

PVC WIRE AND CABLE COATING

1. INTRODUCTION

PVC Cables are used for power distribution in all types of electrical wiring, control cables, Telephone cables and signaling in Railways. With the development of industrial sector and with increase in power generation the demand of the cable is going to be more.

2. PRODUCTS AND ITS APPLICATION

PVC wire and cables are used in all sectors including housing, electric appliances, vehicles, flexible and cord cables for appliances, Machine Tools and Equipment Wiring Heavy Duty Domestic Wires for House Wiring, Power supply and distribution for houses and other construction needs

3. DESIRED QUALIFICATION FOR PROMOTER

The Promoter should have preferably a basic degree in plastic engineering/ processing or a degree/ diploma in engineering / or a degree in chemistry. Experience of at least two to three years in plastic industry is desirable.

4. INDUSTRY OUTLOOK AND TRENDS

The PVC wire and cable industry is an integral part of plastic processing industry which has witnessed an impressive rate of around 15% during last five years. The performance trends of this industry show a very encouraging scenario in terms of new capacity creation and utilization. The main reason being the growth of endues industry namely, building and construction due to aggressive activities in this sector. The wires and cable industry outlook therefore also shows good potential. The PVC wire and cable industry has already established its place and

credentials as well as competitive advantage in the construction industry. The industry therefore is expected to register healthy growth.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

This product has got a very good scope in the present market. With the rural development programme embarked upon by the Government of India and various States spell out vast scope of cables. Small scale sector in India occupies a significant role in the cable industry. More than 50% L.T. cable is manufactured in small scale sector.

6. RAW MATERIAL REQUIREMENTS

- Copper wire for coating
- PVC Resin Powder
- Other chemicals such as
- Calcium
- Wax
- Titanium
- Packaging material

7. MANUFACTURING PROCESS

E.C. Grade Aluminum wire of the required size is fed into the Extruder where PVC is coated on the wire to the specified thickness. The extruded wire after passing through the cooling tank is coiled on the take off system. The wire is coiled into the length of 100 metres and tested as per IS specification.

- Process flow chart
Mixer ► Extruder ► Coating (Wire)
Cutting « Winding « Cooling
Packing ► Dispatch

8. MANPOWER REQUIREMENT

| Sr. No. | Particulars | Nos | Salary |
|---------|---------------------|-----|--------|
| 1 | Production manager | 1 | 12000 |
| 2 | Production Engineer | 1 | 9000 |
| 3 | Sales Officer | 1 | 8000 |
| 4 | Accountant | 1 | 10000 |
| 5 | Store Keeper | 1 | 7000 |
| 6 | Skilled worker | 2 | 15000 |
| 7 | Semi-Skilled Worker | 4 | 22000 |
| 8 | Unskilled Worker | 4 | 16000 |
| 9 | Watchman | 1 | 6000 |
| | Total | 16 | 105000 |

9. IMPLEMENTATION SCHEDULE

The estimated time required for implementing the project would be approximately 10-12 months

| Sr. No. | Particulars | Time |
|---------|--|--------------|
| 1 | preparation of Project report | Two months |
| 2 | Sanction of loan | Three months |
| 3 | Selection of Site | One month |
| 4 | Completion of registration and other formalities | One month |
| 5 | Machinery procurement, erection and Installation | Four months |
| 6 | Trial production and commissioning | One month |

10. COST OF PROJECT

| Sr. No. | Particulars | Rs. In lakhs |
|---------|--|--------------|
| 1 | Land and Building | 25.00 |
| 2 | Plant and Machinery | 25.30 |
| 3 | Miscellaneous Assets | 4.50 |
| 4 | P & P Expenses | 2.50 |
| 5 | Contingencies @ 10% on land and building and plant and machinery | 5.03 |
| 6 | Working capital margin | 31.85 |
| | | 94.18 |

11. MEANS OF FINANCE

| Sr. No. | Particulars | Rs. (lakhs) |
|---------|-------------------------|-------------|
| 1 | Promoter's contribution | 28.254 |
| 2 | Bank Finance | 65.926 |
| | | 94.18 |

12. WORKING CAPITAL CALCULATION

| Sr. No. | Particulars | Rs. lakhs | Stock Period days | Promoter Margin | Margin Amt. | Bank Finance |
|---------|-------------------------------------|-----------|-------------------|-----------------|-------------|--------------|
| 1 | Salaries and wages | 1.05 | 30 | 1 | 1.05 | - |
| 2 | Raw material and packaging material | 31.25 | 30 | 0.5 | 15.625 | 15.625 |
| 3 | Utilities | 0.45 | 30 | 0.5 | 0.225 | 0.225 |
| 4 | Debtors | 37.37 | 30 | 0.4 | 14.948 | 22.422 |
| | Total | 70.12 | | | 31.848 | |

