

# PLASTIC CARRY BAGS

## 1. INTRODUCTION

Shopping & Carrier bags have recently become an integral part of retail selling in India. The advantage of these bags is not only the ease with which product can be carried but also in avoiding unnecessary show of items packed. A colorfully printed shopping bag is used for quite a long time and is taken to variety of places. Thus it acts as an advertisement media for the retail trade.

Blend ratios vary from 10-90% LLDPE in both HD/LLD as well as LD/LLD blends, with thickness varying from 40 microns to 100 microns.

Bags produced are of various sizes, designs and colors depending on the buyers need. Standard sizes being used are:

9" \* 13", 10" \* 15", 12" \* 15", 12" \* 18", 13" \* 19", 14" \* 20",  
17" \* 21"

The bags produced are of different sizes as well as shapes. Also various types of handles, such as:

"Rasi" handle, Suitcase handle, Suitcase with grip type handle, Half round lock type handle are used, 'D' punch handle

From single color up to twelve colors printing is possible. Depending on the quantity, rotogravure, flexo or screen printing process is used.

Advantages of LLDPE films -

1. Excellent draw-down ability makes possible to produce thinner films
2. Very high tensile strength
3. Outstanding puncture resistance

4. Very high tear strength
5. Exceptional hot tack, sealability and resistance to ESCR.

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

Carry bags are being used for local packaging of vegetables, groceries and stationery etc. as well as for shopping and designer bags for large departmental stores.

## **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/ TREND**

Plastic and Polymer industries in India is growing at about 5% per annum. There are mainly two types of polymers such as commodity plastics and engineering plastics. Plastic carry bags fall in commodity plastics whose consumption is increasing rapidly in India. With Government policy of 100% Foreign Direct Investment in retail business, the demand for permitted carry bag made from plastic will increase many fold in near future. The attractive designs and printing of carry bags will further bust demand in retail business.

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

There is good demand for shopping bags in view of opening of New Malls, Garments Shops, Grocery Shops, General Stores, Vegetable Shops, and Sweet Shops etc. Depending upon the end products shopping bags of small and big sizes are made with aesthetic appeal. Good quality printed bags are also made for the customers especially for jewelry, cosmetics etc. with bright and

attractive works. Shopping bags/carry bags have huge demand for all purpose which has replaced paper bags in specific applications.

## 6. RAW MATERIAL REQUIREMENTS

LLDPE Granules may be obtained from Reliance Industries Ltd., GAIL and Haldia Petrochemicals Ltd. Sufficient quantity of LLDPE is now available within the country. There is no other raw material required for the production of carry bags.

## 7. MANUFACTURING PROCESS

LLDPE or LD/LLDPE granules and color are fed to an extruder, where they are melted and extruded in the form of tube. This tube is inflated into a bubble which is then collapsed to form a lay flat film. The film is then surface treated on a corona treater and then proceeded to a winder. The film roll is brought to a four color flexo machine, where it is printed using rubber rolls.

The printed film is then converted into bags using a bottom or side seal bag making machine. The required handle is then attached to the bag.

## 8. MANPOWER REQUIREMENT

<b>Sr. No.</b>	<b>Particulars</b>	<b>Number</b>	<b>Salary Per Month</b>
1	Production Engineer/Manager	1	10,000.00
2	Sales Executive	1	5,000.00
3	Accountant-cum-Store Keeper	1	4,000.00
4	Watchman	2	6,000.00
5	Skilled Workers	3	10,500.00
6	Helpers	3	9,000.00
	<b>Total</b>	<b>11</b>	<b>44,500.00</b>

## 9. IMPLEMENTATION SCHEDULE

Sr. No	Particulars	Time
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	Three months
5	Machinery procurement, erection and commissioning, Recruitment of laborer etc.	One month
6	Trial runs	One month

## 10. COST OF PROJECT

Sr. No	Particulars	Rs. In Lakhs
1	Land & Building	30.00
2	Plant & Machinery	82.26
3	Other Misc. assets	3.00
4	Pre-Operative expenses	1.00
5	Margin for WC	6.00
	<b>Total</b>	<b>122.26</b>

## 11. MEANS OF FINANCE

Sr. No	particulars	Rs. In lakhs
1	Promoter's Contribution	30.565
2	Bank Finance	91.695
	<b>Total</b>	<b>122.26</b>

## 12. WORKING CAPITAL CALCULATION

Sr. No.	Particulars	Rs. lakhs	Stock Period days	Promoter Margin	Margin Amt.	Bank Finance
1	Salaries and wages	9.6	30	1	1.26	-
2	Raw material and packaging material	20.14	30	0.5	10.07	10.07
3	Utilities	2.63	30	0.5	1.315	1.315
4	Debtors	28.19	30	0.4	11.276	16.914
	<b>Total</b>	<b>60.56</b>				

