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PROJECT REPORT

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PROJECT:

Pencil Manufacturing Business

PROJECT REPORT OF PENCIL MANUFACTURING BUSINESS

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Pencil Manufacturing Business.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

PROJECT AT GLANCE

1 Name of Proprietor/Director	XXXXXXXXXX
2 Firm Name	XXXXXXXXXX
3 Registered Address	XXXXXXXXXX
4 Nature of Activity	XXXXXXXXXX
5 Category of Applicant	XXXXXXXXXX
6 Location of Unit	XXXXXXXXXX
7 Cost of Project	15.72 Rs. In Lakhs
8 Means of Finance	
i) Own Contribution	1.57 Rs. In Lakhs
ii) Term Loan	12.15 Rs. In Lakhs
iii) Working Capital	2.00 Rs. In Lakhs
9 Debt Service Coverage Ratio	2.59
10 Break Even Point	0.79
11 Power Requirement	10 KW
12 Employment	6 Persons
13 Major Raw Materials	Wood, Plastic granules and other materials

14 Details of Cost of Project & Means of Finance

Cost of Project		Amount in Lacs
Particulars		Amount
Land	Owned/Leased	
Building & Civil Work	Owned/Leased	
Plant & Machinery		12.00
Furniture & Fixture		1.00
Other Misc Assets		0.50
Working Capital Requirement		2.22
Total		15.72

Means of Finance

Particulars	Amount
Own Contribution	1.57
Term Loan	12.15
Working capital Loan	2.00
Total	15.72

PENCIL MANUFACTURING UNIT

1. INTRODUCTION



A pencil is a writing implement or art medium constructed of a narrow, solid pigment core inside a protective casing which prevents the core from being broken and/or from leaving marks on the user's hand during use.

Pencils create marks by physical abrasion, leaving behind a trail of solid core material that adheres to a sheet of paper or other surface. They are distinct from pens, which instead disperse a trail of liquid or gel ink that stains the light colour of the paper by absorption.

Most pencil cores are made of graphite mixed with a clay binder which leaves grey or black marks that can be easily erased.

The most common type of pencil casing is of thin wood, usually hexagonal in section but sometimes cylindrical, permanently bonded to the core. Similar permanent casings may be constructed of other materials such as plastic or paper. To use the pencil, the casing must be carved or peeled off to expose the working end of the core as a sharp point. Mechanical pencils have more elaborate casings

which are not permanently bonded to the core. Instead, the casing supports a separate, mobile piece of pigment core that can be extended or retracted through the casing tip as needed; these pencil casings can be re-loaded with a new core (usually graphite) when necessary.

2. MARKET POTENTIAL

Wooden pencil or lead pencil is an essential item for students and artists. Generally, HB and 2B pencils have popularity in the Indian market. Even in the recent era of computers, printers, tablets, cell phones and a whole host of other writing and drawing instruments, pencil industry is growing.

There is a growing demand of wooden pencil in the market. The products find application in schools, colleges, government offices, commercial establishments, NGOs and miscellaneous activities.

According to the type of carbon used, pencils are classified as soft, medium and hard. There is no doubt about the acceptability of the product and lead pencils still command a respectful demand. The product has a good export potential also. According to the different grades, there is a variety of HB, B, 2B, 3B, 4B, 5B, 6B, 7B, 8B, 9B, and 10B. Writing, drawing, sketching, coloring and shading are the basic applications of the wooden pencil.

The ever increasing population of the country and requirement of quality products are the major reason for the growth of this evergreen business. There is sufficient market for the pencil to justify the establishment of a wooden pencil manufacturing plant in India.

3. PRODUCT DESCRIPTION

3.1 PRODUCT USES

Graphite pencils are used for both writing and drawing and result in durable markings: though writing is easily removable with an eraser, it is otherwise resistant to moisture, most chemicals, ultraviolet radiation, and natural aging. Other types of pencil core are less widely used, such as charcoal pencils, which are mainly used by artists for drawing and sketching.

3.2 RAW MATERIAL REQUIREMENT

The major raw materials required are wood, lead, glue, lacquer, ferrule, eraser tip and packing materials. The raw material requirement is calculated on the bases of the final output.

3.3 MANUFACTURING PROCESS

The pencil making plant consists of the following processes:

- Making uncoated pencils,
- Lacquering, stamping,
- Attaching of eraser,
- Final treatment, and
- Packing.

4. PROJECT COMPONENTS

Plant & Machinery:

Table shows the list of machinery and equipment required for a pencil manufacturing unit.

