

# Ball Pen Ink

PRODUCT CODE	: 35215
QUALITY AND STANDARDS	: Not available in BIS. As per market demand
PRODUCTION CAPACITY	: Quantity : 12 kilo litres (per annum) Value : Rs. 30,00,000
MONTH AND YEAR OF PREPARATION	: January, 2003
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## INTRODUCTION

Ball pen is one of the most essential items for students, educational institutions and for office work, etc. Ink is a viscous and coloured fluid composed of reflux blue, varnishes, oil and drier. This is a mass consumption item.

## MARKET POTENTIAL

Ball pen is the most common tool for all schools, colleges and university going students for writing purpose. As greater emphasis is being laid on removal of illiteracy, the prospects of Ball pen ink industry are bright.

## BASIS AND PRESUMPTIONS

- i) Efficiency and working hours considered for full capacity utilization.      8 working hours/day/shift 300 working days taken into account annually.

- ii) Time period for achieving full/ envisaged capacity utilization.      Within 2 months after trial production.
- iii) Labours, wages and conditions.      As per local salaries.
- iv) Interest rate for fixed and working capital.      Average @ 14%
- v) Margin money      Average 25%
- vi) Rented shed      With partition walls 20' x 21'
- vii) Costing of machinery and equipment.      As per local rates.

## IMPLEMENTATION SCHEDULE

1. Selection of site      2 months
2. Collection of quotation for M/c and Equipment      2 months
3. Procurement of machinery.      1 month
4. Placement of order for raw material      1/2 month

5. Commercial production 1/2 month  
Total 6 months

## TECHNICAL ASPECTS

### Process of Manufacture

Metal complex dyes and complexes in castor oil/stand oil, varnishes and driers are mixed together in suitable proportions in a mixing machine. The material so produced is called ball pen ink, which is viscous in nature. Metal complex dyes are chosen to get a shade to suit customer's requirements. A list of metal complex dyes used for making ball pen ink is given at the end.

### Quality Control and Standards

As per market demand.

### Production Capacity (per annum)

Quantity 12 kilo litres  
Value Rs. 30,00,000

### Motive Power

Electric power 5 H.P. approx.  
Man power 8 Nos.

### Pollution Control

No liquid or gaseous effluents are released during the process. Pollution is not involved.

### Energy Conservation

Not much relevant.

## FINANCIAL ASPECTS

### A. Fixed Capital

(i) Shed of size (rented) 20'×20'  
with partition walls  
Rs. 200 per month

### (ii) Machinery and Equipments

Description of M/cs	Qty.	Price (Rs.)
Mixing machine with motor Cap. 10 litres per 8 hrs.	1	60,000
Weighing m/c platform type Cap. 50 kg.	1	15,000
Shovel made of stainless steel material	4	4,000
Scraper knife	4	1600
Storage tank (for varnish and oil) HDPP material	2	8,000
Triple Roll Mill	1	50,000
Total		1,38,600

(iii) Testing Equipments	Qty.	(Rs.)
1. Ford's cup	2	2,500
2. Rectangular Glass Sheet	2	800
3. Exhaust Fan (for pollution control)	1	800
4. Cost of power connection, Electrification and installation Charges @ 10% of the cost of M/c. and equipments		14,270

### (iv) Total Cost of M/c. and Equipment Rs. 156970

Cost of office equipments/  
working Tables and chairs etc. 5,000

(v) Pre-operative Expenses Rs. 5,000

(vi) Total Fixed Capital Rs. 166,970

## B. Working Capital (per month)

### (i) Personnel

Designation	No.	Salary (Rs.)	Total (Rs.)
1. Manager/Chemist	1	3000	3,000
2. Accountant/Clerk	1	2000	2,000
<i>Technical Staff</i>			
3. Skilled workers	2	1500	3,000
4. Unskilled workers	2	1200	2,400
5. Casual labour	2	1000	2,000
Total			12,400
(+) Perquisites @ 15% of salaries			1,860
Total			14,260

(ii) Raw material including Packaging (per month)

Item	Qty.	Rate (Rs.)	Value (Rs.)
a) Metal Complex dyes	200Kg.	400/ kg.	80,000
b) Stand oil/castor oil/solvents	550 kg.	130/Kg	71,500
c) Varnishes (alkyd/ Phenolic/Maleic)	250 Kg.	140/Kg.	35,000
d) Drier	10 Kg.	230/Kg	2,300
	Total		1,88,800

