Profile No.: 62 **NIC Code: 22207**

BLOW MOULDED PLASTIC PRODUCT

1. INTRODUCTION

Plastic have played a vital role in the growth phase of the Indian economy and continue to do so. From packaging to agriculture, automobiles and electronics plastics have revolutionized all areas because of its functionality, economics, aesthetics and reliability. Plastic have made all products affordable to the Indian consumer and have helped in raising the lifestyle of the common man. Consequently, a lot more products manufactured in India today either contain plastics or are contained in plastics.

Thermo-plastic materials like High Density polythene (HDPE), Poly-vinyl chloride (PVC) can be blow molded into containers of different sizes and shapes. Some of the common items that are produced include buckets, mugs, jugs, & jerry cans. In bulk quantity is stored in over-head tanks made of concrete, galvanized steel sheet and mild steel in case of very big tank. Due to heavy load of such tank, the supporting structures have to be strong and are consequently very costly. Plastic tank, being very light as well corrosion resistant and available in ready to use condition, can be installed at a nominal cost on any roof top.

2. PRODUCTS AND ITS APPLICATION

Plastic containers up to 5 liters capacity are generally used for domestic purpose. The plastic tanks are between 500-2000 liters. Has also widening use such as water storage tank, Chemical storage tank, grain storage tank and some of the common items like buckets, mugs, jugs, & jerry cans are also used for domestic purpose etc.

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. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

From a modest beginning in the late 1950's the plastic industry in India has acquired a great deal of versatility and sophistication. The industry has especially taken off in the post liberalization era. The new found business environment and abundant domestic availability of raw materials has aided the double-digit growth for plastics consumption in the country.

Keeping in view the pattern of uses of jug, mug, bucket and jerry can in urban and rural areas, there is a substantial demand of about 60 to 65 lakhs numbers for assorted products. On the other hand the water storage tank for domestic purpose, it is estimated that at present about 60,000 MT of plastic tank equivalent to 10, 80,000 pcs. Of 1000 liters. Capacity is required annually. There are 8-10 blow moulding units in the north eastern region. The production of these units is limited and bulk of the requirement is being met from outside sources, the leading brands being "Brite" and "Prince".

5. RAW MATERIAL REQUIREMENTS

- HDPE Granules
- PVC
- Colors/Pigments and others

6. MANUFACTURING PROCESS

The main product is manufactured on a semi-automatic extrusion blow moulding machine. The main process steps involved are:

- Plastic material in the form of granules is subjected to heat and pressure in an extruder.
- Semi-molten plastic in extruder passed through the nozzle known as parison. Adjustments have to be made in the machine to vary the wall thickness of the parison.
- Suitable parison is then inserted in a female mould and air is blown into parison to force the moltan plastic against the sides of the mould.
- The material is then cooled before removal from the mould.
- The article is then trimmed to remove flashes.

7. MANPOWER REQUIREMENT

Sr. No.	Particulars	Nos	Salary
1	Production manager	1	10000
2	Chemist	1	12000
3	Accountant	1	10000
4	Store Keeper	1	8000
5	Skilled worker	2	16000
6	Semi-skilled worker	3	18000
7	Unskilled Worker	3	12000
8	Watchman	1	6000
	Total	13	92000

8. 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

9. COST OF PROJECT

Sr. No.	Particulars	Rs. In lakhs
1	Land and Building	30.00
2	Plant and Machinery	9.35
3	Miscellaneous Assets	2.25
4	P & P Expenses	1.50
5	Contingencies @ 10% on land and building and plant and machinery	3.94
6	Working capital margin	28.02
		75.06

10. MEANS OF FINANCE

Sr. No.	Particulars	Rs. (lakhs)
1	Promoter's contribution	22.518
2	Bank Finance	52.542
		75.06

11. WORKING CAPITAL CALCULATION

Sr. No.	Particulars	Rs. lakhs	Stock Period days	Promoter Margin	Margin Amt.	Bank Finance
1	Salaries and wages	0.92	30	1	0.92	-
2	Raw material and packaging material	27.08	30	0.5	13.54	13.54
3	Utilities	0.71	30	0.5	0.355	0.355
4	Debtors	33	30	0.4	13.2	19.8
	Total	61.71			28.015	

12. LIST OF MACHINERY REQUIRED

Sr. No.	Particulars	Rs. lakhs
1	50 mm screw extruder motor, variable speed drive and electrical control cabinet	2.50
2	cross head dies	0.50
3	Mould closing and opening unit with hydraulic System	2.50
4	Compressor with motor	0.35
5	Water Pump	0.50
6	Moulds, dies, tools	3.00
	Total	9.35

13. PROFITABILITY CALCULATIONS

Sr. No.	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
(A)	Sales Realization per annum	27726426	31687344	35648262	35648262	35648262
(B)	Cost of Production					
1	Raw material per annum	22750000	26000000	29250000	29250000	29250000
2	Utilities	598500	684000	769500	769500	769500
3	Salaries	1104000	1192320	1280640	1368960	1457280
4	Repairs and maintenance	250000	260000	270000	280000	290000
5	Selling expenses (3% on sales value)	831792.78	950620.32	1069447.86	1069447.86	1069447.86
6	Administrative Expenses (other expenses)	300000	350000	400000	450000	500000
	Total	25834292.78	29436940.3	33039587.86	33187907.86	33336227.86
(C)	Profit before interest & depreciation	1892133.22	2250403.68	2608674.14	2460354.14	2312034.14
	depreciation	590250	590250	590250	590250	590250
	Profit Before term loan and tax	1301883.22	1660153.68	2018424.14	1870104.14	1721784.14
	Interest on term loan (11%)	549063.9	462369.6	346777.2	231184.8	115592.4
	Profit before tax	752819.32	1197784.08	1671646.94	1638919.34	1606191.74
	Tax (30%)	225845.796	359335.224	501494.082	491675.802	481857.522
	Total Profit	526973.524	838448.856	1170152.858	1147243.538	1124334.218

14. BREAKEVEN ANALYSIS

Fixed Cost (FC):	**Rs. In lakhs**
Wages & Salaries	11.04
Repairs & Maintenance	2.5
Depreciation	5.9
Admin. & General expenses	3
Interest on Term Loan	5.49
Total	**27.93**

Fixed Cost: 27.93

Profit After Tax: 5.27

BEP = FC x 100/FC+P

27.93 /33.20 x 70/100 x 100

58.89%