

PROJECT PROFILE ON STEEL FURNITURE

PRODUCT	:	STEEL FURNITURE
QUALITY & STANDARD	:	IS 3312-1984 -Steel Shelving Cabinet IS 3499 -1985 -Metal Chairs & as per Customer specification
PRODUCTION CAPACITY (P.A.)	:	i) Steel Almirah - 600 Nos. ii) Steel cup boards - 300 Nos. iii) Steel chairs. - 960 Nos.
	Value	: Rs. 67,74,000/-
Prepared on	:	June 2021
Updated by	:	MECHANICAL DIVISION Micro Small & Medium Enterprises Development Institute, 65/1,GST Road,Guindy Chennai-600032 Ph:044-22501011/12/.13 Email: dcdi-chennai@dcmsme.gov.in

A. INTRODUCTION:

With the growth of industrial, commercial and household activities the demand of office automation, equipments and steel furniture has increased considerably, Steel furniture is preferred over other kinds of furniture due to its durability, foldability (in many cases) and easy transportability. This profile envisages production of steel almirahs, steel cup boards and steel chairs. These items find their extensive use in industrial, commercial and household activities.

B. MARKET:

As mentioned above, the steel almirahs, steel cup boards and steel chairs find their extensive use in industrial, commercial and household activities. These items are also used by various Govt. organizations. With the growth of industrial, commercial and household establishments, the demand of steel furniture items has increased considerably. Various Govt. organizations also procure these items directly or through annual rate contract system. Hence, there is a good market potential for above items.

C. BASIS AND PRESUMPTIONS:

- i) This project profile is based on 8 working hours a day and 25 days in a month and the break even efficiency has been calculated on 75% capacity utilization basis.
- ii) The gestation period in implementation of the project may be about 5 to 6 months. This period includes making all arrangements, completion of all formalities, market surveys and tie ups, financial arrangements, purchase of machines, recruitment of staff, commissioning of plant and trial production etc.
- iii) The normal wages and salaries being paid in the industry to various grades of personnel have been considered and also the provision of minimum wages has been taken care of.
- iv) The rate of interest both for fixed and working capital have been taken as 10% P.A.
- v) The pay back period for finance to the financial institutions may be about 5/6 years in case of term loan. The working capital loan may however be in a shape of rolling/limit based capital.

D. IMPLEMENTATION SCHEDULE:

Implementation of the project involve various activities like market surveys and tie-ups, procurement of know-how, arrangement of premises/ land, building, preparation of project report, registration, financing, purchase of machines, commissioning of project, recruitment of staff and training,

arrangement of power, procurement of raw materials, packing materials, trial production etc. in order to implement the project efficiently and in the shortest period there is a need to initiate many activities simultaneously as far as possible. This will not only cut the slack period but also will give quick results and be costeffective. It is advised to follow PERT/CPM/NET WORK analysis technique for implementation along with their estimated time requirement is given below:

Sl.No	Activity	Estimated period required
1.	Market survey	15-20 days
2.	Technical know-how/experts	10-15 days
3.	Arrangement of premises	10-20 days
4.	Obtaining quotations and preparation of project report.	15-20 days
5.	Financing.	15-30 days
6.	Recruitment of personnel and training.	10-15 days
7.	Obtaining power connection.	15-30 days
8.	Procurement of machines and equipments.	15-20 days
9.	Installation and electrification of machinery.	15-20 days
10.	Procurement of raw materials, consumables, packing materials etc.	5-10 days
11.	Product development/trial production.	5-10 days
12.	Commercial production.	

E. TECHNICAL ASPECTS:

- i) Manufacture of steel furniture involve the operations like sheet shearing, sheet folding, pipe bending, press work, spot welding, gas welding, painting etc. The size and design of furniture may be as per customer/IS specification.
- ii) This project profile envisages production of following steel furniture items with their production capacity mentioned against each:

a.	Steel Almirah 1855x910x430 mm	:	300 Nos. Per Annum
	-do- 1155x780x430 mm	:	300 Nos Per Annum
b.	Steel Cup Boards of assorted sizes.	:	300 Nos.Per Annum
c.	Steel chairs:		
	Folding type /dining	:	480 Nos. Per Annum
	S-type	:	480 Nos. Per Annum

- iii) The motive power required for the project will be to the tune of 10KW
- iv) All the machines and equipments mentioned in the project profile are of indigenous make and are of medium price.
- v) There is no special feature attracting energy conservation and pollution control. However, preventive maintenance of machines, use of shunt capacitors on electrical motors will be effective for efficient running of the machines and conserving electrical energy. For lighting purpose the use of LED / fluorescent lamps and electronic chokes may be made as far as possible.

