

# **PAPER BAGS AND POUCHES**

## **1. INTRODUCTION**

Of late, owing to the increased awareness of biologically non-disposable nature of the plastics bags, the plastic carry bags are being banned in many cities and urban centers. The disposal and recycling of plastic bags have created havoc and a threat to the environment. Suitable solution to come out of this difficulty is to replace, wherever possible, plastic bags with other bio-degradable materials such as paper bags, cotton bags, jute bags etc., considering the necessity to solve this problem there is an immediate demand for paper carry bags, which can be made in different sizes and thicknesses.

## **2. PRODUCTS AND ITS APPLICATION**

Paper carry bags are used in all types of trade. Some of them are the following.

- Textile Shops
- Bakeries
- Shoe / Chappal Shops
- Grocery Shops
- Fancy Shops
- Book Shops
- Sweet Shops
- Meat / Fish Shops
- Vegetable Shops
- Stationery Shops
- Hardware Shops
- All departmental shops & consumer shops

The Bureau of Indian Standards has not prescribed any standards for paper carry bags. IS: 1060-1996 parts 1 to 3 deal with methods of sampling and testing and allied products for various tests, such as bursting strength, tensile strength etc.

## **3. DESIRED QUALIFICATION FOR PROMOTER**

Bachelor of Science in Paper Science and Engineering or Master Degree in Paper Engineering or bachelor or master degree in chemicals.

#### **4. INDUSTRY OUTLOOK/ TREND**

Paper packaging is increasingly gaining importance due to pollution problem of using plastic carrier and packaging bags. Many state governments in India and also Central Government have put ban on using certain type of plastic bags. Therefore the present trend is to use bio-degradable packaging products such as paper and products made from bio-degradable polymers. The growth of organized retailing in India will result in high growth of paper packaging.

The market size of the paper packaging industry in India has increased tremendously with an annual growth rate of about 11%. It is expected to perform reasonably well in the coming years on account of significant rise in the demand for quality paper packaging products and increase in consumer spending in India.

#### **5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY**

The challenge for the Indian paper industry to meet the ever-increasing demand of paper, board and newsprint is getting crippled due to shortage of fibers in the country. The future demand of paper is expected to grow from 5.6 MT at present TO 9.5 MT in 2010 and 13 MT in 2015. Demand for cream wove paper and Maplitho paper is expected to increase by 7-8%. Demand for different kinds of coated paper has increased by 8% in 2002, duplex board has recorded increase by 6.5%, Kraft paper has registered a 6% rise in demand and newsprint an impressive 10%.

Paper is an eco-friendly product. It is made from natural raw materials and as an end product, paper is bio-degradable. Paper has no real competing product. Plastic this was rated as a substitute for paper has lost the race, being non-bio-degradable.

Electronic media, which was considered a threat to the growth of the print media, has not dampened the growth of paper usage by the print media. Thus there seems to be no barrier for growth of the paper industry. Among the regions, Asia is expected to record the highest rate of growth.

There are certain products for which market demand is always accelerated. Paper bag and pouches are also one of such products. In view of Government's proposal for banning plastic bags and pouches, the demand for paper bags and pouches are bound to increase manifold. There is export potential for export of paper bags & pouches. The consumption of paper boards used in packaging industry has been increasing.

## **6. RAW MATERIAL REQUIREMENTS**

The paper bags can be manufactured from different varieties of papers ranging from 44

GSM (Grams per Square Metre) to 160 GSM with Burst Factor ranging from 2 to 30. Besides Kraft paper, Wrapper paper, Art paper, Butter paper, and Wax coated paper also can be used to manufacture paper bags.

## 7. MANUFACTURING PROCESS

The whole process involved in the manufacture of paper bags is automatic, starting with printing and ending with stacking up of finished bags. The paper roll is initially cut into proper width and they are fed into the printing unit first. After the printing is done the roll goes into the bag making section where it is folded, pasted, sheared and stacked. The bags will be plain bags or sachetted bags with folds in the middle.

## 8. MANPOWER REQUIREMENT

Sr. No.	Particulars	Nos	Salary
1	Manager	1	12000
2	Accountant	1	11000
3	Office boy cum Store Keeper	1	6500
4	Operator	1	5000
5	Helpers	2	8000
6	Sales Executive	1	8000
7	Unskilled Worker	2	8000
8	Supervisor	1	8000
9	Skilled worker	2	16000
10	Watchman	1	6000
	Total	13	88500

## 9. IMPLEMENTATION SCHEDULE

Sr. No.	Particulars	Time Period
1	The Time requirement for preparation of Project report	Two months
2	Time requirement for selection of Site	One month
3	Time required for registration as Small Scale Unit	One Week
4	Time required for acquiring the loan Machinery procurement, erection and commissioning	Three Months

5	Recruitment of labourer etc.	One month
6	Trial runs	Three Months

## 10.COST OF PROJECT

Sr. No.	Particulars	Rs. In lakhs
1	Land and Building	32.00
2	Plant and Machinery	14.65
3	Miscellaneous Assets	3.05
4	P & P Expenses	2.15
5	Contingencies @ 10% on land and building and plant and machinery	4.67
6	Working capital margin	91.64
		148.16

