

PROJECT REPORT

ON POWDER COATING

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding 'Powder coating'

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.]

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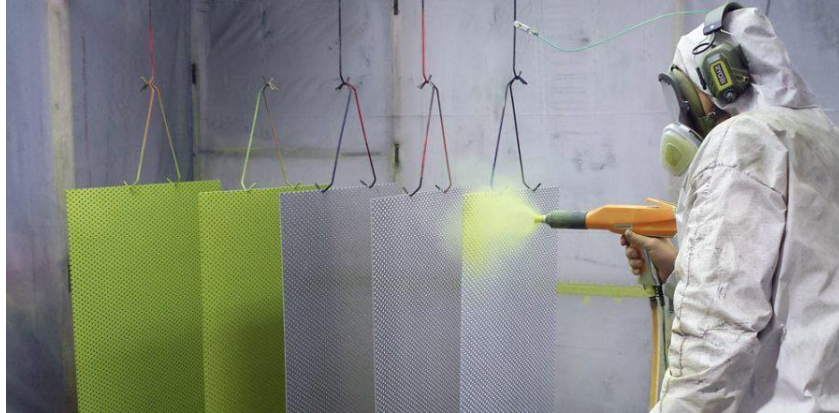
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PROJECT PROFILE ON POWDER COATING



INTRODUCTION:

The Powder coating is a coating which is applied on the job in the powder form, it does not require any liquid carrier while the paint can be applied on the job in the liquid form only and requires the liquid carrier which causes the dropping sag, run and storage problem etc. It is a dry paint, which gives almost 100% finish maximum material use with no wastage in over spray, spillage etc.

MARKET POTENTIAL:

The powder consist of homogenous synthetic resin, pigments and other additives and in some powders the hardener or cross linking agents are used. The powder can be thermoplastic or thermosetting type. The thermoplastic materials like polyethylene, PVC, PTFE etc. are more widely used. Now-a-days the powder coating is find very wide applications in the sheet material components for the purpose of protection as well as better looking. These components are steel cabinet of Computers, VCR, VCP, Panel Boards of sophisticated equipment, metal components in Telecom Industries, steel furniture, domestic appliances, auto parts, hardware, machine parts and architectural section etc.

The common problems observed are the difficulty in changing the colour and peeling of the coating etc. For excellent results the seven tanks cleaning operation can be applied on the job. Though this coating is costlier than the simple paint, its long life and excellent looking proves to be cheaper.

BASIS & PRESUMPTIONS:

- (i) The efficiency of machinery is taken at 60%. The unit will work on single shift basis of 8 hrs. per day and 25 days in a month and 300 days in a year. of the total production capacity.
- (ii) The time period to achieve the full envisaged capacity utilization is 5year.
- (iii) The labor wages are as per the prevailing rates in the market
- (iv) The interest rate for fixed and working capital is taken as 11.00%.
- (v) The margin money requirement will be 10% of the total cost of this project.
- (vi) The payback period is 5 years.
- (vii) The land requirement is 150 Sq. mtrs. And the built up area is 100 sq.mtr.

IMPLEMENTATION SCHEDULE:

Time required for preparation of Project report	: One month
Selection of Site	: One month
Registration as SSI Unit	: One Week
Time required for acquiring the loan	: Three months
Construction of building	: Three months
Machinery procurement, commissioning & erection	: One months
Recruitment of labourer etc.	: One month
Trial runs	: One month

TECHNICAL ASPECTS:

(iii) Process Outline:

First the surface which is to be coated is cleaned perfectly by giving a pre-treatment i.e. degreasing, chromating so that the oil, grease, dust and rust should not remain there. Now give a phosphate coat on the surface by phosphating process, wash and dry the object. Dry powder is filled in a hopper

where it is fluidised by low pressure gas. When it comes to the gun through a flexible hose where it is electro-statically charged by a high voltage generator. An electrostat field is produced between the gun nozzle and the earthed object, which is already kept in spray booth. The powder particles get uniformly deposited on the object. Now remove the objects from the spray booth and keep it in the oven at the temp. approx. 150°C for 10 to 15 minutes the powder metals get polymerised and form a solid hard film. The over sprayed powder is recovered by a separate recovery system attached with the spray booth. Now remove the object from the oven and it is the finished goods.

(iv) Quality Specification:

The BIS has not prepared any standards for this product, hence this product can be made as per the customers' requirement.

(v) Production capacity: (Per annum)

Quantity : 70,000 Sq. mtrs.

(vi) Approximate Motive Power:

The approximate Motive Power is required 30 KWH.

(vii) Pollution Control:

This unit does not make so much effluents because the water is used only for cleaning and phosphating purposes.

(viii) Energy Conservation:

By adjusting the process and utilization of machinery the proper utilization and conservation of the energy can be done.\

(ix) Labour Requirement:

4-5 Manpower is required Includes:
2 skilled Labour /Technician
3 Unskilled Labour

FINANCIAL ASPECT:

Product and By Product	:	Powder coating	
Name of the project / business activity proposed :		Powder coating	
Cost of Project	:	Rs.14.86 Lacs	
Means of Finance			
Term Loan		Rs.11.16 Lacs	
KVIC Margin Money	-	As per Project Eligibility	
Own Capital		Rs.1.49 Lacs	
Working Capital		Rs.2.22 Lacs	
Debt Service Coverage Ratio	:	2.82	
Pay Back Period	:	5	Years
Project Implementation Period	:	6	Months
Break Even Point	:	28%	
Employment	:	9	Persons
Power Requirement	:	30.00	HP
Major Raw materials	:	Powder of Epoxy, Acrylic, Polyester, Hybrid & Polyurethane	
Estimated Annual Sales Turnover	:	35.77	Lacs

