

PROJECT PROFILE
ON
BLOW MOULDED CONTAINERS

MONTH & YEAR
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PREPARED BY
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BLOW MOULDED CONTAINERS

INTRODUCTION

Blow moulded containers are used to pack liquid items such as drinking water, edible oils, toiletries, pharmaceuticals, pesticides etc. The blow-moulded containers have the following advantages

1. Light in weight
2. Barrier characteristics against gas and vapour
3. Environmental resistance
4. Impact resistance
5. Burst strength
6. Clarity
7. Choice of colours
8. Printability
9. Non-corrosion & flexibility

There is a continuous growing demand for the containers from 200 ML to 2000 ML.

MARKET POTENTIAL

The plastics industry seems to be going through a major change as the processing units shift focus from traditional packaging to newer segments such as equipment manufacturing for automobiles, agriculture, poultry farming, agriculture and blown films. The plastics product manufacturing and processing business, which employs over 3.6 million people directly in India, is considered as one of the most sought after industries among the entrepreneurs and start ups in India. The industry is growing at an annual rate of over 15 per cent and the emerging segments include agro-based as well as consumer based.

The proposed investment of Rs 1.5 lakh crore (\$37 billion) in upstream industry to set up 11 petrochemical complexes in India is expected to provide impetus for growth of polymer consumption to 15 million tonnes by 2015 according to Mr. Ashok Goel, President, Plastindia Foundation. The Indian plastics industry, he said, has seen a consistent growth of over 15 per cent over the past five years, and the per-person consumption has doubled over the last four years to eight kg in 2010. This is expected to increase to 10 kg by 2012 and to be on par with the global consumption, 27 kg, by 2020 because of the increasing consumption across sectors like packaging, infrastructure, agriculture, automotives, healthcare and FMCG.

In agriculture alone, around 17 million hectares are to be brought under drip irrigation according to the Union Ministry of Agriculture over the next three-four years. This leads to a tremendous potential for use of plastics in irrigation and plastic pipes, Mr. Goel said.

INDIA- one of the fastest growing economies of the world, is all set to attain the premier status along with China. India is a favoured destination for overseas investors and offers the advantages of an open economy, increasing liberalization, a stable democratic political scenario, highly skilled work force with fluency in English. After liberalization of the economy in 1992, the Government of India has been quite supportive of industry in general, taking many steps over the years for the conducive growth of business. These measures favouring economic growth, are being continuously taken by the Indian Government, irrespective of the change in power. The Government of India is endeavouring to achieve GDP growth of more than 7% in the next 10 years. It is quite possible that plastics could grow at 14%, based on historical performance. The Indian plastics industry, with more than 4 million tons consumption in 2003 is well spread all over India. While it is estimated to be

fragmented across more than 30,000 processors, the large processors are less than 100. These 100 have about 35% share of the plastics processing industry. The historical growth of the plastics industry over the last few decades is at an impressive 12-14%, which is twice the GDP growth. The major driver of this growth is the increased standard of living of people in India (housing the second largest population in the world). It is estimated that almost 35% of the 1.2 billion population has a purchasing power equivalent to that in European countries. The plastics industry seems to be going through a major change as the processing units shift focus from traditional packaging to newer segments such as equipment manufacturing for automobiles, agriculture, poultry farming, agriculture and blown films.

The plastics product manufacturing and processing business, which employs over 3.6 million people directly in India, is considered as one of the most sought after industries among the entrepreneurs and start ups in India. The industry is growing at an annual rate of over 15 per cent and the emerging segments include agro-based as well as consumer based.

With the growth in consumption, plastic production in India is likely to grow by 60 per cent to touch 12.75 million tonne by 2012, according to a industry body. "Plastic is an integral part of our life and its consumption is growing every year. We are expecting the production to grow by 60 per cent in line with the consumption which will be around 12.75 million tonne by FY 12," according to All India Plastics Manufacturers' Association (AIPMA) .At present, the plastic production as well as the consumption is about eight million tonne.

The consumption has grown significantly over the last two decades and India is projected to be number three in plastic usage by 2015.India's plastics processing sector will grow from 69,000 machines to 150,000 machines by the year 2020. India's demand for plastics in irrigation alone is pegged to cross 2.5

million tonnes by 2015. Indian automobile industry is growing at more than 18% p.a. and is hungry for plastics. The plastics processing industry is a source of great potential for global businesses. There is tremendous scope for innovative technological upgradations.

