PROJECT REPORT

Of

STEEL TUBES MANUFACTURING UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Steel Tubes Manufacturing unit.

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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PROJECT AT A GLANCE

1	Name of the Entreprenuer		xxxxxxxxxx
2	Constitution (legal Status)	:	xxxxxxxxxx
3	Father / Spouse Name		xxxxxxxxxxx
4	Unit Address	:	xxxxxxxxxxxxxxxxxxxxxxx
			District : xxxxxxx
			Pin: xxxxxxx State: xxxxx
			Mobile xxxxxxx
5	Product and By Product	:	**STEEL TUBE**
6	Name of the project / business activity proposed :		**STEEL TUBE MANUFACTURING UNIT**
7	Cost of Project	:	Rs.23.01 Lakhs
8	Means of Finance		
	Term Loan		Rs.16.88 Lakhs
	Own Capital		Rs.2.3 Lakhs
	Working Capital		Rs.3.84 Lakhs
9	Debt Service Coverage Ratio	:	2.18
10	Pay Back Period	:	5 Years
11	Project Implementation Period	:	5-6 Months
12	Break Even Point	:	39%
13	Employment	:	14 Persons
14	Power Requirement	:	20.00 HP
15	Major Raw materials	:	Steel, Sulphuric Acid, Packing material
16	Estimated Annual Sales Turnover (Max Capacity)	:	82.96 Lakhs
17	Detailed Cost of Project & Means of Finance		

COST OF PROJECT

(Rs. In Lakhs)

Particulars	**Amount**
Land	Own/Rented
Plant & Machinery	17.25
Furniture & Fixtures	1.50
Working Capital	4.26
Total	**23.01**

MEANS OF FINANCE

Particulars	**Amount**
Own Contribution	2.30
Working Capital(Finance)	3.84
Term Loan	16.88
Total	**23.01**

STEEL TUBE MANUFACTURING UNIT

Introduction:

Steel pipes are long, hollow tubes that are used for a variety of purposes. They are produced by two distinct methods which result in either a welded or seamless pipe. In both methods, raw steel is first cast into a more workable starting form. It is then made into a pipe by stretching the steel out into a seamless tube or forcing the edges together and sealing them with a weld. The first methods for producing steel pipe were introduced in the early 1800s, and they have steadily evolved into the modern processes we use today. Each year, millions of tons of steel pipe are produced. Its versatility makes it the most often used product produced by the steel industry. Steel pipes are found in a variety of places. Since they are strong, they are used underground for transporting water and gas throughout cities and towns. They are also employed in construction to protect electrical wires. While steel pipes are strong, they can also be lightweight. This makes them perfect for use in bicycle frame manufacture. Other places they find utility is in automobiles, refrigeration units, heating and plumbing systems, flagpoles, street lamps, and medicine to name a few. There are two types of steel pipe, one is seamless and another has a single welded seam along its length. Both have different uses. Seamless tubes are typically more light weight, and have thinner walls. They are used for bicycles and transporting liquids. Seamed tubes are heavier and more rigid. They have a better consistency and are typically straighter. They are used for things such as gas transportation, electrical conduit and plumbing. Typically, they are used in instances when the pipe is not put under a high degree of stress.

Uses & Market Potential:

Stainless Steel tubes are widely used in the dairy & food processing industries, heat exchangers, evaporators, cooling units, stock lives and condensers, such as those used in chemical digestive food liners, blow lines, evaporation pulp and paper industry, pharmaceutical industry production flow lines, aircraft tubing, hydraulic lines, air conditioning and pressurizing tubes, oil lines, electrical controls and switches, fuel lines, flexible joints & connections, exhaust turbine assemblies, oxygen tanks, stationary, etc. so there is a good demand of such products. The demand for steel pipes and tubes is increasing day by day, especially in the automobile industry.

