

PROJECT PROFILE

ON

PLASTIC ROPES

PREPARED BY



**Formerly Andhra Pradesh Industrial & Technical
Consultancy Organisation Limited**

**8th Floor, Parishrama Bhavan,
Basheerbagh, Hyderabad**

1. Introduction:

PP ropes made from fibrillated flat tapes have already replaced cotton, jute, sisal fiber and manila fiber ropes all over the world. The advantage of PP ropes is its strength, light weight, long life, and water resistance. These ropes find application in many a field such as defense industry, navy, shipping & marine industry, fishing Industry, petroleum Industry, electricity boards, port trust and dock-yards, paper plants, sugar mill, transport industry, railways and agriculture etc.

2. Market:

The demand for plastic rope varies according to the application and size of the rope. As per the estimates of Plastic wire market research the growth rate for plastic ropes has been estimated to be 3.5% per annum. The current demand for Plastic ropes are mainly from usage in marine, fishing industries for fish netting and construction etc. In view of the growth in these industries, there is a good demand for Plastic ropes in India.

3. Raw Material:

The raw material used in manufacturing of Plastic Ropes is Polypropylene.

4. Manufacturing Process

The step wise production process of plastic ropes is explained in the following process flow diagram:



5. Technology:

The technology/Machinery required for manufacturing of the Plastic ropes are Monofilament extrusion plant, color mixer, extra bobbin winder, rope making machine, coiling machine, ply yarn twister, feeding bobbins, electronic weighing machine and box strapping machine etc.

6. Investment:

The investment for setting up a plastic rope manufacturing Plant works out to **Rs. 2.29 Crores** and the break up of the cost is tabulated below.

The land requirement will be around 2.0 acres. The Preliminary & Pre-operative expense works out to Rs 0.14 crores. Plant & Machinery including installation, erecting & transportation charges are of 0.38 Crores. Buildings and civil works are estimated to be 1.09 Crores. Contingencies @ 5%, Misc. Fixed Assets and Electricity Deposits have been considered in the project cost. Margin money for working capital is estimated to be 0.10 Crores.

Table 1: Project Cost

S.No.	Description	Cost (Rs in Crores)
1	Land & Site Development	0.20
2	Buildings & Civil works	1.09
3	Plant & Machinery including ert., ins.,& trans	0.38
4	Misc. Fixed Assets	0.20
5	Contingency @5%	0.08
6	Electricity Deposits	0.10
7	Preliminary & Pre-operative Expenses	0.14
8	Margin Money for Working capital	0.10
Total Project Cost		2.29

Means of Finance

The project is proposed to finance with a debt equity ratio of 2.32:1 and the means of finance is as follows:

Table 2: Means of Finance

S.No.	Sources of Funds	Cost (Rs in Crores)
1	Share Capital - Equity	0.69
2	Term Loan	1.60
	Total	2.29

7. Profitability Assumptions:

Basic assumptions of the Plastic rope manufacturing unit are given in the table below:

- The installed capacity is considered as below:
 - 10 mm Rope: 80 Kgs/Hr with 75 operating days
 - 12 mm Rope: 80 Kgs/Hr with 75 operating days
 - 14 mm Rope: 80 Kgs/Hr with 150 operating days
- No. of operating shifts per day is considered at 2 with 8 hours/shift
- The unit can work at 70% capacity for the first year and can increase by 2-3% there on.
- The manpower requirement is considered at 29 personnel for various level viz. casual labour, Technical & Supervisory staff and administrative staff.

8. Key Financial indicators:

The returns are adequate enough to repay the term loan in 5 years. The key financial indicators are tabulated below.

(Rs. in Crores)

S No	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
1	Sales	3.96	4.08	4.19	4.30	4.42
2	Total Expenditure	2.52	2.59	2.66	2.74	2.81
3	PBIDT	1.45	1.49	1.53	1.57	1.61
4	PBT	1.15	1.23	1.32	1.41	1.49
5	PAT	0.73	0.79	0.85	0.90	0.96
6	Cash Accruals	0.81	0.86	0.92	0.98	1.03
7	BEP @ Operating capacity	34.69%	31.72%	28.91%	26.26%	23.82%
8	Debt Equity Ratio	1.86	1.39	0.93	0.46	0.00
9	DSCR (Gross)	1.98	2.19	2.45	2.76	3.15
10	Average DSCR	2.44				
11	DSCR (Net)	2.60	2.78	2.96	3.14	3.31
12	Average DSCR	2.96				
13	IRR (%)	44%				
