A
PROJECT PROFILE
ON

SOLDERING WIRE (NEW)

2010-2011

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A PROJECT PROFILE ON SOLDERING WIRE

QUALITY STANDARD	:	The Bureau of Indian standard has laid down Following specification IS – 1921/61
PRODUCTION CAPACITY	:	
QUANTITY	:	30 M.T.
VALUE	:	Rs. 90, 00,000
MONTH & YEAR OF PREPARATION	:	DEC, 2010
PREPARED BY	:	MET. DIVISION MSME D.I 34, INDUSTRIAL ESTATE, NUNHAI AGRA 282006

Introduction:-

Soldering wire is used in Electrical, Electronics and telephone industries for soldering ratio, transistor, TV. Circuit and computer circuits too as well as electrical connection. The industry can be taken up small scale basis with good profitability.

MARKET POTENTIAL:-

The product is having very good demand in indigenous market as well as in foreign countries. There is a great Export potential for this item in Middle East countries. Its price varies depending upon the ratio of tin, lead and other alloy.

III. Basis & presumption:-

1. The project file has been prepared on the basis of single shift of 8-hrs. a day and 25- working days in a month at 75% efficiency.

2. It is presumed that Ist year, the capacity utilization will be 70% followed by 85% in the next year and 100% in the subsequent year.
3. The rates quoted in respect of salaries and wages for skilled worker and others are on the basis of minimum rates in the state of U.P.
4. Interest rate for the fixed and working capital has been @ 18% on an average whether financed by the bankers or financial institutional.
5. The margin money required is minimum (30% of the total capital investment.)
6. The rental value for the accommodation of office, workshop and other covered area has been taken @20/-per sq. meter.

7. The rate quoted in of machinery, equipments and raw material are those prevailing at the time of preparation of the project profile and are likely to vary from place to place and suppliers to suppliers. When a tailor made project profile is prepared, necessary changes are to be made.

1. The pay back period may be 5-years after the initial gestation period.
2. The gestation period in implementation of the project may to be the tune of 6to 9 months which includes making all arrangements, completion of all formalities, market surveys and tie-ups etc. once all the arrangements are made and quality/standards achieved the 100% project capacity may be achieved at the end of three years. However, a detailed PERT/CPM/chart with implantation period has been given in the report.

IV. Implementation schedules:-

The implementation of the project includes various jobs/exercise 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 material etc. recruitment of staff, erection/commissioning of machines, trial production and commercial productions etc. In order to efficiently and successfully implement the project in the shortest period the slack period is curtailed to minimum has been illustrated below, According to which a minimum period of 227 days is involved in family starting the project on commercial basis. By following this process a time period of 82 days can e solved.

Details of Activities

C.P.M.

Activity	**Days**	**Activity**	**Days**	**Particular of activity**

1-2	15	1-2	15	procurement of tech.know/ Transfer of technology.
3-4	15	3-4	15	Market survey, tie up 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	place of orders for machinery and Receipt of machines.
10-11	30	6-8	30	Recruitment of staff and training
11-12	15	6-9	30	Additional/Alteration in rental Premises
		8-10	15	Procurements of raw material/Bought out Components
		7-10	30	Erection, Electrification and commissioning
		10-11	30	Trial productions
		11-12	15	Commercial productions
227 days		309 days		

V. Technical Aspect.

Manufacturing Process:

The process consists of following operations:-

1. Melting as per requirements.
2. Pouring in metal Moulds.
3. Filling the flax.
4. Bar Rolling.
5. Wire Rolling.
6. Coiling
7. Packaging.

The recommendation percentage of thin, lead, antimony is to be melted first and then poured in Metal Moulds keeping the provision of central hole longitudinally for subsequent pouring of rosin mixture and then it is allowed for cooling. The bars are rolled plant and further it is reduced to thinner gauges in wire rolling machine according to the requirement. Finally, the material is packed and kept ready for marketing. The solder Wires of different compositions of thin and lead mentioned below mat be manufactured with the help of some machinery and equipments. However the sale price will vary and the rates will be lowered with presences of more percentage of loads.

