator	01				
31	Environmental Chamber (Temperature Cum Humidity)	01				
32	Digital Pressure Testing Machine.	01				

IV. PROCESS FLOW CHART FOR MANUFACTURING PROCESS & QUALITY ASSURANCE PLAN FOR PERMANENTLY LUBRICATED HDPE DUCT

