

PROJECT PROFILE ON GLASS TOYS

Product : **Glass Toys**

Quality Standard. : As per Customers Specification

Production : Qty – 126000 no. of toys

: Value- Rs. 20,66,000/-

Month & Year : November, 2010
Of preparation

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INTRODUCTION:

Glass toys are hollow or solid toys made out of fabrication work from either coloured or transparent glass tubes or rods respectively. These glass toys are decorative articles made generally in the form of biological birds, animals, ships and model sets etc. having different shape and size with different attractive colours. These can very well be produced in small scale sector only with the help of a few equipment and little techniques. They are extensively used for the decoration purpose and its unique aesthetic values and performance being displayed in shelves in all the houses, throughout this world.

MARKET POTENTIAL:

Hollow and solid glass toys in the shape of biological birds, animals and models in attractive colours and designs have got good demand in the market and the taste for this item is increasing day by day with medium and affluent class of people due to its aesthetic value and performance. Glass toys are having certain better inherent qualities than plastic and other toys in respect of transparency brilliancy, cleanliness and attraction and hence have more demand for keeping them in drawing room of houses, shops, hotels, restaurant etc. As standard of living and purchasing capacity of our middle class society is improving day by day, the scope of these items is increasing and everlasting for being fragile in nature requiring replacement from time to time. Fabricated glass toys of highly sophisticated nature if made with good workmanship have good market potential in abroad also.

BASIS & PRESUMPTIONS:

- i) The unit will operate on single shift basis and 300 working days in a year considering 8 hours/shift.
- ii) Capacity utilization – 1st year – 70%, IInd year-80%, IIIrd year onwards – 90%.
- iii) Salary & wages are as per minimum wages act of govt.
- iv) Margin money – 25%
- v) Pay back period of the project is about 7 years

- vi) The cost of land, construction charges, machinery & equipment, raw material etc. indicated in the scheme are based on the prices prevailing at the time of project preparation. Hence, these are subject to necessary changes from time to time based on the local condition and availability.

IMPLEMENTATION SCHEDULE:

i)	Market survey & preparation of project document	1 st month
ii)	Registration	2nd month
iii)	Arrangement of finance/loans	3 rd – 4 th month
iv)	Land acquisition & construction of building	5 th – 6 th month
v)	Procurement of machinery & equipment & its installation	6 th – 7 th month
vi)	Purchase of raw material	7 th – 8 th month
vii)	Recruitment of skilled worker & staff	8 th – 9 th month
viii)	Trial production	10 th month
ix)	Commercial Production	10 th month

TECHNICAL ASPECT :

Process of manufacture:

Soda-lime and carving glass rods and tubes of different sizes and colours are used for manufacturing of different types of solid and hollow glass toys. The glass tubes and rods are heated and softened over the burner flame of LPG drawn and fabricated to the desired shape by slightly pulling, bend up, pressing and shaping by the blowing tools. Additional rods/tubes are attached such as legs, hands and other parts to complete the toys. Available charts of animal and birds in the market can also serve as a guide for the purpose. Carving glass rods and tubes which is high heat resistant are used for fabricating complicated toys such as Lord Nahraja, Vaganshwara, ships and action figures of Bharatha Natyam. These articles are durable only if they are made by carving glass because of its low thermal expansion. Solid glass toys will have more attraction when they are given iridescent lustrous and coatings. Likewise, articles made out of glass tubes are more attractive and valuable if they are silvered. The glass toys can be decorated in different colours and designs by applying glass colours and transfer

papers and subsequently taking them into muffle furnace and heating the articles at appropriate temperature. By applying these methods, the value may be added and their aesthetic performance is improved as well.

QUALITY CONTROL & STANDARD

There is no standard specification for glass toys. Hence these are to be made as per the consumer requirement and prevailing fashion. The joints, bends and corners of glass solid and hollow toys must be crystal clear and smooth to have good appeal by customers. The tube diameter of the toys should be drawn uniformly and correctly. This can be maintained by skilled labour with good techniques.

Production Capacity (per annum) :

Quality	:	1,26,000 no. of toys
Value	:	Rs.20,66,000/-

FINANCIAL ASPECTS:

Fixed capital:

Land & Building:

Land – 150 Sq. mtrs. @ Rs. 600/- per sq. mtr.	90,000
Building	
Work shed – 50 Sq. mtr. @ Rs.2000/- per sq. mtr.	1,00,000
Office cum show room - 20 Sq. mtr. @ Rs.2500/- per sq. mtr.	50,000
Store & Go down - 20 Sq. mtr. @ Rs.2000/- per sq. mtr.	40,000
Boundary wall etc. – L.S.	30,000
	2,20,000
Total cost of land & building - L.S.	3,10,000

Machinery & Equipment:

S.No	Particulars	Rate (Rs)
i)	LPG Cylinder 12 nos. @ Rs.1000/- per cylinder	12,000
ii)	Burners 12 Nos. @ R.400/- per burner	4,800
iii)	Oxygen Cylinder 2 Nos. @ Rs.800/- per cylinder	1,600
iv)	Oxygen regulator 4 nos. @ Rs.200/- per set	800
v)	Blowing work benches 12 nos. @ Rs.1200/- per set	14,400
vi)	Muffle furnace chamber size 600 X 300 mm 440 volt/3 phase load 12 KW and working temp. 750 ^o C 1 No. 800 ^o C with safety devices and automatic temp. control	75,000
vii)	Racks, beakers, chemical flasks, measuring cylinders etc for silvering work	25,000
viii)	Office equipment & furniture etc.	5,000
ix)	Installation charges @ 10%	5,800
	TOTAL	1,44,400
	Say	1,45,000