Seamless pipes and tubes are used in both oil and non-oil sectors in a wide range of applications as line pipes, casing pipes, production tubings, and drill pipes. Oil sector absorbs nearly 60% of seamless pipes, while some 30% are consumed by bearings and boiler manufacturers. Steel tubes industry is poised for a 30% growth in the wake of a growing demand in the infrastructure construction sector, mainly in scaffolding in buildings. The steel tubes and pipes industry witnessed demand from various domestic industries like real estate, construction, telecom, power, energy, entertainment zones, metros, airports and ports, etc. Key policy-led initiatives such as the urban infrastructure program under Public Private Partnership also proved to be a shot in the arm. The market environment for stainless steel tube & pipe is challenging at the moment.

Product:

STEEL TUBE

Raw Material:

1. Steel
2. Sulphuric Acid
3. Packaging Material

Manufacturing Process:

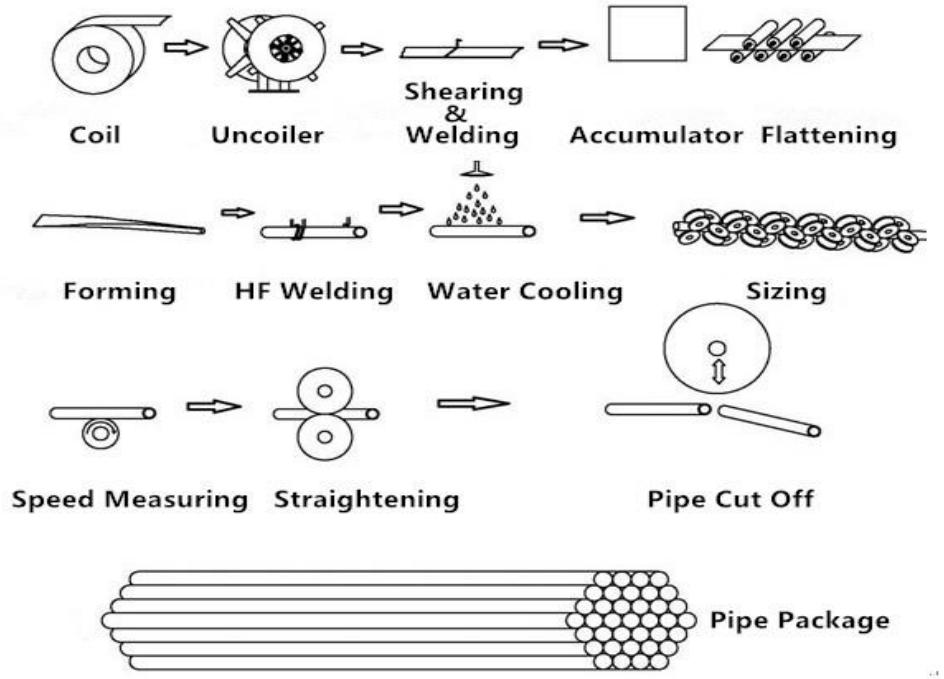

Fig. 1 – Process Flowchart

Area:

The industrial setup requires space for manufacturing unit. Also, some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete small-scale factory setup is 2500-3000Sq. ft. approximately.

Cost of Machines:

S No.	Machine	Unit	Price (INR)
1.	Guillotine shearing Machine	1	1,20,000/-
2.	Hand Operated shearing machine	1	1,10,000/-
3.	Power Press with electric motor	1	85,000/-
4.	Electric Arc Welding Set	1	25,000/-
5.	Special purpose production lathe	1	95,000/-
6.	Tapping Machine	1	1,11,000/-
7.	Power Press	1	70,000/-
8.	Power Hacksaw machine	1	80,000/-
9.	Bench type Drilling Machine	1	22,500/-
10.	Bench-Grinder	1	20,090/-
11.	Portable Hand-Drilling	1	11,900/-
12.	Universal Bending Machine complete with electrical	1	75,000/-
13.	Steel Tube making Machine	1	9,00,000/-
	Total		**17,25,490/-**

Power Requirement- - The estimated Power requirement is taken at 20 HP

Manpower Requirement– Following manpower is required:

- Skilled/unskilled worker-3
- Machine Operator- 4
- Helper- 5
- Sales Personal and Accountant- 2