COST OF PROJECT

	(Rs. In Lacs)
Particulars	Amount
Land 150 sqmt	Rented/Owned
Building & Civil Work (100Sqmt)	3.50
Plant & Machinery	7.80
Furniture & Fixtures	0.75
Pre-operative Expenses	0.35
Working Capital Requirement	2.46
Total	14.86

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	1.49
Term Loan	11.16
Workign Capital Finance	2.22
Total	14.86
	General 10%
Beneficiary's Margin Monery (% of Project Cost)	Special 5%

PLANT & MACHINERY

1	Tanks (for surface cleaningSystem, Pickling, phosphating etc.)	8	100000
2	Powder spray equipment output capacity 3kg.hr. attached with other accessories.	1	120000
3	Powder spray booth with cyclone type recovery system, overall dimension 1.5x1.5x2.5 meters with blower motor 2 HP 5000 M3/hr.air exhaust	1	120000
4	Powder curing oven with dimension2x2.5x2M, heat load 15KW, max. temp. 200oC blower motor 1 HP 1.5 KW, 60/40 IR Con heater	1	160000
5	Compressor 5000 M3/hr. cap	1	50000
6	Over Head Crane – 2 Ton capTesting equipment	1	50000
7	Pollution Control Equipment & facilities	LS	100000
8	Electrification & Installation charges	LS	80000
	TOTAL		780000

COMPUTATION OF MANUFACTURING OF POWDER COATING

Manufacturing Capacity per day	235.00	SQMT
No. of Working Hour	8	
No of Working Days per month	25	
No. of Working Day per annum	300	
Total Production per Annum	70,500.00	SQMT
Year	Capacity	SQMT
	Utilisation	
IST YEAR	60%	42,300
IIND YEAR	65%	45,825
IIIRD YEAR	70%	49,350
IVTH YEAR	75%	52,875
VTH YEAR	80%	56,400

COMPUTATION OF RAW MATERIAL

Item Name		Quantity of	Recovery	Unit Rate of	Total Cost
		Raw Material		/ Kg	Per Annum (100%)
		Kg			
Powder of Epoxy, Acrylic, Polyester, Hybrid & Polyurethane	100%	2,760.00	100.00%	450.00	12,42,000.00
Miscellaneous chemicals for Cleaning & phosphating etc.	100%	-	100.00%	0.00	60,000.00
Total					13,02,000.00
Annual Consumption cost (In Lacs)					13.02

Raw Material Consumed	Capacity		Amount (Rs.)
	Utilisation		
IST YEAR	60%		7.81
IIND YEAR	65%		8.46
IIIRD YEAR	70%		9.11
IVTH YEAR	75%		9.77
VTH YEAR	80%		10.42

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>Finished Goods</u>					
(15 Days requirement)	1.02	1.12	1.23	1.35	1.47
<u>Raw Material</u>					
(15 Days requirement)	0.39	0.42	0.46	0.49	0.52
Closing Stock	1.41	1.54	1.69	1.83	1.99

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Total Amount
Stock in Hand	1.41
Sundry Debtors	1.32
Total	2.72
Sundry Creditors	0.26
Working Capital Requirement	2.46
Margin	0.25
Working Capital Finance	2.22

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	2,115	2,291	2,468	2,644
Production	42,300	45,825	49,350	52,875	56,400
	42,300	47,940	51,641	55,343	59,044
Less : Closing Stock	2,115	2,291	2,468	2,644	2,820
Net Sale	40,185	45,649	49,174	52,699	56,224
Sale Price per Sqft	60.00	61.20	62.42	63.67	64.95
Sale (in Lacs)	24.11	27.94	30.70	33.55	36.52

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>A) SALES</u>					
Gross Sale	24.11	27.94	30.70	33.55	36.52
Scrap sale 15 MT @15000/MT	2.25	2.25	2.25	2.25	2.25
Total (A)	26.36	30.19	32.95	35.80	38.77
B) COST OF SALES					
Raw Mateiral Consumed	7.81	8.46	9.11	9.77	10.42
Electricity Expenses	2.58	2.79	3.01	3.22	3.44
Repair & Maintenance	-	0.28	0.31	0.34	0.37
Labour & Wages	4.09	4.50	4.95	5.45	5.99
Depriciation	1.56	1.38	1.19	1.03	0.89
Consumables and Other Expenses	1.32	1.51	1.65	1.79	1.94
Cost of Production	17.36	18.93	20.22	21.59	23.04
Add: Opening Stock /WIP	-	1.02	1.12	1.23	1.35
Less: Closing Stock /WIP	1.02	1.12	1.23	1.35	1.47
Cost of Sales (B)	16.34	18.82	20.11	21.48	22.92
C) GROSS PROFIT (A-B)	10.02	11.37	12.84	14.33	15.84
	42%	41%	42%	43%	43%
D) Bank Interest (Term Loan)	0.92	1.11	0.81	0.50	0.20
Bank Interest (C.C. Limit)	0.22	0.22	0.22	0.22	0.22
E) Salary to Staff	2.11	2.32	2.56	2.81	3.09
F) Selling & Adm Expenses Exp.	0.48	0.56	0.61	0.67	0.73
TOTAL (D+E)	3.74	4.22	4.20	4.20	4.24
H) NET PROFIT	6.28	7.15	8.64	10.13	11.60
I) Taxation	-	0.72	1.73	2.03	2.32
J) PROFIT (After Tax)	6.28	6.44	6.91	8.10	9.28



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