PROJECT PROFILE

PRODUCT: **INJECTION MOULDED PLASTIC ITEMS LIKE MUGS, & JUGS**

QUALITY SPECN: **AS PER CUSTOMER'S SPECN.**

CAPITAL INVESTMENT: **Rs 36,71,000/-**

TURNOVER(P.A.):

Plastic Mugs & Jugs (HDPE items)	21.6 MT @2,70,000/MT	58,32,000
		58,32,000

MONTH AND YEAR OF PREPARATION: **JUNE - 2020**

PREPARED BY:

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INTRODUCTION:

Articles made from Plastic materials are widely used in every sphere of life. It is known that the thermoplastics like polystyrene, polyethylene, polyethylene terephthalate (PET), acrylic, PVC cellulose acetate/butyrate etc. are very common nowadays and lots of articles are being manufactured from these materials.

The raw materials with the exception of a few are available in the country. The machinery both hand operated and automatic are also available indigenously which shows a significant increase in demand of plastic goods among the consumers.

The injection moulding technique is simple. It can be termed as the melting of plastic material conveying of the molten material into a cool mould die of a desired shape and size where it takes the shape of the mould cavity and finally removal of the moulded part. The product is then polished mechanically. So the outline of the injection moulding technique is quite simple. It may be mentioned here that the production capacity of an automatic machine is much more than hand operated machine and the production cost will therefore be automatically less in the earlier case.

However, the present scheme for manufacture of plastic mugs and jugs by using HDPE granules is drawn on the basis of production by automatic machines. Thermo plastic materials like LLDP, PP, HDPE, can be blow moulded into containers of different shapes and sizes for packing pharmaceuticals, chemicals, solvents, acids, and use in hospitals etc. The light weight flexibility, chemical resistance, attractive colour possibilities are the positive qualities in favour of thermoplastic for domestic applications.

MARKET POTENTIAL:

In Tamilnadu many small scale units are producing the HDPE based plastic items including Mugs & Jugs for domestic use, Hotels, and hospitals. Apart from the domestic household demand there is a demand from hotel industry and also from private and Govt hospitals & dispensaries. After the outbreak of COVID-19, the demand from hospitals increased manifolds due the quarantine of covid patients in the hospitals, and their requirements can be satisfied locally if good quality plastic containers can be made at low

price. The use of small plastic items have more advantageous properties than metal and wood items, and the latter cannot replace plastic in near future.

BASIS AND PRESUMPTION:

1. The scheme is based on single shift basis and 300 working days per annum.
2. Minimum labour charge has been considered in prepared the scheme.
3. 80% maximum capacity utilisation has been considered.
4. 12% rate of interest has been considered for total capital investment.

IMPLEMENTATION SCHEDULE:

Preparation of profile	1 month
Availability of finance/sanction of loan	3 months
Machinery and raw material procurement	1 month
Recruitment of staff and trial run	1 month
	6 months

TECHNICAL ASPECTS:

Injection Moulding:

The plastic material like HDPE granules are fed into the hopper of the injection moulding machine, which essentially has a injection unit and a multicavity mould system. The mould is held in between the two platens which are kept closed by the locking pressure and the material which gets plasticized in the barrel is injection under higher pressure into the mould which results in a moulded article.

POLLUTION CONTROL:

There is no such harmful effluent coming out of this factory. But dumping of wastage may create problem. Proper attention should be given to dump the scrap. The unit should obtain No Objection Certificate from the State Pollution Control Board. Workers must be provided hand gloves and masks during operation.

QUALITY CONTROL AND STANDARDS:

As per customer's specification.

PRODUCTION CAPACITY per Annum

Plastic Mugs & Jugs (HDPE items)	21.6 MT @2,70,000/MT	58,32,000

FINANCIAL ASPECTS:

Land: 2400 Sft. Own.
Shed: 1000 sft. @1000/- Sq. ft Rs 10,00,000/-

MACHINERY AND EQUIPMENT:

S.no.	Specn.	No.	Rate	Value
1.	Injection moulding machine to make diff. Plastic items with 3 KW motor (Windsor make)	1	9,50,000	9,50,000
2.	Scrap grinder (7 HP motor)	1	1,50,000	1,50,000
3.	Dies of different items	LS		2,50,000
4.	Other necessary equipt.	LS		50,000
5.	Office furniture	LS		50,000
6.	Installation charges @ 10%			1,10,000
	TOTAL			15,60,000

FIXED CAPITAL INVESTMENT:

1) Land and building 10,00,000/-
2) Machinery & Equipment 15,60,000/-
3) Pre-operative Expenses 1,00,000/-
Total 26,60,000/-

WORKING CAPITAL ANALYSIS:

A. Staff and Labour:

Manager	1		15,000
Skilled labour	2		15,000
Unskilled	3		12,000
Accountant	1		10,000
			52,000
	Perquisites @ 15%		7,800
		TOTAL	59,800
		Say	60,000/-

B. Raw material:

HDPE Granules	2TON @ 105/kg	2,10,000
Colour, pigments, plasticizers, lubricants,etc.	L.S.	20,000
		2,30,000/-

C. Utility:

Electricity	1400 KWH @ 6.00	8400
Packing materials		2600
		11,000/-

D. Other Misc. expenditure:

Telephone	1,000
Travel and transport	10,000
Advertisement	10,000
Misc. expenditure	5,000
Repairs & Maintanance	5,000
Insurance	5,000
	36,000

WORKING CAPITAL P.M.

= A + B + C + D = 60,000 + 2,30,000 + 11000 + 36000 = 3,37,000/-

CAPITAL INVESTMENT:

Fixed capital	Rs 26,60,000/-
Working capital (three months)	Rs 10,11,000/-
	Rs 36,71,000/-

COST OF PRODUCTION (PER ANNUM):

Total Recurring expenditure	40,44,000
Depreciation on machinery and Equipment @ 10%	1,56,000
Depreciation on shed@ 5%	50,000
Interest on cap. Invt. @ 12%	4,40,520
	Rs 46,90,520/-
	Say Rs.46,90,000/-

TURNOVER (ASSUMING 10% LOSS OF RAW MATERIALS):

Plastic Mugs & Jugs of HDPE material	21.6 MT @2,70,000/MT	58,32,000
	Total	58,32,000

PROFIT ANALYSIS: **Net profit** = 58,32,000– 46,90,000=11,42,000/-

Net profit ratio = $\frac{\text{Profit x 100}}{\text{Turnover}}$ = 19.58%

Rate of return = $\frac{\text{Profit x 100}}{\text{Investment}}$ = 31.11%

BREAKEVEN ANALYSIS:

Fixed cost (Per annum):

Depreciation on machinery &Equipment @ 10%		1,56,000
Depreciation on shed@ 5%		50,000
Interest on cap. Invt. @ 12%		4,40,520
40% salary		2,88,000
40% other exp.		1,72,800
	Total	Rs 11,07,320/-

BREAK EVEN POINT:

$$= \frac{\text{Fixed cost x 100}}{\text{fixed cost + profit}} = 49.23\%$$

ADDRESSES OF MACHINERY SUPPLIERS:

1. M/s Windsor Machines Limited, No. 5403, Phase 4, G. I. D. C, GIDC,Vatwa,
   Ahmedabad-382445, Gujarat, India

ADDRESSES OF SUPPLIERS OF RAW MATERIALS:

1. M/s.Indian Petrochemicals Corp. of India Ltd., 33 A, Chowringhee Road, Chatterjee International Centre, Calcutta-16.
2. Dealers of Reliance industries and IOCL etc