(iii) Utilities (per month) (Rs.)

i) Power	5 H.P. @ Rs. 3 per unit	2250
ii) Water charges	L.S.	500
	Total	2750

(iv) Other Contingent Expenses (per month) (Rs.)

i) Rent of the shed	2000
ii) Postage and stationery	500
iii) Consumable stores	500
iv) Repairs and maintenance	500
v) Transport charges	1000
vi) Advertisement and publicity	1500
vii) Insurance	1500
viii) Sales expenses and miscellaneous expenditure	1000
	Total 8500

(v) Total Recurring Expenditure (per month) (Rs.)

i) Raw material	1,88,800
ii) Utilities	2,750
iii) Salary/Wages	14,260
iv) Other expenditure	8,500
	Total 2,14,310

### C. Total Capital Investment

Fixed capital	Rs. 1,66,970
Working capital for 3 months	Rs. 6,42,930
	Total Rs. 8,09,900

## FINANCIAL ANALYSIS

(1) Cost of production (per year) (Rs.)

a) Total expenditure	25,71,720
b) Depreciation on machinery @ 10%	14,270
c) Depreciation on furniture @ 20%	1,000
d) Interest on total capital investment	1,13,400
	Total 27,00,390

(2) Turnover (per year) (Rs.)

Ball Pen Ink 12 KL @ Rs. 250 per litre 30,00,000

(3) Net Profit Before Income Tax Rs. 2,99,610

(4) Net Profit Ratio 10%

(5) Rate of Return 37%

(6) Break-even Point

(i) Calculation of Fixed Cost (Rs.)

a) Depreciation on m/cs., equipments and office equipments	14270
b) Rent of shed	24000
c) Interest on total investment	113400
d) Insurance	18000
e) 40% of salaries and wages	68448
f) 40% of other contingent expenses (excluding rent and insurance)	24000
	Total 262118

(ii) Profit Rs. 3,12,632

B.E.P

$$\begin{aligned}
 &= \frac{FC \times 100}{FC + \text{Profit}} \\
 &= \frac{249096 \times 100}{262118 + 299610} \\
 &= \frac{262118 \times 100}{561728} \\
 &= 46.6\%
 \end{aligned}$$

### Additional Information

1. Machinery and equipments can be fabricated locally.
2. Taxes like sales tax, income tax, etc. not included in the project profile.

### Basic dyes for Ball Pen Ink

1. Victoria Blue Base F 4 R
2. Methyl Violet base
3. Basonyl Yellow X-RL 300%
4. Basonyl Brilliant Red X-4 G 300%
5. Basonyl Green 830 Liquid
6. Basonyl Blue 636
7. Basonyl Violet 600
8. Basonyl Red 482
9. Basonyl Red 540
10. Rhodamine GDN Extra

### Addresses of Machinery Suppliers

1. M/s. Anup Engineering Ltd.  
Post Box No. 1158,  
Ahmedabad-380002
2. M/s. Billy Engg. Enterprises  
761, Thiruvettivur,  
Chennai-600081
3. M/s. APV Eng. Co. Ltd.  
7 Jessore Road, Dum Dum,  
Kolkata
4. M/s. Sweta Bass  
Industrial Estate,  
Bareilly, Uttranchal.

5. M/s. Ganson Ltd.  
6, West View, Dadar,  
Mumbai-400014
6. M/s. Richard Engg.(Bombay) Pvt.  
Ltd.  
25, MIDC Chemical Zone,  
Ambarnath-420501

### Addresses of Raw Material Suppliers

1. M/s. Gujarat Quinon Pvt. Ltd.  
Block 150/B, Tundev, Anjesar  
Road, Tundev, Taal Sabli, Distt.  
Baroda-390005
2. M/s. India Product  
Manilal Mukhi Estate,  
Naroda, Narole Highway,  
Behind Narela House,  
Ahmedabad-380026
3. M/s. Dausala Organics Ltd.  
22 B, Himalaya House,  
Kasturba Gandhi Marg,  
New Delhi-110001.
4. M/s. Indian Dye Stuff Industries  
Ltd.  
Mafatlal Centre, Nariman Point,  
Mumbai-400021.
5. M/s. Kanoria Chemical and  
Industry Ltd.  
Park Plaza, 71, Park Street,  
Kolkata-700016
6. M/s. Unity Chemical  
Block No. 85, D Wing,  
Paramal Nagar,  
Gorigaon (W)  
Mumbai-400062.