Total fixed Capital investment = (i) + (ii)
4,55,000

WORKING CAPITAL REQUIREMENT :**Salary & Wages (per month) :**

S.No	Designation	Nos.	Salary (Rs.)	Total (Rs.) Lakhs
1.	Manager cum Supervisor	2 No.	10000/-	20,000
2.	Skilled worker	9 Nos.	4000/-	36,000
3.	Semi-skilled worker	5 Nos.	3000/-	15,000
4.	Peon-cum-watchman	3 Nos.	2500/-	7,500
	Total			78,500
	Add perquisites etc. @ 15%			11,700

				90,200
				90,200

Raw material (per month):

S.No	Particular	Qty. (MT)	Rate (Rs.)	Value (Rs.)
i)	Soda glass tubes	40 kg.	@ Rs. 50/- per kg.	2,000
ii)	Amber glass tubes	20 kg.	@ Rs. 55/- per kg.	1,100
iii)	Oher oloured tubes and rods	20 kg.	@ Rs. 55/- per kg.	1,100
iv)	Chemicals for silvering	L.S.		4,000
v)	Soda glass rods clear	30 kg.	@ Rs. 50/- per kg.	1,500
vi)	Coloured glass rods	20 kg.	@ Rs. 55/- per kg.	1,100
vii)	Caorning glass tube	10 kg.	@ Rs. 320/- per kg.	3,200
viii)	Corning glass rods	10 kg.	@ Rs. 320/- per kg.	3,200
ix)	Iridescent lusters & coatings	L.S.		2,500
x)	Packing materials and cord boards etc.	L.S.		6,000
				25,700

Utilities (per month):

Refilling of LPG cylinde	=	24 Nos. @ Rs.250/- per cylinder	6,000
Refilling oxygen cylinder	=	4 Nos. @ Rs.200/- per cylinder	800
Power 1800 KWH @ Rs.4/- per unit			7200
Water			100
Total			14,100

Other expenses (per month):

S.No	Particular	Amount (In Rs.)
1.	Telephone	500
2.	Postage & Stationery	300
3.	Repair & Maintenance	200
4.	Insurance	300
5.	Consumables stores etc.	200
6.	Unforeseen expenses	200
	Total	1700

Total Recurring Expenditure (per month):

S.No.	Particular	Amount (In Rs.)
1.	Salary & Wages	90,200
2.	Raw Material	25,700
3.	Utilities	14,100
4.	Other contingent	1,700
	Total	1,31,700

Total working capital requirement (for 3 months)

Rs.1,31,700x3

3,95,100

Total Capital Investment:

Fixed Capital

4,55,000

Working capital (3 months)

3,95,100

Total

8,50,000

FINANCIAL ANALYSIS:

Cost of Production (per annum):

1.	Recurring expenses	15,80,400
2.	Depreciation on Building @ 5%	11,000
3.	Depreciation on plant & machinery @ 10%	14,000
4.	Depreciation on office equipment & furniture @ 20%	1,000
5.	Interest on capital investment @ 12.00% p.a.	1,02,000
	Total	17,08,400

Turnover (Per year)

i)	Soda lime glass plain & coloured toys on an average 1,10,000 nos. @ Rs.15/- per toy	16,50,000
ii)	Carving toys 16,000 nos. @ Rs.26/- per toy	4,16,000
		20,66,000
	Net Sales	20,66,000

Net Profit (per annum):

Sales per annum – cost of production
20,66,000 – 17,08,400 = 3,57,600

Net Profit Ratio:

= $\frac{\text{Profit} \times 100}{\text{Sales (per year)}}$

= $\frac{3,57,600 \times 100}{20,66,000}$

= 17.30%

Return On Investment

$$\frac{\text{Profit} \times 100}{\text{Total investment}}$$

$$= \frac{3,57,600 \times 100}{8,50,000}$$

$$= 42\%$$

Break Even Point :

Fixed Cost

Fixed Cost	Value (in Rs.)
Depreciation on building @ 5%	11,000
Depreciation on Machinery @ 10%	14,000
Depreciation on office equipment @ 20%	1,000
Interest on Total Investment @ 12%	1,02,000
Insurance	3,600
40% of salary & wages	4,32,960
40% of other expenses	6,720
Total	5,71,280

B.E.P.

$$= \frac{\text{Fixed cost} \times 100}{\text{Fixed cost} + \text{Profit}}$$

$$= \frac{5,71,280 \times 100}{5,71,280 + 3,57,600}$$

$$= 61\%$$

NAME & ADDRESS OF PLANT AND MACHINERY SUPPLIERS

1. M/s.Toshniwal Brothers,
607 A, Ist main, 2nd State
Rajaji Nagar, Bangalore.
2. M/s. Indian Oxygen & Acetylene company,
7 A, Vaidyanathe, Mudali Street,
Madras-21
3. M/s. Jain Scientific Glass Works,
Bengali Mohalla,,
Ambala Cantt.-133001
4. M/s. Veer Workshop
B-57, Nariana Indl. Area,
Ph-II, New Delhi –28.
5. M/s. Mehendiratta & Associates
Hathras Road, Naraich,
Agra-282006

ADDRESSES OF RAW MATERIAL SUPPLIERS

1. M/s. Borosil Glass work Ltd.,
44, Khanna contruction House,
Dr. R.G. Thadani Marg,
Worli, Bombay-18.
2. M/s. Saraikella Glass Works (P) Ltd.,
P.O. Bara Hahera, Konnagar Rly. Station,
Distt. Hooghly, West Bengal.
3. M/s. Hi-Tech Glass Factory,
Dholpur, Rajasthan
4. M/s. Manohar Glass Works,
Station road, Firozabad. (U.P.)