

BOPP SELF ADHESIVE TAPE

1. INTRODUCTION

The packaging industry in India, which started on low ebb in the 1950's, has grown slowly and steadily in both quality and quantity. The 70's and 80's witnessed a remarkable change in materials as well as machinery. This has not only given a face-lift to the industry but also opened it up for innovations. In this period, the industry by and large, depended on domestic resources for materials as well as machinery. This was due to various restrictions on imports. Around the mid 90's, liberalisation opened the industry further and it began to reflect in the changes in consumers' consumption pattern.

2. PRODUCTS AND ITS APPLICATION

These tapes are used in electrical insulation purpose, in packaging, sealing and a various other general uses. These tapes are also used for general labelling with printing.

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

Packaging in India is an Rs.11, 500 crores industry and growing at the rate of 18 per cent annually. The global market for packaging is US \$900 billion and India's share is only US \$3 billion, but while the per capita expenditure on packaging in the US is a whopping US \$125, it is only \$6.5 in India. Therefore, there is a huge potential for growth in the Indian packaging industry.

4. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

The BOPP Adhesive Tapes are used for packaging. It is consumed daily in large quantities by all industrial and commercial organisations. From packing courier covers and bags to packing of pharmaceutical cartons, everywhere, the self-adhesive tapes are consumed. The consumption increases in line with the improved standard of living and business activity in the society. Therefore the consumption of this product is bound to increase further.

5. RAW MATERIAL REQUIREMENTS

The materials required for manufacturing self-adhesive tapes are the following:

12 mm BOPP film in 1000 mm wide rolls.

6. MANUFACTURING PROCESS

The BOPP roll is loaded in the coating machine and adhesive applied on one side. The coated roll is loaded in the slitting machine and the slit tapes wound in the paper core of required width automatically. The paper core of required width is obtained from the automatic core cutting machine by cutting from the long paper core.

7. MANPOWER REQUIREMENT

| Sr. No. | Particulars | Nos | Salary (Rs.) |
|---------|-----------------------------|-----|--------------|
| 1 | Manager | 1 | 12000 |
| 2 | Accountant | 1 | 10000 |
| 3 | Office boy cum Store Keeper | 1 | 5000 |
| 4 | Unskilled Worker | 4 | 14000 |
| 5 | Supervisor | 1 | 7500 |
| 6 | Skilled worker | 2 | 14000 |
| 7 | Semi-Skilled Worker | 4 | 18000 |
| 8 | Watchman | 1 | 5000 |
| | Total | 15 | 85500 |

8. IMPLEMENTATION SCHEDULE

Estimated implementation time for the project would be 15 to 17 months.

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

9. COST OF PROJECT

| Sr. No. | Particulars | Rs. In lakhs |
|---------|--|---------------|
| 1 | Land and Building | 30.00 |
| 2 | Plant and Machinery | 44.11 |
| 3 | Miscellaneous Assets | 3.25 |
| 4 | P & P Expenses | 2.35 |
| 5 | Contingencies @ 10% on land and building and plant and machinery | 7.41 |
| 6 | Working capital margin | 65.07 |
| | Total | 152.19 |

10. MEANS OF FINANCE

| Sr. No. | Particulars | Rs. (lakhs) |
|---------|-------------------------|-------------|
| 1 | Promoter's contribution | 45.657 |
| 2 | Bank Finance | 106.533 |
| | | 152.19 |

11. WORKING CAPITAL CALCULATION

| Sr. No. | Particulars | Rs. lakhs | Stock Period days | Promoter Margin | Margin Amt. | Bank Finance |
|---------|-------------------------------------|-----------|-------------------|-----------------|-------------|--------------|
| 1 | Salaries and wages | 0.85 | 30 | 1 | 0.85 | - |
| 2 | Raw material and packaging material | 68.21 | 30 | 0.5 | 34.105 | 34.105 |
| 3 | Utilities | 0.56 | 30 | 0.5 | 0.28 | 0.28 |
| 4 | Debtors | 74.58 | 30 | 0.4 | 29.832 | 44.748 |
| | Total | 144.2 | | | 65.067 | |

