

**PROJECT REPORT**

**ON**

**‘CABLE CONNECTORS(LUGS)’**

**PURPOSE OF THE DOCUMENT**

This particular pre-feasibility is regarding Cable Connectors(Lugs) .

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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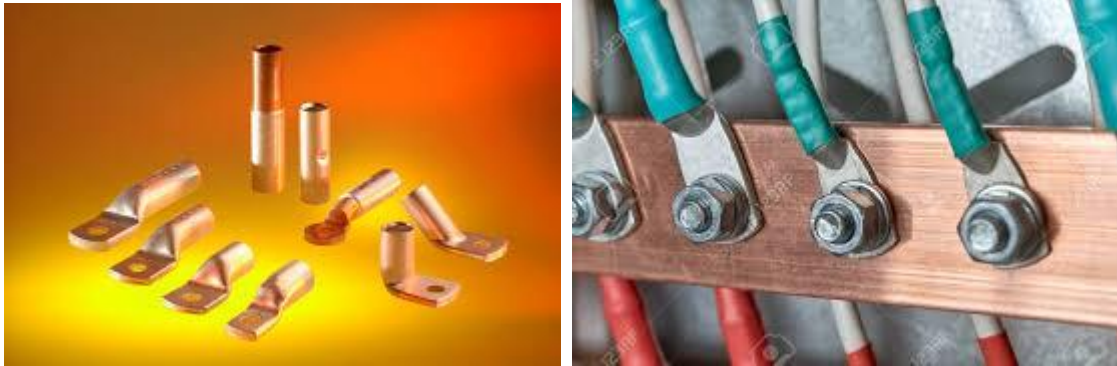
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# PROJECT PROFILE ON CABLE SOCKET (LUGS)



## INTRODUCTION

Cable lugs are the devices used for connecting cable and wire conductors in electrical installations and equipment. These are used when permanent, direct fastening methods are not feasible or necessary. In general, lugs are fixed to cables and wires by inserting the conductor/s into the barrel (tube) of the device and then barrel is crimped, soldered or welded onto the conductor for secure mechanical and electrical joint. The connection end of the lug is then fastened to connection point by means of a bolt, screw, or spring clip. Numerous sizes, configurations and material types are available to suit particular applications. The connector end of a cable lug is typically chosen for its compatibility to the terminal type or anchoring method. Fork or U-shaped lugs are used for screw terminals; closed-ring or O-type lugs are used for bolt-on applications; and pin or spade lugs are used for press-on pin or blade terminals. A cable lug also serves as a cable-size reducer, thereby allowing thick cables to be attached to a connector with a smaller diameter.

Cable lugs, also referred to as Cable terminal ends or cable shoes are electrical supplies utilized to securely connect or terminate cables to electrical devices, power or

control panels, junction boxes, equipments and machineries. These lugs are often used to join power cables together as well. Cable Lugs intended to ensure the safety of both the appliances and human beings. These lugs can be uniquely engineered according to the client's preferences and requirements.

### **MARKET POTENTIAL**

Cable Sockets and Thimbles are very common item and it used in every place wherever Electric supply exists. With rapid industrialization and electrification the demand for this item is every increasing. It is used by Electricity Board. Industries of all type in installation of plant and machinery and by Electrical Power Equipment manufacturing units. The demand for this item is unlimited.

### **BASIS & PRESUMPTIONS**

1. The basis for calculation of production capacity is on single shift basis, working of 25 days per month on 60 % efficiency. The required for achieving envisaged capacity utilization is assumed as five years.
2. BEP for the scheme has been calculated on full capacity utilization.
3. Rate of interest has been taken as 11.5% on an average. This, however, is likely to vary .
4. Labour wages have been taken on the basis of minimum applicable. There are likely to change depending upon the location of the project.
5. Term of loan differs from one financial institution to another and in general minimum gestation period is normally 6 months Maximum period for repayment of loan is 5 years including gestation period. The entrepreneurs from the concerned financial institutions may find the exact terms and conditions.
6. The cost of machinery and equipments as indicated in the scheme are approximate those ruling at the time of preparation of the scheme. The entrepreneur may check the exact price for specific make and model of the machine selected.
7. Non-refundable deposits, cost of preparation of project report etc. may be considered under preoperative expenses.