INSTALLED CAPACITY

Product	Installed capacity per hour	No of working hours per day	Capacity per day	Capacity per annum 300 days per annum
Blow moulded containers	20 kgs	8	160 Kg	48 MT

PLANT AND MACHINERY

Sl. No	Description	Qty	Value
1.	2 litres Blow moulding machine with all controls, Air compressor unit and cooling water pump etc.	Whole	12,12,800
2.	Moulds dies & tools		1,94,200
3.	Scrap grinder	1	1,10,000
4.	Colour mixer	1	1,04,000
5.	Weighing Scale	1	40,400
6.	Container screen printing device	1	1,38,600
	TOTAL		18,00,000

MANUFACTURING PROCESS

Plastic material in the form of granules is subjected to heat and pressure and an extruded and the semi-molten plastic is extruded through the nozzle in the form of a hollow tube known as PARISON. Adjustments are provided 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 the parison to force it against the sides of the mould. The material is then cooled before removal from the mould. The article thus obtained is trimmed to remove the flashes.

RAW MATERIALS

For MTS 48

	Qty-MTs	Rate/MT	Value
HDPE	31.20	81000	25.27
Miscellaneous plastic	10.80	70000	7.56
Master batches & colour	4	125000	4.20
TOTAL			37.03
Packing materials	48.00	1200	0.58

LOCATION LAND AND BUILDING

Built up area-Sq.ft	1500
Rent p.m.-Rs per .10 per sq.ft	15000
Advance-10 months. Rs	150000

UTILITIES

POWER & WATER

Three phase-	KW	30.00
Power charges Rs.lakhs p.a		3.96
Water- For process-Litres per day		0
For human consumption-litres/day		200

MANPOWER

		Monthly wages	Total
Supervisor	1	9000	9000
Skilled	3	7000	21000
Unskilled	3	5000	15000
Accounts Assistant	1	6000	6000
Sales Executive	1	7000	7000
Security	2	5000	10000
sub total			68000
Add benefits		20%	13600
Total per month			81600
TOTAL PER ANNUM-Rs. lakhs			9.79

SCHEDULE OF IMPLEMENTATION

If the financing arrangements are finalised the project can be implemented in three months time.

COST OF PRODUCTION AND PROFITABILITY

Assumptions

Installed capacity	48 MT of Blow moulded containers per annum
Capacity utilisation	Year-1 -60% Year -2 -70% Year-3 onwards- 80%
Selling price Per MT	Rs.1.70 Lakhs
Raw materials	As per the details given above
Packing materials	As per details given above
Power	Rs.3.96 lakh per annum at 100%

Wages and salaries	Rs. 9.79 lakhs with increase 5% every year.
Repairs and Maintenance	Rs.0.60 lakh per annum
Depreciation	Written down value method -15 % on machinery
Selling general and administrative expenses	Rs.30000 per month
Interest on Term loan	14% per annum
Interest on working capital	14 % per annum
Income tax	34 % on profits

MACHINERY SUPPLIERS

1. M/s Brimco Plastic Machinery Corpn, Plot 55, Govt. Kandivli Indl. Estate, Kandivli (W), Bombay-400 067.
2. Windsor Machines India Ltd, 2 J, Century Plaza, Teynampet, Chennai – 600 018.
3. Euro pack Machines India Pvt Ltd, 52, Bindal Industrial Estate, Sakinaka, Andheri East, Mumbai- 500 072.
4. Ambica Engineering & Wire Products, L 45, GIDC Estate, Odher, Ahmedabad – 382415,
5. Hind Hydraulics & Engineers, Faridabad, Plot No. 13, Sector 74, Faridabad – 121005.
7. Prasad Groups & Companies, Plot No. 14 – 16 GIDC Industrial Estate, Phase1 Valva, Ahmedabad – 382445
8. HMT International Ltd, 59 HMT Bhavan, Bellary Road, Bangalore- 560032.
9. M/s Boolani Engineering Corpn. 402, Prabhadevi Indl. Estate, Veer Savarkar Road, Bombay-400 025.
- 10.J.B. Industries, 7 / 36 PH-2 TNHB, Muthamil Nagar- Chennai 600118.