13. LIST OF MACHINERY REQUIRED

| Sr. No. | Particulars | Rs. lakhs |
|---------|--|-----------|
| 1 | PVC Extruder and Wire Coating Machine | 10.00 |
| 2 | Wire Straightening equipment | 0.90 |
| 3 | Cable Printing Machine | 0.60 |
| 4 | Measuring & Coiling Machine | 5.00 |
| 5 | Extrusion Dies, KNOZZLES etc. | 0.50 |
| 6 | 4 Bar Rotary machine for creasing & sizing | 2.30 |
| 7 | Acentric Slotter | 2.50 |
| 8 | Testing Equipments | 3.50 |
| | Total | 25.30 |

Major machinery manufacturers are M/s. Remika Plastic Machinery Manufacturers, M/s. Konark Plastic Manufacturers, M/s. Shyam Plastic, etc.

14. PROFITABILITY CALCULATIONS

| Sr. No. | Particulars | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|------------|--|----------|----------|----------|----------|----------|
| (A) | Sales Realization per annum | 31395000 | 35880000 | 40365000 | 40365000 | 40365000 |
| (B) | Cost of Production | | | | | |
| 1 | Raw material per annum | 26250000 | 30000000 | 33750000 | 33750000 | 33750000 |
| 2 | Utilities | 271320 | 310080 | 348840 | 348840 | 348840 |
| 3 | Salaries | 1260000 | 1360800 | 1461600 | 1562400 | 1663200 |
| 4 | Repairs and maintenance | 350000 | 370000 | 390000 | 410000 | 430000 |
| 5 | Selling expenses (3% on sales value) | 941850 | 1076400 | 1210950 | 1210950 | 1210950 |
| 6 | Administrative Expenses (other expenses) | 375000 | 395000 | 415000 | 435000 | 455000 |
| | Total | 29448170 | 33512280 | 37576390 | 37717190 | 37857990 |
| (C) | Profit before interest & depreciation | 1946830 | 2367720 | 2788610 | 2647810 | 2507010 |

| Sr. No. | Particulars | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---------|---------------------------------|-----------|-----------|------------|------------|------------|
| | depreciation | 754500 | 754500 | 754500 | 754500 | 754500 |
| | Profit Before term loan and tax | 1192330 | 1613220 | 2034110 | 1893310 | 1752510 |
| | Interest on term loan (11%) | 688926.7 | 580148.8 | 435111.6 | 290074.4 | 145037.2 |
| | Profit before tax | 503403.3 | 1033071.2 | 1598998.4 | 1603235.6 | 1607472.8 |
| | Tax (30%) | 151020.99 | 309921.36 | 479699.52 | 480970.68 | 482241.84 |
| | Total Profit | 352382.31 | 723149.84 | 1119298.88 | 1122264.92 | 1125230.96 |

15. BREAKEVEN ANALYSIS

| Fixed Cost (FC): | Rs. In lakhs |
|---------------------------|--------------|
| Wages & Salaries | 12.6 |
| Repairs & Maintenance | 3.5 |
| Depreciation | 7.55 |
| Admin. & General expenses | 3.75 |
| Interest on Term Loan | 6.88 |
| | |
| Total | 34.28 |

Fixed Cost: 34.28

Profit After Tax: 3.52

$$\text{BEP} = \text{FC} \times 100 / \text{FC} + \text{P}$$

$$34.28 / 37.8 \times 70 / 100 \times 100$$

63.48%

16. STATUTORY/GOVERNMENT APPROVALS

There is no specific statutory requirement for plastic industry process. However, MSME registration various taxation related registration and labour law related compliances have to be ensured. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

17. BACKWARD & FORWARD LINKAGES

There are no specific backward or forward linkages related techno-economic advantages or synergies for this type of project. However, in future after achieving certain growth entrepreneur may consider backward linkage.

18. TRAINING CENTRE AND COURSES:

There are number of institutions providing facilities and training courses on production/marketing for the proposed project. These are Central Institute of Plastic Engineering and Technology (CIPET), Indian Institute of Packaging Management (IIPM), Plastic and Rubber Institute (PRI), Indo German Tool Room (IGTR), etc. Udyamimitra portal (link : www.udyamimitra.in) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.