MACHINERY AND EQUIPMENT REQUIREMENT

Sr. No	Description
	I. Wood working Line
2	Automatic gluing machine and connector
3	Oleo-hydraulic press
4	Clamping frame and plate
5	Automatic slut-end rough cutting machine and connector
6	Cutter grinder
7	Glue stirrer
8	Exhaust fan
	II. Painting Process
10	Lacquer stirrer
11	III. Final Treatment
12	Automatic triple hot foil stamping machine and connector
13	Automatic triple hot foil stamping machine and connector
14	Automatic eraser tipping machine
15	Exhaust fan
16	Foil cutter

PROJECTED PROFITABILITY STATEMENT

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	55%	65%	75%	85%	95%
SALES					
Gross Sale					
Pencil	39.88	51.41	62.72	74.93	88.04
Total	39.88	51.41	62.72	74.93	88.04
COST OF SALES					
Raw Material Consumed	20.63	25.35	30.38	35.70	41.33
Electricity Expenses	1.06	1.31	1.51	1.71	1.92
Depreciation	1.98	1.68	1.44	1.22	1.04
Wages & labour	5.28	6.07	6.98	8.03	9.23
Repair & maintenance	0.80	1.03	1.25	2.25	2.64
Consumables	1.20	2.06	3.14	4.50	5.28
Cost of Production	30.93	37.50	44.70	53.41	61.44
Add: Opening Stock	-	1.03	1.25	1.49	1.78
Less: Closing Stock	1.03	1.25	1.49	1.78	2.05
Cost of Sales	29.90	37.28	44.46	53.12	61.18
GROSS PROFIT	9.98	14.13	18.26	21.81	26.86
G.P Ratio	25.02%	27.48%	29.12%	29.11%	30.51%
Salary to Staff	3.36	3.86	4.44	5.11	5.88
Interest on Term Loan	1.19	1.05	0.75	0.46	0.16
Interest on working Capital	0.22	0.22	0.22	0.22	0.22
Rent	2.40	2.76	3.17	3.65	4.20
Selling & Administrative Exp.	0.40	1.54	3.45	4.50	6.16
TOTAL	7.57	9.44	12.04	13.93	16.62
NET PROFIT	2.40	4.69	6.22	7.87	10.25
Taxation	-	0.11	0.25	0.43	0.80
PROFIT (After Tax)	2.40	4.58	5.97	7.44	9.45
N.P Ratio	6.03%	8.91%	9.53%	9.93%	10.73%

PROJECTED BALANCE SHEET

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
Opening balance		2.48	4.06	6.03	8.47
Add:- Own Capital	1.57				
Add:- Retained Profit	2.40	4.58	5.97	7.44	9.45
Less:- Drawings	1.50	3.00	4.00	5.00	6.50
Closing Balance	2.48	4.06	6.03	8.47	11.42
Term Loan	10.80	8.10	5.40	2.70	-
Working Capital Limit	2.00	2.00	2.00	2.00	2.00
Sundry Creditors	0.48	0.59	0.71	0.83	0.96
Provisions & Other Liability	0.20	0.76	1.14	1.71	2.57
TOTAL :	15.96	15.51	15.28	15.72	16.95
<u>Assets</u>					
Fixed Assets (Gross)	13.50	13.50	13.50	13.50	13.50
Gross Dep.	1.98	3.66	5.09	6.32	7.36
Net Fixed Assets	11.53	9.84	8.41	7.18	6.14
Current Assets					
Sundry Debtors	0.93	1.20	1.46	1.75	2.05
Stock in Hand	1.72	2.10	2.50	2.97	3.43
Cash and Bank	1.78	2.37	2.91	3.82	5.33
TOTAL :	15.96	15.51	15.28	15.72	16.95

PROJECTED CASH FLOW STATEMENT

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	1.57				
Net Profit	2.40	4.69	6.22	7.87	10.25
Depreciation & Exp. W/off	1.98	1.68	1.44	1.22	1.04
Increase in Cash Credit	2.00	-	-	-	-
Increase In Term Loan	12.15	-	-	-	-
Increase in Creditors	0.48	0.11	0.12	0.12	0.13
Increase in Provisions & Other liabilities	0.20	0.56	0.38	0.57	0.86
	-				
TOTAL :	20.78	7.04	8.15	9.79	12.28
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	13.50				
Increase in Stock	1.72	0.38	0.41	0.47	0.46
Increase in Debtors	0.93	0.27	0.26	0.28	0.31
Increase in loans & Advances	-	-	-	-	-
Repayment of Term Loan	1.35	2.70	2.70	2.70	2.70
Drawings	1.50	3.00	4.00	5.00	6.50
Taxation	-	0.11	0.25	0.43	0.80
TOTAL :	19.00	6.46	7.62	8.88	10.76
Opening Cash & Bank Balance	-	1.78	2.37	2.91	3.82
Add : Surplus	1.78	0.59	0.54	0.91	1.52
Closing Cash & Bank Balance	1.78	2.37	2.91	3.82	5.33