	A	B	C	D	E	F	G
Tin	60	50	40	30	20	10	5
Lead	40	50	60	70	80	90	9

Production (Target & value):-

QUANTITY : 30 M.T.

VALUE : Rs.90, 00,000/-

Quality Control & Standards:-

Soldering Wire will be produced as per IS - 1921/1961

1. Power Requirement: - 10 K.W.
Water Requirement: - - K.L./monthly

2. Energy Conservation:-

The following steps may be taken for the conservation of energy.

1. Machinery & Equipments parts, which are resolving and reciprocating should be properly, lubricated from time to time with suitable lubricant oil.
2. Lay out of the unit should be in such a way in that no back tracking of material is there.
3. All electric switches may be kept off, when no required.

4. The entire transmission belt will be tightened before starting the work is wherever applicable.
5. Fluorescent with electronic chokes may be used for energy saving. Further recently developed compact fluorescent tubes called (CFT) of 10, 15 watts Philips/Glaux made may be used for energy saving and decoration. These self ballasted fluorescent lamps are high efficiency replacements for ordinary bulbs. For same light output, CFLEBs consume about one-fifth the power consumed by ordinary bulbs. thereby saving a lot of energy. The saving get further multiplied when CLEBs are used in air conditioned areas, since the saving of energy by using CLEBs also corresponds to less heat dissipation reducing load on air conditioners. The life of CLEBs is about 8000/10000 hours i.e. about 10 times that of ordinary bulb.

The typical payback period in terms of savings of energy bills and cost of ordinary lamps is about 6 months operation. Unlike ordinary bulbs, these CFLEBs provide choice of three colors designated A,B,&C, to suite individual requirements.

Electronic ballast, with protection against high voltage spikes, along with high quality

CFLs make these composite CFLEBs (or self ballasted CFLs) slim, lightweight, efficient and reliable units.

6. As far as possible solar Energy and day light will be used keeping all the other lights off.
7. As far as possible inductive load of motor will be reduced and high power factor will be used with the aid of capacitors of appropriate sizes.

7. Population control:-

1. This industry involves population to some extent for which state Population control Board has to be approached.

2. Minimum height of shed will be maintained with exhaust fans should be installed for removing decongestion proper ventilation, removal of cook’s fumes etc.

VI. Financial Aspects:-

Land and building (rented)

On rent @ Rs. 20/- sq. meter

Covered Area 300 Sq. meter

2. Machinery and equipments:-

S.No.	Description	HP/KW IND/Imp	Qty.	Value(Rs)
1.	(a) Production unit Name of machine with specification Coke fire pit furnace with 1 hp motor and other accessories	1 HP	2	20,000,00
2	Bar Rolling plants for rolling bar/rod with 2 HP motor	2 HP	2	32,000,00
3	Rolling Machine for rolling the bar to inner section		2	16,000,00
4	Wire rolling machine with 1 HP motor	1 HP	4	20,000,00
5	Wire cutting Machine with 1 HP motor	1 HP	2	10,000,00
6	Wire Winding Machine with 1 HP motor	1 HP	2	8,000,00
7	Chemical Testing Equipments		LS	15,000,00
8	Weight balances		2	7,000,00

(b) Testing Equipments such as:
i) Measuring Instruments
(c) Pollution Control equipment, if required:

(d) Energy Conservation Facilities/ Equipments, if used:
Furnace should have resistant fire bricks to
Avoid wastage of heat energy
CFT Tubes
Florescent Tubes with electronic chokes

(E) Electrification & installation charges @ 10% 12,800.00

(f) Cost of jigs/fixtures/dies etc. 10,000.00

(g) Cost of office equipments etc. 15,000.00

(h) Cost of Transformer & Electrification
(If load more than 15 K.W.)