12. LIST OF MACHINERY REQUIRED

| Sr. No. | Particulars | Rs. lakhs |
|---------|---|-----------|
| 1 | Coating machine | 28.5 |
| 2 | slitter turret machine with accessories | 6.51 |
| 3 | Automatic core cutting machine | 5.50 |
| 4 | Baby slitter | 1.80 |
| 5 | Salvage rewinding machine | 1.80 |
| | Total | 44.11 |

The major machinery required for the project, namely, protein plant is manufactured by a number of manufacturers such as Remika Plastic Extrusion technology, Konark Plastomac Pvt. Ltd.;

13. PROFITABILITY CALCULATIONS

(Rs.)

| Sr. No. | Particulars | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---------|--------------------------------------|-----------|-----------|-----------|-----------|-----------|
| (A) | Sales Realization per annum | 89349750 | 102114000 | 114878250 | 114878250 | 114878250 |
| (B) | Cost of Production | | | | | |
| 1 | Raw material per annum | 81854745 | 93548280 | 105241815 | 105241815 | 105241815 |
| 2 | Utilities | 472500 | 540000 | 607500 | 607500 | 607500 |
| 3 | Salaries | 1026000 | 1077300 | 1128600 | 1128600 | 1128600 |
| 4 | Repairs and maintenance | 250000 | 265000 | 280000 | 295000 | 310000 |
| 5 | Selling expenses (3% on sales value) | 2680492.5 | 3063420 | 3446347.5 | 3446347.5 | 3446347.5 |
| 6 | Administrative Expenses (other | 315000 | 335000 | 355000 | 375000 | 395000 |

| | | | | | | |
|-----|---------------------------------------|------------|-----------|-------------|-------------|-------------|
| | expenses) | | | | | |
| | Total | 86598737.5 | 98829000 | 111059262.5 | 111094262.5 | 111129262.5 |
| (C) | Profit before interest & depreciation | 2751012.5 | 3285000 | 3818987.5 | 3783987.5 | 3748987.5 |
| | depreciation | 1111650 | 1111650 | 1111650 | 1111650 | 1111650 |
| | Profit Before term loan and tax | 1639362.5 | 2173350 | 2707337.5 | 2672337.5 | 2637337.5 |
| | Interest on term loan (11%) | 1113269.85 | 937490.4 | 703117.8 | 468745.2 | 234372.6 |
| | Profit before tax | 526092.65 | 1235859.6 | 2004219.7 | 2203592.3 | 2402964.9 |
| | Tax (30%) | 157827.795 | 370757.88 | 601265.91 | 661077.69 | 720889.47 |
| | Total Profit | 368264.855 | 865101.72 | 1402953.79 | 1542514.61 | 1682075.43 |

Underlying assumptions for probability calculation are:-

The installed capacity of the plant is assumed at 700 MT per annum. The capacity utilization is taken at 70% for the first year. The raw material price is assumed at Rs. 115/- per KG. The selling price is taken at Rs.140/- per KG. Power cost is taken at Rs.8/- per unit. Interest rate on long term loan is taken at 11%.

14. BREAKEVEN ANALYSIS

| Fixed Cost (FC): | Rs. In lakhs |
|---------------------------|--------------|
| Wages & Salaries | 10.26 |
| Repairs & Maintenance | 2.5 |
| Depreciation | 11.13 |
| Admin. & General expenses | 3.15 |
| Interest on Term Loan | 11.13 |
| | |
| Total | 38.17 |

Fixed Cost: 38.17

Profit After Tax: 3.68

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

$$=38.17/41.85 \times 70/100 \times 100$$

63.84%

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.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

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.

Source:- Udyami Mitra/Sidbi