CALCULATION OF D.S.C.R

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	4.38	6.26	7.41	8.67	10.49
Interest on Term Loan	1.19	1.05	0.75	0.46	0.16
Total	5.57	7.32	8.17	9.13	10.65
REPAYMENT					
Instalment of Term Loan	1.35	2.70	2.70	2.70	2.70
Interest on Term Loan	1.19	1.05	0.75	0.46	0.16
Total	2.54	3.75	3.45	3.16	2.86
DEBT SERVICE COVERAGE RATIO	2.19	1.95	2.36	2.89	3.72
AVERAGE D.S.C.R.					2.59

REPAYMENT SCHEDULE OF TERM LOAN

Interest 11.00%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	17.78	17.78	-	-	17.78
	2nd month	17.78	-	17.78	0.16	-	17.78
	3rd month	17.78	-	17.78	0.16	-	17.78
	4th month	17.78	-	17.78	0.16		17.78
	5th month	17.78	-	17.78	0.16		17.78
	6th month	17.78	-	17.78	0.16		17.78
	7th month	17.78	-	17.78	0.16	0.33	17.45
	8th month	17.45	-	17.45	0.16	0.33	17.12
	9th month	17.12	-	17.12	0.16	0.33	16.79
	10th month	16.79	-	16.79	0.15	0.33	16.46
	11th month	16.46	-	16.46	0.15	0.33	16.13
	12th month	16.13	-	16.13	0.15	0.33	15.80
					1.75	1.98	
2nd	Opening Balance						
	1st month	15.80	-	15.80	0.14	0.33	15.47
	2nd month	15.47	-	15.47	0.14	0.33	15.14
	3rd month	15.14	-	15.14	0.14	0.33	14.81
	4th month	14.81	-	14.81	0.14	0.33	14.48
	5th month	14.48	-	14.48	0.13	0.33	14.15
	6th month	14.15	-	14.15	0.13	0.33	13.83
	7th month	13.83	-	13.83	0.13	0.33	13.50
	8th month	13.50	-	13.50	0.12	0.33	13.17
	9th month	13.17	-	13.17	0.12	0.33	12.84
	10th month	12.84	-	12.84	0.12	0.33	12.51
	11th month	12.51	-	12.51	0.11	0.33	12.18
	12th month	12.18	-	12.18	0.11	0.33	11.85
					1.54	3.95	
3rd	Opening Balance						
	1st month	11.85	-	11.85	0.11	0.33	11.52
	2nd month	11.52	-	11.52	0.11	0.33	11.19
	3rd month	11.19	-	11.19	0.10	0.33	10.86
	4th month	10.86	-	10.86	0.10	0.33	10.53
	5th month	10.53	-	10.53	0.10	0.33	10.20
	6th month	10.20	-	10.20	0.09	0.33	9.87
	7th month	9.87	-	9.87	0.09	0.33	9.55
	8th month	9.55	-	9.55	0.09	0.33	9.22
	9th month	9.22	-	9.22	0.08	0.33	8.89
	10th month	8.89	-	8.89	0.08	0.33	8.56
	11th month	8.56	-	8.56	0.08	0.33	8.23

12th month	8.23	-	8.23	0.08	0.33	7.90
				1.10	3.95	
4th Opening Balance						
1st month	7.90	-	7.90	0.07	0.33	7.57
2nd month	7.57	-	7.57	0.07	0.33	7.24
3rd month	7.24	-	7.24	0.07	0.33	6.91
4th month	6.91	-	6.91	0.06	0.33	6.58
5th month	6.58	-	6.58	0.06	0.33	6.25
6th month	6.25	-	6.25	0.06	0.33	5.92
7th month	5.92	-	5.92	0.05	0.33	5.60
8th month	5.60	-	5.60	0.05	0.33	5.27
9th month	5.27	-	5.27	0.05	0.33	4.94
10th month	4.94	-	4.94	0.05	0.33	4.61
11th month	4.61	-	4.61	0.04	0.33	4.28
12th month	4.28	-	4.28	0.04	0.33	3.95
				0.67	3.95	
5th Opening Balance						
1st month	3.95	-	3.95	0.04	0.33	3.62
2nd month	3.62	-	3.62	0.03	0.33	3.29
3rd month	3.29	-	3.29	0.03	0.33	2.96
4th month	2.96	-	2.96	0.03	0.33	2.63
5th month	2.63	-	2.63	0.02	0.33	2.30
6th month	2.30	-	2.30	0.02	0.33	1.97
7th month	1.97	-	1.97	0.02	0.33	1.65
8th month	1.65	-	1.65	0.02	0.33	1.32
9th month	1.32	-	1.32	0.01	0.33	0.99
10th month	0.99	-	0.99	0.01	0.33	0.66
11th month	0.66	-	0.66	0.01	0.33	0.33
12th month	0.33	-	0.33	0.00	0.33	-
				0.24	3.95	
DOOR TO DOOR	60	MONTHS				
MORATORIUM PERIOD	6	MONTHS				
REPAYMENT PERIOD	54	MONTHS				

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