### 13. LIST OF MACHINERY REQUIRED AND THEIR MANUFACTURERS

Sr. No	Particulars	Nos.	Rs in Lakhs
1	Extrusion Blow Film Plant	1	4500000
2	Printing machine	1	1351000
3	Bag making machine	1	1800000
4	Scrap Grinder	1	175000
5	Cooling Tower	1	100000
6	Compressor	1	150000
7	Testing Equipment & Other Accessories		50000
8	Cost of Molds & Dies & Mini Expenses		100000
	<b>Total</b>		<b>82,26,000</b>

- Kabra Extrusiontechnik (KET)  
Fortune Terraces, 10th Floor,  
B Wing, Opp. Citi Mall, Link Road,  
Andheri-(West) Mumbai-400053  
Maharashtra, India.
- Rajoo Engineers Limited  
Survey No. 210, Plot No.1,  
Industrial Area  
Rajkot  
Gujarat 360024

- REMICA PLASTIC MACHINERY MANUFACTURERS  
2/Ab, Sardar Patel Industrial Estate,  
Near Gujarat Petrol Pump,  
Shahwadi, Narol,  
Ahmedabad,  
Gujarat 382405
- Mamata Machinery Private Limited  
Survey No-423/p Sarkaswavala Highway Moraiyasaunand,  
Ahmedabad - 382213,  
Gujarat.

#### 14. PROFITABILITY CALCULATIONS

(Rs.)

Sr. No	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
	<b>Production/Sales-MTs</b>	<b>283.5</b>	<b>324</b>	<b>364.5</b>	<b>364.5</b>	<b>364.5</b>
<b>A</b>	<b>Sales Value</b>	<b>3383572</b>	<b>3866940</b>	<b>43503075</b>	<b>4350307</b>	<b>4350307</b>
		<b>5</b>	<b>0</b>		<b>5</b>	<b>5</b>
1	Raw Materials	<b>2416837</b>	27621000	31073625	3107362	3107362
		<b>5</b>			<b>5</b>	<b>5</b>
2	packing material	280000	320000	360000	360000	360000
3	Power	3150000	3600000	4050000	4050000	4050000
4	Wages & Salaries	960000	1036800	1113600	1190400	1267200
5	Repair & maintenance	1120000	1280000	1440000	1440000	1440000
6	Depreciation	972600	972600	972600	972600	972600
	Selling , Admin & Genera Exp	1400000	1600000	1800000	1800000	1800000
<b>B</b>	<b>Cost Of Production</b>	<b>3205097</b>	<b>3643040</b>	<b>40809825</b>	<b>4088662</b>	<b>4096342</b>
		<b>5</b>	<b>0</b>		<b>5</b>	<b>5</b>
	Profit before Interest on term loan and Income tax	1784750	2239000	2693250	2616450	2539650
Sr. No	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
<b>C</b>	Interest on term loan	972622	864552.9	720460.7	576368.6	432276.4
	Profit before tax	812128	1374447.1	1972789.3	2040081.4	2107373.6
<b>D</b>	tax 30%	243638.4	412334.13	591836.79	612024.42	632212.08
	<b>Profit after tax</b>	<b>568489.6</b>	<b>962112.9</b>	<b>1380952.5</b>	<b>1428057</b>	<b>1475162</b>
			<b>7</b>	<b>1</b>		

Underlying assumptions for probability calculation are:-

The installed capacity of the plant is assumed at 400 MT per annum. The capacity utilization is taken at 70% for the first year. The raw material price is assumed at Rs. 85/- per KG. The selling price is taken at Rs.120-122/- per KG. Power cost is taken at Rs.8/- per unit. Interest rate on long term loan is taken at 11%.

## 15. BREAKEVEN ANALYSIS

<b>Fixed Cost (FC):</b>	<b>Rs. In lakhs</b>
Wages & Salaries	9.60
Repairs & Maintenance	11.20
Depreciation	9.76
Admin. & General expenses	14.00
Interest on Term Loan	9.73
<b>Total</b>	<b>54.29</b>

Fixed Cost: 54.29

Profit After Tax: 5.68

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

$$54.29 / 59.97 \times 70 / 100 \times 100$$

**63.37%**

## 16. STATUTORY/ GOVERNMENT APPROVALS

There is no specific statutory requirement for plastic processing 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 carry bags. However, as forward linkages promoter may think of producing special purpose bags such as liners, lamination material, auto and machinery packing bags and cloth.

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

For plastic processing industry training and short term courses may be availed from the Central Institute of Plastic Engineering and Technology (CIPET), Guindy, Tamil Nadu and its regional centers. More over training and guidance are also provided by polymer manufacturers such as Reliance Industries Limited, GAIL and Haldia Petrochemicals Limited.

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