F. FINANCIALASPECTS:

1. Land & Building

Amount(Rs.) 12,000/-

Built up area of 400 sq. mtr. on rental basis @ Rs. 12000/- Per month.

2. Machinery & Equipments.

a. Productionunit:

S.No.	Description of machine/equipment	Qty. (No.)	Amount(Rs.)
i)	Shearing machine power operated 2500 x 2 mm (Hydraulic)	1	4,00,000/-
ii)	Power operated Universal sheet folding press, Size : 2500 x 2mm	1	2,50,000/-
iii)	Power press C frame, 10 ton capacity, motorized with accessories	1	75,000/-
iv)	Spot welding machine pedestal rocker arm type, 10 KVA, complete with accessories.	1	70,000/-
v)	Pipe bending machine, max, dia 50mm, hydraulically operated complete with accessories.	1	30,000/-
vi)	D.E. bench grinder 200mm, 1 HP MOTORISED.	2	17,000/-
vii)	Bench drilling machine 20mm cap., 1 HP motorized.	1	18,000/-
viii)	Flexible grinder 125mm wheel dia, 1 HP motorized.	1	14,000/-
ix)	Portable drilling machine 12mm cap.	1	10,000/-
x)	Gas welding set complete with torch, regulator and hose pipe etc.	1	16,000/-
xi)	Booth for painting, Compressor, Spray gun for painting	1 Set.	1,10,000

b) Testing Section:

i)	Precision measuring instruments like thickness gauges, Micrometer, vernier, gauges etc.	10,000/-
ii)	Office furniture, Computer with Printer, workingtables, etc.	75,000/-
iii)	Cost of jigs, fixtures, dies, hand tools, material handling equipments etc.	40,000/-
	Total	11,35,000
	Installation and electrification charges @ 10% of cost of machines and equipments etc.	1,13,500/-
	Preliminary and preoperative expenses	40,000/-
	TotalRs.	12,88,500/-

4. WORKING CAPITAL (PERMONT):**1. Personnel(p.m.):****A. Administrative and Supervisory:**

S.No.	Designation	No.	Salary (Rs.)	Amount(Rs.)
a.	Manager	1	20,000	20,000/-
b.	Supervisor/Foreman	1	14,000	14,000/-
c.	Accountant/Clerk	1	9,000	9,000/-
d.	Assistant	1	7,000	7,000/-
			Total:	50,000

B. Technical:

a.	SkilledWorkers	3	9500	28,500/-
b.	Helpers\	1	7,000	7,000/-
			Total :	35,500/-

Perquisites@ 15% (A+B)**12,825/-****Total= 98,325/-****II. UTILITIES(p.m.)**

a.	Power	1000 KWH @ Rs. 6.50 per KWH	6,500/-
b.	Water	30 K.ltr. Lumpsum	3,000/-
		Total Rs.	9,500/-

III. RAW MATERIALS(P.M.):

S. No.	Particulars	Qty.	Rate (Rs.)	Amount (Rs.)
a.	CRC/BP sheet of 18,20,22,24 gauges	4 MT	50,000/- per MT	2,00,000/-
b.	M.S. pipe 18 SWG x 22mm dia.	200 Mtr..	50/- Per Mtr.	10,000/-
c.	M.S. pipe 16 SWG x 15mm dia	200 Mtr.	45/- Per Mtr.	9,000/-
d.	M.S. rod 10mm dia.	25 Kg.	50/- Per Kg.	1,250/-
e.	Seat and back with wooden frame for S Type chairs.	40 Pairs	400/- pair	16,000/-
f.	Pressed steel Seat and back for folding chair.	40 Pairs	200/- per pair	8,000/-
g.	Wooden handles for S-type chairs.	40 Pairs	200/- per pair	8,000/-
h.	Plastic / rubber bush for folding/S-type chairs.	10 Kg.	200/ per Kg.	2,000-
i.	Fasteners like, rivets, screws, nuts/bolts, etc.	L.S	L.S	2,500/-
j.	Lock, handles and fittings.	L.S	L.S	10,000/-
k.	Paints, primers and chemicals etc.	L.S	L.S	10,000/-
l.	Packing materials like poly sheets, juts cloth etc.	L.S	L.S	4,000/-
			Total Rs.	2,80,750/-

