

PROJECT PROFILE ON ELECTRIC TRANSMISSION LINE HARDWARE

- 1. Product:-** Electric Transmission Line Hardware
- 2. Production capacity:-** Qty. 576 MT of galvanized hardware
(Value Rs 3,11,37,600)
- 3. Month & year of Preparation:-** 2010-11
- 4. Prepared by:-** MSME-Development Institute
Govt . of India, Ministry of MSME
Goushala Road, P.O: Ramna,
Muzaffarpur (BIHAR)
PHONE-0621-2282486,2284425
Web:
www.msmedimzfpur.bih.nic.in
E.mail:
dcdi-mzfp@dcmsme.gov.in

1. INTRODUCTION :

Transmission line hardwires are generally used for transmission of overhead telecommunication and electric lines. The main users of this items are electricity department, railways & the companies which are engaged telecommunication work.

2. MARKET POTENTIAL :

Due to rapid growth and necessity of telecommunication & electricity a demand of such hardware is going at accelerated rate. The network of transmission line is also increasing day by day. Hence, the market prospect of these items is very bright in the country and in Bihar. Because, infrastructure development is passing through a re-construction stage. Therefore the demand is very high.

3. BASIC & PRESUMPTION :

1. 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 full capacity utilization basis.
2. The gestation period in implementation of the project may be to the tune of 6 to 9 months which includes making all arrangements, completion of all formalities, market surveys and tieups etc. Once all the above arrangements are made and quality/standards achieved the project capacity may be achieved at the end of one year.
3. The normal wages/salaries being paid in the industry to various grades of personnel have been considered and also the provision of minimum wages has been taken in to care.
4. The rate of interest, both for fixed and working capital has been taken as 16% p.a.
5. The margin money as applicable to general categories of entrepreneurs may be 20% of the project cost.
6. The pay back period may be 5 years after the loan has been disbursed.
7. Non-refundable deposits & cost, Preparation of Project Reports is considered under pre-operative costs.
8. The provision made in the report viz. Raw Material utilization, over head etc are drawn on the basis of standard variation and

output. The cost indicated against each are approximate and based on local market conditions and observations. The entrepreneur may find out exact cost from the concern source. The operative period of this project is estimated between 10-15 years considering technology obsolesce.

4. IMPLEMENTATION SCHEDULE :

The implementation of the project includes various jobs/exercises such as procurement of technical know how, transfer of technology, market surveys and tie-ups, preparation of project report, selection of site, registration financing of project, procurement of machinery and raw materials etc., recruitment of staff, erection / commissioning of machines, trial production and commercial production, etc. In order to efficiently and successfully implement the project in the shortest period the slack period is curtailed to minimum possible and as far as possible simultaneous exercises are carried out.

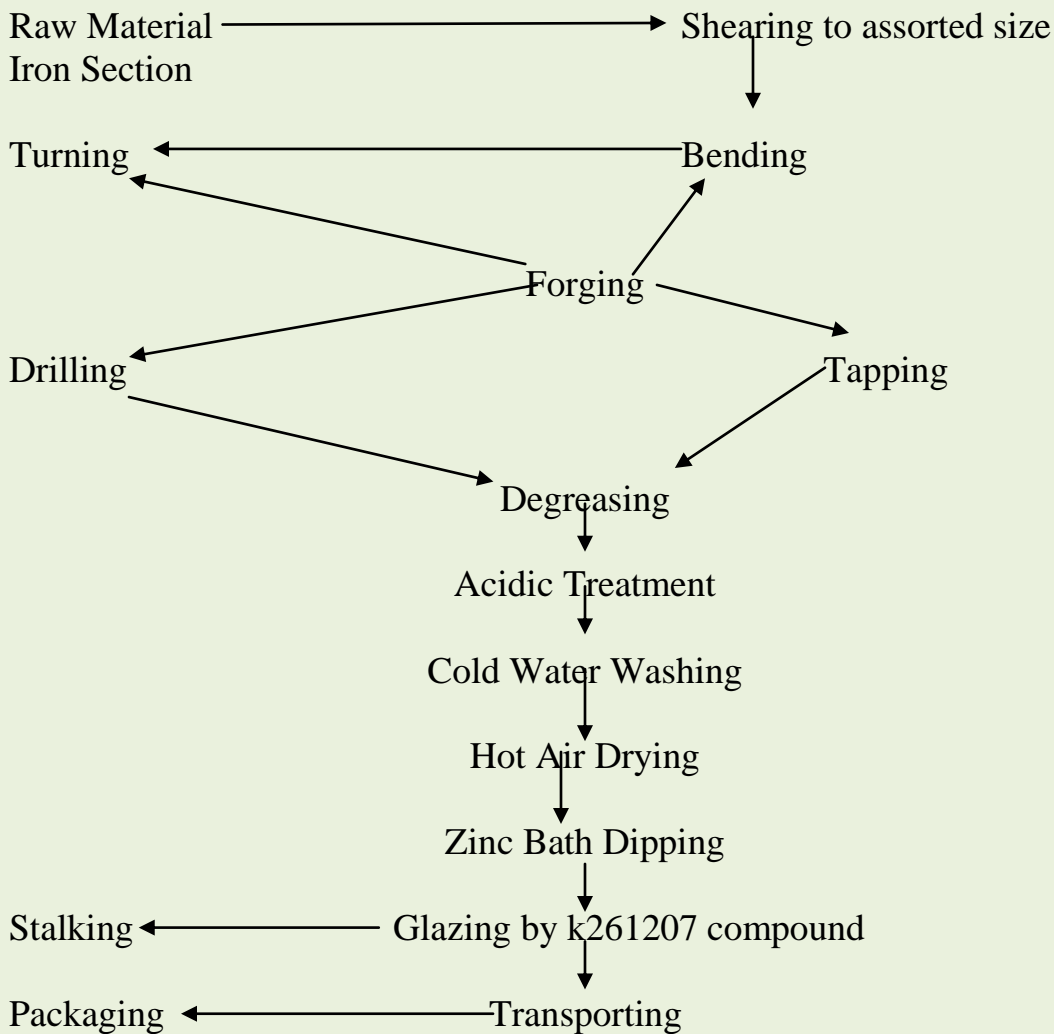
DETAILS OF ACTIVITY :