## 11.MEANS OF FINANCE

Sr. No.	Particulars	Rs. (lakhs)
1	Promoter's contribution	44.448
2	Bank Finance	103.712
		148.16

## 12.WORKING CAPITAL CALCULATION

Sr. No.	Particulars	Rs. lakhs	Stock Period days	Promoter Margin	Margin Amt.	Bank Finance
1	Salaries and wages	0.89	30	1	0.89	-
2	Raw material and packaging material	96.99	30	0.5	48.495	48.495
3	Utilities	0.48	30	0.5	0.24	0.24
4	Debtors	105.03	30	0.4	42.012	63.018
	Total	203.39			91.637	

## 13.LIST OF MACHINERY REQUIREDAND THEIR MANUFACTURERS

Sr. No.	Particulars	Rs. lakhs
1	Single Slit Slitting unit to size the paper from big width to small width to produce small bags with 3 HP Motor	8.5
2	Double Color Flexo printing unit with attachment	3
3	3 HP Motor for Main drive	0.15
4	Flat type size plates and Sachet type size plates	0.45
5	Gear Wheels	0.32
6	Eye letting Machine	0.25
7	Bag cutting machine	1.80
8	Stereo rollers	0.18
	Total	14.65

- S. K. Machines  
No. 166, Savitri Nagar, Vinayagapuram Saravanampatti  
Savithri Nagar,  
Coimbatore- 641035,  
Tamil Nadu, India
- [Dreampac Machines](#)  
Podanur, Coimbatore,  
Tamil Nadu
- [Royal Paper Industries](#)  
Ashok Park,  
Main Metro Station,  
Delhi

## 14. PROFITABILITY CALCULATIONS

Sr. No.	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
(A)	Sales Realization per annum	88225284	100828896	113432508	113432508	113432508
(B)	Cost of production					
	Raw material per annum	81471600	93110400	104749200	104749200	104749200
1	Utilities	409500	468000	526500	526500	526500
2	Salaries	1062000	1115100	1168200	1168200	1168200
3	Repairs and maintenance	225000	240000	255000	270000	285000
4	Selling expenses (3% on sales value)	2646758.52	3024866.88	3402975.24	3402975.24	3402975.24
5	Administrative Expenses (other expenses)	375000	390000	405000	420000	435000
6	Total	86189858.52	98348366.88	110506875.24	110536875.24	110566875.24
		2	8	2	2	2
(C)	Profit before interest & depreciation	2035425.48	2480529.12	2925632.76	2895632.76	2865632.76
	depreciation	699750	699750	699750	699750	699750
	Profit Before term loan and tax	1335675.48	1780779.12	2225882.76	2195882.76	2165882.76
	Interest on term loan (11%)	1083790.4	912665.6	684499.2	456332.8	228166.4
	Profit before tax	251885.08	868113.52	1541383.56	1739549.96	1937716.36
	Tax (30%)	75565.524	260434.056	462415.068	521864.988	581314.908
	Total Profit	176319.556	607679.464	1078968.49	1217684.97	1356401.45
				2	2	2

Broad assumptions underlying the above profitability calculations are summarized below:

- Buildup of capacity utilization and hence sales is assumed at 70% of installed capacity culminating to optimum 90% in third year. Due to several internal and external constraints, peak utilization is pegged at 90%.

- Raw material rates are assumed to be dynamic and variable depending on type and quality of paper used, a.e. GSM, Kraft, white, wrapping paper, coated etc. GSM of paper vary from 50 to 160 and Burst Factor from 3 to 30. The price of paper of about 100 to 120 gsm as raw material is taken at Rs 35 to 40 per Kg. whereas price of paper bags made from brown Kraft paper of above RM specifications is assumed at Rs 41 to 44 per kg.
- Cost of power is taken at Rs 8 per unit. Interest on term loan is taken at 11%.

## 15. BREAKEVEN ANALYSIS

Fixed Cost (FC):	Rs. In lakhs
Wages & Salaries	10.62
Repairs & Maintenance	2.25
Depreciation	6.99
Admin. & General expenses	3.75
Interest on Term Loan	10.83
Total	<b>34.44</b>

Fixed Cost: 34.44

Profit After Tax: 1.76

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

$$= 34.44 / 36.20 \times 70 / 100 \times 100$$

**66.60%**

## 16. STATUTORY/ GOVERNMENT APPROVALS

There is no specific statutory requirement for Paper conversion industry, however MSME & GST registration, IEC Code for Export of end products and local authority clearance may be required for Shops and Establishment, for Fire and Safety requirement and registration for ESI, PF and Labour laws may be required if applicable. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

## 17. BACKWARD AND FORWARD INTEGRATION

There is no possibility of backward linkage to paper bag manufacturing. However as forward linkages, promoter may think of manufacturing jumbo



bags, special purpose, customized bags and pouches and also laminated and lacquered products.

## **18. TRAINING CENTERS/COURSES**

For paper packaging products, training programs/courses conducted by Indian Institute of Packaging Mumbai and its branches in the states may be looked into when required. Similarly training at National Institute of Design Ahmedabad and its other branches may be contacted for attractive designs of bags and pouches. For technical training promoter may also depend on machinery supplier.

Udyamimitra portal ( link : [www.udyamimitra.in](http://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