Total Cost of machinery & Equipments
A+b+c+d+f+g+h
1,65,800.00
Total Fixed Capital (1+2+3) 1,65,000.00

VII. Working Capital (per month)

Staff and Labour (per month):-

(1.) personnel

S.No.	Description	No.	Salary @	Total value (Rs.)
(a)	Administrative & supervisor			
	i) Manager	1	9000	9000.00
	ii) Supervisor/Foreman	1	7000	
	iii) Store Keeper	1	4000	
	iv) Clerk	1	2000	
	v) Chowkidar	1	2000	
(b)	Technical skilled & unskilled			
	Skilled worker	8	1500	12000.00
	Helper	9	1000	9000.00
			Perquisites@15%	6750.00
			Total	51,750.00
			Say	52000.00

(2) Raw Material (per month):-

S.No	Description with specification	Qty.	Rate	Value (Rs.)
1	Tin (30%) imported	1250kg.	377/- per kg	4,71,250.00
2	Lead (49.5%) ind.	1250 kg.	40/- per kg	50,000.00
3	Antinomy (.5%) imported	75 kg.	280/- per kg	21,000.00
4	Rosin, glycerin	Ls		10,000.00
5	Head Coke	4 Ton	6000/ton	24,000.00
			Total	5,76,250.00
			Say	5,76,000.00

3) Utility (per month):-

Electricity	5000.00
Water	500.00
	5500.00

(4) Other Expenditure (per month)

1	Rent	6,000.00
2	Postage	1500.00
3	Advertisement	1000.00
4	Packing	1000.00
5	Sales expenses	1000.00
	Total	13500.00

II. Total Recurring Expenses (per month)

1) Salary & wages	52,000.00
2) Raw Material	5, 76,000.00
3) Utilities	5,500.00
4) Other contingent Expenses	13,500.00
Total	6, 47,000.00

IX. Working Capital for three month:-

6, 47,000 X 3 = 19, 41,000.00

X. Total Capital Investment:-

Fixed capital	1, 65,800.00
Working capital for 3 months:-	19,41,000.00
Total	21, 06,800.00
Say	21, 07,000.00

XI. MACHINERY UTILIZATION:-

It is used that during first year machine utilization will be 70% and during second year 85% and 100% in subsequent years.

XII. Additional Information if any; Nil

XIII. FINANCIAL ANALYSIS

1. Cost of production (per amount):-

(a) Salary & Wages	52000 x 12	624000.00
(b) Rent		72000.00
(c) Raw material	576000 x 12	6912000.00
(d) Utility	5500 x 12	66000.00
(e) Other Expreses	135000 x 12	162000.00
(f) Depreciation on M/c. @ 10%		14500.00
(g) Depreciation on Fixed Cost @ 20%		4000.00
(h) Interest on Capital Investment @ 15 %		291150.00
	Total	8145650.00

XIV. Turn Over per annum:-

S.No.	Description	Qty.	Rate	Value(Rs.)
1.	Soldering wire	30,000 kg	300/- per kg	90,00,000.00
			Total	90,00,000.00

XV. Net profit per annum before Income Tax:-

90,00,000-81,46,000= 8,54,000.00

XVI. **Net Profit Ratio:-**

$$\frac{\text{Net profit x 100}}{\text{Turn over}} = \frac{8,54,000 \times 100}{21,07,000} = 9.48\%$$

XVI. Ratio of Return:-

Net profit x 100
Total investment
8, 54,000 x 100
2107000 = 40.5%

XIV. BREAK EVEN ANALYSIS:-

(1) Fixed Cost (per annum)

(a) Total Depreciation (on m/c. & equipments, dyies, tools, furniture):	18500.00
(b) Rent:	72,000.00
(c) Interest on borrowing (Total Investment)	2,91,150.00
(d) 40% of salary & wages	2,49,600.00
(e) 40% of other contingent expenses: (Excluding rent & insurance)	36,000.00
Total	**6,67,250.00**

XX. Break even point = fixed cost x 100
Fixed cost + profit
= 6,67,250, X 100 = 43.8%
667250+854000

XXI. LIST OF MACHINERY & REAW MATERIAL SUPPLIERS

1. M/s. Winner Electrical, B- 104/2, Naraina Indl. Area, New Delhi.
2. M/s. Desman Engineering Co. B-99, Mayapuri Indl. Area New Delhi.
3. M/s. Pioneer Equipments 432, padra Road, Baroda.
4. M/s. Mineral & Metal Trading Corpn Of India, Express Building, New Delhi.
5. M/s. Global Linkers (p) Ltd. 3492 Ajmeri Gate, kamla market, New Delhi.