FINANCIALS

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	2.38	3.74	6.15	8.78
Add: Additions	2.30	-	-	-	-
Add: Net Profit	3.38	5.06	6.81	8.64	9.05
Less: Drawings	3.30	3.70	4.40	6.00	6.10
Closing Balance	2.38	3.74	6.15	8.78	11.73
CC Limit	3.84	3.84	3.84	3.84	3.84
Term Loan	15.00	11.25	7.50	3.75	-
Sundry Creditors	1.13	1.29	1.46	1.64	1.83
TOTAL :	**22.34**	**20.11**	**18.94**	**18.01**	**17.40**
APPLICATION OF FUND					
Fixed Assets (Gross)	18.75	18.75	18.75	18.75	18.75
Gross Dep.	2.74	5.07	7.06	8.76	10.21
Net Fixed Assets	16.01	13.68	11.69	9.99	8.54
Current Assets					
Sundry Debtors	2.52	2.96	3.34	3.73	4.15
Stock in Hand	2.87	3.27	3.69	4.13	4.60
Cash and Bank	0.94	0.21	0.23	0.15	0.11
TOTAL :	**22.34**	**20.11**	**18.94**	**18.01**	**17.40**
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	50.46	59.22	66.77	74.69	82.96
Total (A)	**50.46**	**59.22**	**66.77**	**74.69**	**82.96**
B) COST OF SALES					
Raw Material Consumed	22.50	25.74	29.16	32.76	36.54
Elecricity Expenses	2.24	2.46	2.69	2.91	3.13
Repair & Maintenance	1.77	2.07	2.34	2.61	2.90
Labour & Wages	12.54	14.17	16.29	18.25	20.44
Depreciation	2.74	2.33	1.99	1.70	1.45
Cost of Production	41.78	46.78	52.47	58.23	64.46
Add: Opening Stock /WIP	-	1.74	1.98	2.23	2.50
Less: Closing Stock /WIP	1.74	1.98	2.23	2.50	2.77
Cost of Sales (B)	40.04	46.54	52.21	57.96	64.19
C) GROSS PROFIT (A-B)	10.42	12.68	14.56	16.72	18.78
	20.65%	**21.42%**	**21.81%**	**22.39%**	**22.63%**
D) Bank Interest i) (Term Loan)	1.83	1.50	1.08	0.67	0.26
ii) Interest On Working Capital	0.42	0.42	0.42	0.42	0.42
E) Salary to Staff	3.28	3.93	4.25	4.76	5.33
F) Selling & Adm Expenses Exp.	1.51	1.78	2.00	2.24	2.49
TOTAL (D+E+F)	**7.04**	**7.63**	**7.75**	**8.09**	**8.49**
H) NET PROFIT	3.38	5.06	6.81	8.64	10.28
	6.7%	**8.5%**	**10.2%**	**11.6%**	**12.4%**
I) Taxation	-	-	-	-	1.23
J) PROFIT (After Tax)	3.38	5.06	6.81	8.64	9.05

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Own Contribution	2.30	-			
Reserve & Surplus	3.38	5.06	6.81	8.64	10.28
Depriciation & Exp. W/off	2.74	2.33	1.99	1.70	1.45
Increase In Cash Credit	3.84				
Increase In Term Loan	16.88	-	-	-	-
Increase in Creditors	1.13	0.16	0.17	0.18	0.19
TOTAL :	**30.25**	**7.56**	**8.97**	**10.51**	**11.92**
APPLICATION OF FUND					
Increase in Fixed Assets	18.75	-	-	-	-
Increase in Stock	2.87	0.40	0.42	0.44	0.46
Increase in Debtors	2.52	0.44	0.38	0.40	0.41
Repayment of Term Loan	1.88	3.75	3.75	3.75	3.75
Taxation	-	-	-	-	1.23
Drawings	3.30	3.70	4.40	6.00	6.10
TOTAL :	**29.31**	**8.29**	**8.95**	**10.59**	**11.96**
Opening Cash & Bank Balance	-	0.94	0.21	0.23	0.15
Add : Surplus	0.94	- 0.73	0.02	- 0.08	- 0.04
Closing Cash & Bank Balance	**0.94**	**0.21**	**0.23**	**0.15**	**0.11**