Activity	Days	Activity	Days	Particulars of Activity
1-2	15	1-2	15	Procurement of Tech. Know-how/ transfer of technology.
2-4	15	2-4	15	Market survey, tie-ups and obtaining quotations.
4-5	7	2-3	7	Selection of site
5-6	70	4-5	7	Preparation of project report
6-7	45	5-6	70	Registration of Financing
7-10	30	6-7	45	Placement of orders for machineries and receipt of machines.
10-11	30	6-8	30	Recruitment of staff and training
11-12	15	6-9	30	Addition / Alteration in rental premises
		8-10	15	Procurement of raw materials Bought out components
		7-10	30	Erection, Electrification and Commissioning
		10-11	30	Trial Production
		11-12	15	Commercial Production
	227 Days		309 Days	

5. TECHNICAL ASPECTS :

Process of manufacture : The process of manufacture consist of cutting of channels, rods, etc to the assorted size then the operation in sequence of bending, turning, forging, drilling and threading is to be done to make items at per drawing. Then the hardware is galvanized in the galvanized tank.

Process Chart



6. QUALITY STANDARDS :

Strict inspection and quality standards has to be enforced as per prescribed specification of IS-802(Part-II)/1978 should be practice invariably during the process of fabrication, galvanizing, inspection and packaging.

7. PRODUCTION CAPACITY PER ANNUM :

- I. Quantity – Annual Production capacity will be 576 MT of fabricated galvanized hardware.
- II. Value – Will be Rs. 53850 per MT amounting Rs. 31137600 Lakh per annum

8. POLLUTION CONTROLL :

The slight pollution measure is required to adopt for the diffusion of smoke and discharging of rejects during galvanizing process, as such control measures as per the norms is required to take-up and before launching of the project pollution control NOC is required to be obtained from pollution department.

9. ENERGY CONSERVATION :

The following steps should be taken in consideration before selecting the technology, machineries and testing facilitation.

- a) adoption of energy conservation technology, production aids and testing facilities,
- b) efficient management of process/manufacturing machineries and systems, QC and testing equipments for yielding maximum energy conservation,
- c) periodical maintenance of motors, compressors etc,
- d) use of power factors correction capacitors, proper selection of lighting aids and systems, software to switch off light as per optimum utilization

FINANCIAL ASPECTS :

A. FIXED CAPITAL :

A built-up area of 550 sq. metre on rental basis as follows :

i) for office, stores, workshop etc.	550 sq. metre	55000
parking etc Rent @ Rs.100/- per sq metre.		
ii) open space for stalking the raw materials etc Rent @ 10/- per sq. metre	1000 sq. metre	10000
Total		65000

B. MACHINERY & EQUIPMENTS :

S.I No	Description of Machines	Indgs. /Impt e	Qty (Nos.)	Price
a) Production Unit				0
1	Rod Shearing Machine complete with 440/3/50 electric motors of 10 mm shearing capacity	Indgns	1	333750
2.	Power Press 50 Tone Capacity fitted with electrical 440/3/50 motors	DO	1	217500
3.	Capastion, turret and servo cutting lathes of 6' bed 440/3/50 electric motors	DO	1	342000
4.	Hand lever shearing machine	DO	1	7275
5.	Bench drilling machine of dia 1" capacity 440/3/50 electric motors	DO	1	24750
6.	Arc welding transformer 300 Amps oil cooled	DO	1	21000
7.	Blacksmithy heart with blower and accessories	DO	1	8475
8.	Galvanizing and washing tank with heating arrangement fire bricks structures	DO	1	42000
				996750
9	Installation & Electrification Charge @ 10% of the cost of machinery			99675
10	Office equipments, furnitures and working table etc		LS	40000
11	Tools, Jigs & fixtures	Ind.		33000
12	Pre-operative expenses			50000
			Total	1219425