RAW MATERIAL SUPPLIERS

Lucky Plastics, 421-c, SngR Road Gpathy CBE-641006,

Maruthi Plastic, Old – 3 Thirupali ST Sowcarpet- 600 079,

Reliance Industries Ltd A-1 Towers 5th Floor

No.89 Dr Radhakrishnan Salai Mylapore Chennai 600 004

Shri Swastic Plastics, 57/2, Thirupalli Street – 79,

Abs Plastics Ltd, 51 Gidc Industrial Estate, Nadesari – 391340.

5 Polychem Ltd, 74 Jamshedji Tata Road, Mumbai – 400 020

FINANCIAL ASPECTS

1. COST OF PROJECT

	[Rs.lakhs]
Land & Building (Advance)	1.50
Plant & Machinery	18.00
Other Misc. assets	1.00
Pre-Operative expenses	2.00
Margin for WC	1.17
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	23.67
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2. MEANS OF FINANCE

Capital	10.17
Term Loan	13.50
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	23.67
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3. COST OF PRODUCTION & PROFITABILITY STATEMENT

	[Rs.lakhs]				
Years	1	2	3	4	5
Installed Capacity-MTs	48	48	48	48	48

Utilisation	60%	70%	80%	80%	80%
Production/Sales-MTs	29	34	38	38	38
Selling Price per MT-Rs.	1.70	lakhs			
Sales Value (Rs.lakhs)	49.30	57.80	64.60	64.60	64.60
Raw Materials	22.70	26.48	30.27	30.27	30.27
Packing Materials	0.35	0.40	0.46	0.46	0.46
Power	2.38	2.77	3.17	3.17	3.17
Wages & Salaries	9.79	10.28	10.79	11.33	11.90
Repairs & Maintenance	0.60	0.66	0.73	0.80	0.88
Depreciation	2.70	2.30	1.95	1.66	1.41
Cost of Production	38.52	42.89	47.37	47.69	48.09
Selling, Admin, & General exp	3.60	3.78	3.97	4.17	4.38
Interest on Term Loan	1.89	1.65	1.18	0.71	0.24
Interest on Working Capital	0.49	0.49	0.49	0.49	0.49
Total	44.50	48.81	53.01	53.06	53.20
Profit Before Tax	4.80	9.00	11.59	11.54	11.40
Provision for tax	1.63	3.06	3.94	3.92	3.88
Profit After Tax	3.17	5.94	7.65	7.62	7.52
Add:	2.70	2.30	1.95	1.66	1.41
Depreciation					
Cash Accruals	5.87	8.23	9.60	9.28	8.93
Repayment of Term loan	0.00	3.38	3.38	3.38	3.36

4. WORKING CAPITAL:

	Months	Values	%	Margin	Bank
	Consumptions			Amount	Finance
Raw Materials	0.50	0.95	25%	0.24	0.71
Consumables	2.00	0.06	25%	0.02	0.04
Finished goods	0.50	1.61	25%	0.40	1.21
Debtors	0.50	2.05	10%	0.21	1.84
Expenses	1.00	0.30	100%	0.30	0.00
		4.97		1.17	3.80

5. PROFITABILITY RATIOS BASED ON 80% UTILISATION

$$\frac{\text{Profit after Tax}}{\text{Sales}} = \frac{7.65}{64.60} = 12\%$$

$$\frac{\text{Profit before Interest and Tax}}{\text{Total Investment}} = \frac{13.26}{27.47} = 48\%$$

$$\frac{\text{Profit after Tax}}{\text{Total Investment}} = \frac{7.65}{10.13} = 75\%$$

Promoters Capital

10.17

6. BREAK EVEN LEVEL

Fixed Cost (FC):

	[Rs.lakhs]
Wages & Salaries	10.79
Repairs & Maintenance	0.73
Depreciation	1.95
Admin. & General expenses	3.97
Interest on TL	1.18
	<hr/>
	18.62
	<hr/>
Profit Before Tax (P)	11.59

$$\text{BEL} = \frac{\text{FC} \times 100}{\text{FC} + \text{P}} = \frac{18.62 \times 80}{30.21 + 11.59} = 49\%$$

49% of installed capacity