

PROJECT PROFILE
ON
STEEL WOOL

PART-I

NAME OF THE PRODUCT : **STEEL WOOL.**

QUALITY & STANDARD : BIS has laid down specification No. IS:5319 on the product. It covers the requirements for various grades of Steel Wool.

PRODUCTION CAPACITY : The production capacity of the unit at 75% capacity utilisation.

Item	Quantity	Rate (Rs.)	Value (Rs.)
Steel Wool	150 MT	9,60,000/MT	14,40,00,000/-
Sale of scrap	50 MT	15000/MT	7,50,000/-
Total:			14,47,50,000/-

MONTH & YEAR OF PREPARATION : November, 2012.

PREPARED BY : **Mechanical Division**
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PROJECT PROFILE

ON

STEEL WOOL

PART-II

A) INTRODUCTION

Steel Wool has very extensive use in the rapid industrialization in the country and abroad. This item can economise on the time and money considerably. Its main use is for cleaning, de-rusting, polishing, scouring etc. It is used for easy cleaning on metallic & non-metallic surfaces. The various uses of steel wool in different fields are detailed as under:

- i) Used for rough work, where removal of rust & polishing is required.
- ii) Used where heavier abrasive action is needed e.g. removal of corrosion of water pipes, other pipes, boilers and automobile repairing.
- iii) Used for cleaning & preparation of surfaces for preliminary coats of paints, polishing sheet metals, rubber tile flooring, house-hold utensils etc.

B) MARKET POTENTIAL

In the rapid industrialization the use of steel wool as an abrasive enjoys constant demand and good market potential in the country. Being a consumable item it has great demand in commercial establishments, houses, automobile repairing shops etc. There are very few manufacturers of this item; as such it has great market potential.

C) BASIS & PRESUMPTIONS

1. The project profile has been prepared on the basis of single shift of 8 hours per day, 25 days in a month and at 75% efficiency.
2. It is presumed that in the 1st year, the capacity utilization will be 70% followed by 85% in the next year and 100% in the subsequent years.
3. The rates quoted in respect of salaries and wages for skilled workers and others are the minimum rates in the State / neighbouring States.
4. Interest rate for fixed and working capital has been taken @ 15% of an average, whether financed by bankers or by financial corporation.
5. Margin money required is minimum 25% of the projected investment.
6. Payback period of the project – After the initial gestation period of one and a half years, it will require 5 years to pay back the loans.
7. The rental value of the workshed and other built up / covered area has been taken at the rate of Rs. 20/- per sq. mtrs.
8. The rates quoted in respect of machines, equipment and raw materials are those prevailing at the time of preparation of this project profile, and are likely to vary from supplier to supplier and place to place. When a tailor made project profile is prepared necessary changes are to be made.

D) IMPLEMENTATION SCHEDULE:

i.	Preparation of project profile	
	a) Calling of quotations	2 months
	b) Preparation	2 weeks
ii.	EM-I Registration as MSME & other formalities	1 week
iii.	Financial arrangements	3 months
iv.	Purchase and procurement of machinery	2 months
v.	Installation of machines	1 month
vi.	Electrification	1 month
vii.	Recruitment of staff and workers	1 month

E) TECHNICAL ASPECTS:

Steel Wool is manufactured out of metal of steel wire 3:1 mm (Special quality).
The chemical composition is as under:

C = 0.10 to 0.12%, P = 0.032%, Mn = 0.50% to 0.65%, S = 0.32%, Si = 0.10 Max.

Tensile strength 90 to 110 Kg. / MM²

(i) Process of Manufacture:

The plant is totally automatic. Wire is fed into the machine. The different stages in manufacture are:

- i) Spot welding
- ii) Steel Wool making
- iii) Grinding
- iv) Packing etc.

All the attachments are fitted with the machine. No extra tool is required for grinding purpose.

(ii) Quality Control and Standards

The Steel Wool is manufactured in various grades viz; Grade No. 000 (Super fine), Grade No. 00 (Very fine), Grade No. 0 (fine), Grade No. 1 (Standard), Grade No. 2 (Medium), Grade No. 3 & 4 (Course), Grade No. 5 (Rough), BIS specification No. IS:5319 shall be followed for quality control & standards.

(iii) Production Capacity:

Item	Quantity	Value (Rs.)
Steel Wool	150 MT	Rs.

(iv) Approximate Motive Power required: 25 KW**(v) Pollution Control:**

Steel Wool making is not a pollution creating industry. As such no special type of pollution control equipments need to be installed.

(vi) Energy Conservation:

Plant is fully automatic and individually motorized. Provision for installation of shunt capacitor has been made under the head "Electrification installation" to improve the power factor.

F) FINANCIAL ASPECTS:**A) Fixed Capital:****(i) Land & Building:**

Built up covered area 200 sq. mtrs. (Rented) p.m. **12,000/-**
(with Store, Office, Machine Shop & Packing Section.)