C. WORKING CAPITAL (Per Month) :

1. Personnel :

S.I No.	Designation	Nos.	Salary	Total (Rs.)
A.	Administrative & Supervisory :			
a)	General Manager	1	20000	20000
d)	Accountant / Clerk (F.Time)	1	10000	10000
B)	Technical Skilled & Unskilled :			0
a)	Skilled Worker	5	8000	40000
b)	Semi-skilled Worker	3	5000	15000
d)	Watchman cum peon	1	4000	4000
Total :				89000
Perquisite @ 15%				13350
G. Total:				102350

2. Raw Materials [Including Packaging requirements (P.M)]

S.I No.	Description of Machines	Indgs. /Impt d	Qty (Nos.)	Rate (Rs.)	Value (Rs.)
a)	Steel sections viz. rod 10-45 mm dia, angles and channels of assorted size	Ind.	50 MT	4000	2000000
b)	Zinc for galvanizing	Ind.	6 MT	15000	90000
c)	Other chemicals and consumables	Ind.	5 MT	5000	25000
Total :					2115000

3. Utilities (Per Month)

a) Power – 22 KWH unit @ Rs 6 per unit	26400
b) Water – 20000 LTRS @ Rs. 1.0 per K.L	2000
Total :	28400

4. Other Contingent Expenses

No.	Description	Value (Rs.)
a)	Rent	65000
b)	Postage, Stationary & Telephone	2000
c)	Telephone/Fax	2500
d)	Repairs & Maintenance	5000
e)	Transport Charges	12000
f)	Advertisement & Publicity	2000
g)	Insurance	2000
h)	Misc. expenses	5000
Total:		95500

5. Total Recurring Expenditure (Per Month)

No.	Description	Value (Rs.)
a)	Raw Material	2115000
b)	Salary & Wages	102350
c)	Utilities	28400
d)	Other Contingent Expenses	95500
Total:		2341250

6. Total Capital Investment :

a)	Fixed Capital	1219425
b)	Working Capital on 3 months basis	7023750
Total:		8243175

FINANCIAL ANALYSIS :

1. Cost of Production (Per Year)

a) Total recurring cost per year	28095000
b) Depreciation on machinery & equipments @ 10% p.a.	99675
c) Depreciation on Jigs & Fixture & dies @ 25% p.a.	8250
d) Depreciation on office equipment @ 20% p.a.	8000
e) Interest on total capital investment @ 16% p.a.	1318908
Total:	29529833

2. Turn Over (Per Year)

Items	Qty.	Rate	Value (Rs)
a) Zinc coated different types hardwires	576 MT	53850	31017600
b) Scraps	LS		120000
			31137600
			0

3. Net Profit per Year (Before Income Tax) :

$$\begin{aligned} &= 31137600 - 29529833 \\ &= 1607767 \end{aligned}$$

4. Net Profit ratio :

$$\begin{aligned} &= 1607767 \times 100 / 31137600 \\ &= 5.16\% \end{aligned}$$

5. Rate of Return :

$$\begin{aligned} &= 1607767 \times 100 / 8243175 \\ &= 19.5\% \end{aligned}$$

6. Break Even Point :

a. Fixed Capital

a) Depn. (on machinery & equipments @ 10%)	99675
b) Rent	780000
c) Interest on Capital Investment @ 16%	1318908
d) 40% of Salary and wages	491280
e) Insurance	2000
f) 40% of other contingent expensed (Excluding rent and Insurance)	682800
g) Depn. on office furniture @ 20%	8000
h) Depn. on Jigs & fixture @ 25%	8250
Total :	3390913

b. Break Even Point :

$$\begin{aligned} &= \text{B.E.P \%} = \text{FC X 100 / FC + P} \\ &= 3390913 \text{ X } 100 / 3390913 + 1607767 \\ &= 67\% \end{aligned}$$

Address of Machinery & Equipments Suppliers

1. M/s Batlibouy & Co Pvt. Ltd., 26 R. N. Mukharjee Road, Kolkata – 700001
2. M/s Turner & Tools, 16 JC Avenue, Kolkata – 69
3. M/s Maniklal & Sons, 23 JC Avenue, Kolkata –

Address of Raw Materials Supplier

Local / nearby suppliers / manufacturers.