8. The provision made in other respects viz; raw materials, utilities, overheads etc. are drawn on the basis of standard variation and output. The cost indicated against each is approximate and based on local market condition and observations. The entrepreneur may find out the exact cost from the concerned sources.

9. The operative period of this project is estimated to be about 10 years considering technology obsolescence

### **IMPLEMENTATION SCHEDULE:**

It is estimated that from the conception of the project to commercial production, it may take about two years including purchase of machineries, erection & installation, recruitment of staff and all clearance from different agencies like DIC, financial institutions/banks etc.

### **TECHNICAL ASPECTS:**

#### **PROCESS OUTLINE:**

Copper pipes of required size and outer diameter are cut to the size and then pressed in power press with the help of relevant set of dies. Afterwards it is machined and internal threads are made. Now the final finish to product is given and sent for electroplating and buffing. Afterwards the product is sent for physical verification and testing and then to packing.

### **QUALITY CONTROL AND STANDARDS**

The relevant IS specification for Cable Socket (Lugs) is IS:8309 – 1993 Reaffirmed 2008.

### **PRODUCTION CAPACITY:**

Item	Quantity
Cable Socket (Lugs) from 15 Amp to 1000 Amp	1,50,000 Nos.

### **MOTIVE POWER:**

13 KW for plant & machinery & 2 KW for lighting & fans.

### **POLLUTION CONTROL:**

NOC is required to be obtained from DIC level.

### **ENERGY CONSERVATION:**

The product is totally electrical energy consuming device and everything depends on motor efficiency and design. So motor, i.e. washing motor cum spinning motor are to be at optimum efficiency with minimum frictional losses to have maximum electrical energy conservation.

### **LABOUR REQUIREMENT:**

8-9 Manpower is required for All Purpose Cream manufacturing Includes:

- 1 Production supervisor
- 4 Skilled Labour
- 4 Unskilled Labour

## **BANK LOAN**

Rate of Interest is assumed to be at 10.00%

## **DEPRECIATION**

Depreciation has been calculated as per the provisions of Income Tax Act, 1961

## **APPROVALS & REGISTRATION REQUIREMENT:**

Basic registration required in this project:

- GST Registration
- Udyam Registration
- License under Drugs and cosmetics act
- Choice of Brand name of the product and secure the name with Trademark if required
- NOC from DIC

## **CABLE CONNECTOR (LUGS) MANUFACTURING PLANT SETUP & MACHINES**

2000 Sq Ft space is sufficient for starting a small scale operation. Apart from the production area, you will need to have space for storage and office work. Check the location before finalizing the place. You must have electricity, adequate water supply, and good drainage system. Additionally, you must have a laboratory setup for testing and quality maintenance.

Some of the basic required machines are

- Power Press
- Lather Machine 1 HP Motor 6 Ft. Bed Length
- Threading
- Hand Press
- Surface Grinder with 1 HP Motor
- Tinning Plant for Electroplating Barrel

**FINANCIAL ASPECTS :**

Product and By Product	:	<b>Cable Socket (Lugs)</b>	
Name of the project / business activity proposed :		<b>Cable Socket (Lugs)</b>	
Cost of Project	:	Rs.14.21 Lacs	
Means of Finance			
Term Loan		Rs.7.56 Lacs	
KVIC Margin Money	-	As per Project Eligibility	
Own Capital		Rs.1.42 Lacs	
Working Capital		Rs.5.23 Lacs	
Debt Service Coverage Ratio	:	4.21	
Pay Back Period	:	5	Years
Project Implementation Period	:	6	Months
Break Even Point	:	30%	
Employment	:	15	Persons
Power Requirement	:	15.00	HP
Major Raw materials	:	<b>Copper Pipe EC Grade of assorted dia &amp; size</b>	
Estimated Annual Sales Turnover	:	75.46	Lacs

**COST OF PROJECT**

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work (2000 Sq Ft)	3.50
Plant & Machinery	3.80
Furniture & Fixtures	0.75
Pre-operative Expenses	0.35
Working Capital Requirement	5.81
Total	<b>14.21</b>

**MEANS OF FINANCE**

Particulars	Amount
Own Contribution @10%	1.42
Term Loan	7.56
Workign Capital Finance	5.23
<b>Total</b>	<b>14.21</b>