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	1.74	1.98	2.23	2.50	2.77
Raw Material					
(15 Days requirement)	1.13	1.29	1.46	1.64	1.83
Closing Stock	**2.87**	**3.27**	**3.69**	**4.13**	**4.60**

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	2.87		
Less:			
Sundry Creditors	1.13		
Paid Stock	**1.74**	**0.17**	**1.57**
Sundry Debtors	2.52	0.25	2.27
Working Capital Requirement			**3.84**
Margin			0.43
MPBF			**3.84**
Working Capital Demand			**3.84**

REPAYMENT SCHEDULE OF TERM LOAN 11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
I	Opening Balance						
	Ist Quarter	-	16.88	16.88	0.46	-	16.88
	Iind Quarter	16.88	-	16.88	0.46	-	16.88
	IIIrd Quarter	16.88	-	16.88	0.46	0.94	15.94
	Ivth Quarter	15.94	-	15.94	0.44	0.94	15.00
					1.83	1.88	
II	Opening Balance						
	Ist Quarter	15.00	-	15.00	0.41	0.94	14.06
	Iind Quarter	14.06	-	14.06	0.39	0.94	13.13
	IIIrd Quarter	13.13	-	13.13	0.36	0.94	12.19
	Ivth Quarter	12.19		12.19	0.34	0.94	11.25
					1.50	3.75	
III	Opening Balance						
	Ist Quarter	11.25	-	11.25	0.31	0.94	10.31
	Iind Quarter	10.31	-	10.31	0.28	0.94	9.38
	IIIrd Quarter	9.38	-	9.38	0.26	0.94	8.44
	Ivth Quarter	8.44		8.44	0.23	0.94	7.50
					1.08	3.75	
IV	Opening Balance						
	Ist Quarter	7.50	-	7.50	0.21	0.94	6.56
	Iind Quarter	6.56	-	6.56	0.18	0.94	5.63
	IIIrd Quarter	5.63	-	5.63	0.15	0.94	4.69
	Ivth Quarter	4.69		4.69	0.13	0.94	3.75
					0.67	3.75	
V	Opening Balance						
	Ist Quarter	3.75	-	3.75	0.10	0.94	2.81
	Iind Quarter	2.81	-	2.81	0.08	0.94	1.88
	IIIrd Quarter	1.88	-	1.88	0.05	0.94	0.94
	Ivth Quarter	0.94		0.94	0.03	0.94	-
					0.26	3.75	

Door to Door Period	60	Months
Moratorium Period	6	Months
Repayment Period	54	Months

CALCULATION OF D.S.C.R

PARTICULARS	I	II	III	IV	V
CASH ACCRUALS	6.12	7.39	8.80	10.33	10.50
Interest on Term Loan	1.83	1.50	1.08	0.67	0.26
Total	7.95	8.89	9.88	11.00	10.76
REPAYMENT					
Repayment of Term Loan	1.88	3.75	3.75	3.75	3.75
Interest on Term Loan	1.83	1.50	1.08	0.67	0.26
Total	3.71	5.25	4.83	4.42	4.01
DEBT SERVICE COVERAGE R	**2.14**	**1.69**	**2.04**	**2.49**	**2.68**
AVERAGE D.S.C.R.			**2.18**		

Assumptions:

1. Production Capacity of Steel Tube is 600 Kg per day. First year, Capacity has been taken @ 50%.

2. Working shift of 10 hours per day has been considered.

3. Raw Material stock has been taken for 15 days and Finished goods closing stock has been taken for 10 days.

4. Credit period to Sundry Debtors has been given for 15 days.

5. Credit period by the Sundry Creditors has been provided for 15 days.

6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.

7. Interest on working Capital Loan and Term loan has been taken at 11%.

8. Salary and wages rates are taken as per the Current Market Scenario.

9. Power Consumption has been taken at 20 KW.

10. Selling Prices & Raw material costing has been increased by 3% & 5% respectively in the subsequent years.

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