IV. OTHER EXPENSES(P.M.):

a.	Postage, stationery and telephone charges	3,000/-
b.	Rent.	12,000/-
c.	Repair and maintenance.	2,000/-
d.	Transport and traveling.	5,000/-
e.	Consumable stores.	2,500/-
f.	Advertisement and publicity.	1,000/-
g.	Insurance.	1,000/-
h.	Sales expenses.	3,000/-
i.	Misc. expenses.	3,000/-
	Total Rs.	32,500/-

V. TOTAL RECURRING EXPENDITURE(P.M.):

a.	Personnel	98,325/-
b.	Utilities	9,500/-
c.	Raw materials.	2,80,750/-
d.	Other expenses	32,500/-
	Total Rs.	4,21,075/-

VI. TOTAL CAPITAL INVESTMENT:

a.	Machinery and equipments	12,88,500/-
b.	Working capital (for two months)	8,42,150/-
	Total Rs.	21,30,650/-

G. MACHINERY UTILISATION:

The production capacity in this project profile is based on 75% capacity utilization of installed machinery. Although the efforts have been made to balance the production capacity at each stage of manufacture, yet in view of diverse processes and product mix the bottleneck operation may be the spot welding process in extreme cases.

H. FINANCIAL ANALYSIS:

1. Cost of production (per month):

a.	Recurring expenses	4,21,075/-
b.	Depreciation on machinery and equipments @ 10% p.a.	8,500/-
c.	Depreciation on jigs, fixtures, dies etc. @ 20% p.a.	670/-
d.	Depreciation on office equipments, furniture etc. @ 20% p.a.	1,250/-
e.	Interest on total capital @ 10% p.a.	17,755/-
	Total Rs.	4,49,250/-

2. Sales Realization (P.M.):

S. No.	Items	Qty. (Nos.)	Average Price (Rs.)	Amount (Rs.)
a.	Steel almirah of size 1855x910x430 mm	25	8000	2,00,000/-
	-do- 1155x780x430 mm	25	6500/-	1,62,500/-
b.	Steel cup board of assorted sizes.	25	5500/-	1,37,000/-
			-	
c.	Steel chairs ... folding type	40	600/-	24,000/-
	-do- S-type	40	900/-	36,000/-
d.	Steel sheet scrap	250 Kg.	20/-	5,000/-
			Total Rs.	5,64,500/-

3. **Net Profit (P.M.) before IncomeTax:**

Sales realization	5,64,500/-
Cost of production	4,49,250/-
Profit Rs.	1,15,250/-

4. **Net Profitratio:** = $\frac{1,15,250 \times 100}{5,64,500} = 20.41\%$

5. **Rate of return on Total Capital Investment:** = $\frac{1,15,250 \times 100 \times 12}{21,30,650} = 64.9\%$
(per annum)

6. **Break Even Analysis:**

Fixed Cost (F.C)/ month:

a.	Rent	12,000/-
b.	Insurance	1,000/-
c.	Depreciations	10,420/-
d.	Interest	17,755/-
e.	40% of salaries and wages.	39,330/-
f.	40% of other expenses and utilities except rent and insurance.	11,600/-
	Total Rs.	92,105/-

B.E.P. = $\frac{F.C \times 100}{F.C. + Profit} = \frac{92,105 \times 100}{92,105 + 1,15,250}$
= 44.46 %

Address of Machinery and Equipment Suppliers:

A. Shearing machine, folding press, PowerPress:

- a. M/s. Perfect Machine Tools Ltd., 44, E-Block, Connaught Circus, New Delhi.
- b. Essential Machine Tools P. Ltd., 5, Nayay Murti G.N.Vaidya Marg , (Bank Street), P.O. Box-2, Fort Mumbai.
- c. M/s. Jeet Machine Tools, 48, Shardhanand Marg, Ajmeri Gate, Delhi- 110006,
- d. Sri Hari Machinery Manufacturers, Mookamabika Nagar Rd, Nallimarathottam,Sridevi Nagar, Ganapathypudur, Coimbatore, Tamil Nadu 641006

B. Spot Welding machine, drilling machines, grinders,measuring Instruments etc.

- a. M/s. Jeet Machine Tools, 48, G.B. Road, Delhi.
- b. M/s. Royal Sales Corpn., F-7 Udyog Nagar, Near Rohtak Road, New Delhi.
- c. M/s. Punjab Machine Tools, Dholewal Chowk, Ludhiana (Pb.)
- d. Electroflux Industrie Spot Welding Company
4, 3rd cross street, Om parasakthi mills rd, Paaviyar Nagar, Ganapathy Coimbatore, Tamil Nadu 641006

C. Address of Raw MaterialsSuppliers:

From local/nearby suppliers/manufacturers.