(ii) Machinery & Equipment:

Sl. No	Item	Qty. (Nos.)	Amount (In Rs.)
1.	Automatic Steel Wool making machine, type KG, Double group including all attachments i.e. under grinding machine, spot welding machine, packing machine etc.	1	70,00,000/-
2.	Cost of tools, dies, fixtures etc. measuring tools etc.	LS	4,00,000/-
	<u>Electrification and Installation</u>		
	Charges including cost of power connection & installation		5,50,000/-
	Total cost of machinery		79,50,000/-
	Cost of office equipment, furniture etc.		35,000/-
	Pre-operative Expenses		20,000/-
	Total Fixed Capital		80,00,000/-

B) Working Capital (Per Month):**(i) Personnel:**

Sl. No.	Designation	No.	Salary	Total (Rs.)
1.	Manager-cum-Engineer	1	16000	16,000/-
2.	Accountant / Clerk	1	4000	4,000/-
3.	Mechanic / Foreman	1	12000	12,000/-
4.	Skilled Workers / Semi Skilled Workers	2	6000	12,000/-
5.	Helpers for packing etc.	3	4000	12,000/-
6.	Peon / Chwokidar	1	4000	4,000/-
7.	Part Time Sweeper	1	2000	2,000/-
	Total:			62,000/-
	Add Perquisites @ 15% of salary			9,000/-
	Total:			71,000/-

(ii) Raw Materials including Packaging Requirements(P.M.):

Sl. No.	Particulars	Qty.	Rate	Amount (In Rs.)
1.	Special Grade M.S. Wire 3.1mm	17.0 MT	70000/MT	11,90,000/-
	Total:			11,90,000/-

(iii) Utilities:

1.	Power	12,000/-
2.	Water	1,000/-
	Total:	13,000/-

(iv) Other Contingent Expenses (P.M.):

1	Rent	12,000/-
2	Postage & Stationery	1,000/-
3	Consumable stores	4,000/-
4	Telephone	1,000/-
5	Repair & Maintenance	10,000/-
6	Transport charges	12,000/-
7	Advertisement & Publicity	10,000/-
8	Insurance	4,000/-
9	Taxes	2,000/-
10	Sales expenses	6,000/-
11	Miscellaneous Expenses	3,000/-
12	Packing charges	10,000/-
	Total:	75,000/-

(v) Working Capital / Total Recurring Expenditure (P.M.):

1.	Personnel	71,000/-
2.	Raw Materials	11,90,000/-
3.	Utilities	13,000/-
4.	Other Contingent Expenses	75,000/-
	Total:	13,49,000/-

(vi) Total working capital for 3 months 13,49,000 X 2 = Rs.26,98,000/-**C) TOTAL CAPITAL INVESTMENT:**

I.	Fixed Capital	80,00,000/-
II.	Working Capital for 2 months	26,98,000/-
	Total:	1,06,98,000/-

Machinery utilization:

The plant is fully automatic. It will be fully utilized without leaving any spare capacity. However, to further increase the profit the plant can be run on 2 – 3 shift basis.

G) FINANCIAL ANALYSIS:

i) Cost of Production (Per annum)

Sl. No.	Particulars	Value(Rs.)
1.	Total recurring cost per year	12,83,76,000/-
2.	Depreciation on machinery and equipment @ 10%	7,00,000/-
3.	Depreciation on tools & dies @ 20%	80,000/-
4.	Depreciation on office equipment @ 20%	7,000/-
5.	Interest on Total Capital Investment @ 15%	16,05,000/-
Total: -		13,07,68,000/-

ii) Turnover (Per Annum)

Sl. No.	Item	Quantity	Rate (Rs.)	Value (Rs.)
1.	Steel Wool	150 MT	9,60,000/MT	14,40,00,000/-
2.	Sale of scrap	50 MT	15000/MT	7,50,000/-
Total:				14,47,50,000/-

iii) NET PROFIT (Per annum) Before Taxation:

Turn Over	(-)	Cost of Production	=	1,39,82,000/-
14,47,50,000/-	(-)	13,07,68,000/-		

iv) PROFIT RATIO ON SALES (Per Annum):

<u>Profit/annum X 100</u>	<u>1,39,82,000/- X 100</u>	=	9.65%
Turnover/Annum	14,47,50,000/-		

v) RATE OF RETURN (Per Annum):

<u>Net Profit/annum X 100</u>	<u>1,39,82,000/- X 100</u>	=	130.69%
Total Capital Investment	1,06,98,000/-		

BREAK EVEN POINT**Fixed Cost:**

1.	Total Depreciation	Rs.	7,87,000/-
2.	Rent	Rs.	1,44,000/-
3.	Interest	Rs.	16,05,000/-
4.	Insurance	Rs.	48,000/-
5.	40% of Salary & Wages	Rs.	3,41,000/-
6.	40% of other contingent expenses (excluding rent)	Rs.	2,83,000/-
	Total:-	Rs.	32,08,000/-
	Say	Rs.	32,10,000/-

B.E.P.

Fixed Cost X 100	32,10,000/- X 100	=	18.67%
Fixed Cost + Profit	32,10,000/- + 1,39,82,000/-		

Name & Address of Machinery & Equipment Suppliers:**For Steel Wool making machinery, Type KG – Double group**

1. M/s Eisen, U. Hammer works,
6, MBH, Post Patch – 11207835,
Taningan, Germany.

Name & Address of Raw Material Suppliers:

Raw material are easily available I the open market.