Beneficiary's Margin Monery  
(% of Project Cost)

**General /Special**  
10%/5%

**PLANT & MACHINERY**

1	Power Press	Qty.	Rate	Value
	a) Motor 1 HP, 10 Ton Capacity	1	25,000.00	25,000.00
	b) Motor 2 HP, 20 Ton Capacity	1	38,000.00	38,000.00
	c) Motor 3 HP, 35 Ton Capacity	1	50,000.00	50,000.00
2	Lather Machine 1 HP Motor 6 Ft. Bed Length	1	38,000.00	38,000.00
3	Threading Adds 3½ ft length	2	25,000.00	50,000.00
4	Surface Grinder with 1 HP Motor (7"X14" size)	1	45,000.00	45,000.00
5	Bench Grinder Capacity ½ HP motor	1	4,000.00	4,000.00
6	Hand Press	1	3,700.00	3,700.00
7	Portable Drilling Machine 1"	1	7,500.00	7,500.00
8	Potable Drilling Machine ¾" capacity	1	6,500.00	6,500.00
9	Tinning Plant for Electroplating Barrel Tank 3'X3'X5'	1	18,000.00	18,000.00
10	Rectifier 200 Amp	1	25000.00	25,000.00
11	Dryer with Motor	1	9000.00	9,000.00
12	Electrification & Installation charges	<b>LS</b>	30000.00	30,000.00
13	Tools & Dies		40000.00	40,000.00
	<b>Total</b>			<b>3,79,700.00</b>



**COMPUTATION OF MANUFACTURING OF CABLE SOCKET (LUGS)**

Manufacturing Capacity per day 15 Amp to 1000 Amp	500.00	Pcs
No. of Working Hour	8	
No of Working Days per month	25	
No. of Working Day per annum	300	
Total Production per Annum	1,50,000.00	Pcs
Year	Capacity Utilisation	Pcs
IST YEAR	65%	97,500
IIND YEAR	70%	1,05,000
IIIRD YEAR	75%	1,12,500
IVTH YEAR	80%	1,20,000
VTH YEAR	85%	1,27,500

**COMPUTATION OF RAW MATERIAL**

Item Name		Quantity of	Unit Rate of	Total Cost
		Raw Material	/kg	Per Annum (100%)
Copper Pipe EC Grade of assorted dia & size	Kg	18,000.00	175.00	31,50,000.00
Brass strip	LS		-	2,40,000.00
Annual Consumption cost			Total (Rounded off in lacs)	33.90

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)
IST YEAR	65%	22.04
IIND YEAR	70%	23.73
IIIRD YEAR	75%	25.43
IVTH YEAR	80%	27.12
VTH YEAR	85%	28.82

## COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<b>Finished Goods</b>					
(30 Days requirement)	1.82	3.99	4.31	4.63	4.97
<b>Raw Material</b>					
(30 Days requirement)	2.20	2.37	2.54	2.71	2.88
<b>Closing Stock</b>	<b>4.03</b>	<b>6.36</b>	<b>6.86</b>	<b>7.34</b>	<b>7.85</b>

## COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Total Amount
Stock in Hand	4.03
Sundry Debtors	2.55
Total	6.57
Less: Sundry Creditors	0.73
Working Capital Requirement	<b>5.84</b>
Less: Margin	0.58
Working Capital Finance	<b>5.25</b>

**PROJECTED BALANCE SHEET**

<b>PARTICULARS</b>	<b>IST YEAR</b>	<b>IIND YEAR</b>	<b>IIIRD YEAR</b>	<b>IVTH YEAR</b>	<b>VTH YEAR</b>
<b><u>SOURCES OF FUND</u></b>					
Capital Account	1.42	2.75	5.03	8.68	11.98
Retained Profit	6.33	7.28	8.65	10.30	11.98
Less withdrawal	5.00	5.00	5.00	7.00	7.00
	2.75	5.03	8.68	11.98	16.96
Term Loan	7.56	5.67	3.78	1.89	- 0.16
Cash Credit	5.25	5.25	5.25	5.25	5.25
Sundry Creditors	0.73	0.79	0.85	0.90	0.96
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
<b>TOTAL :</b>	<b>16.66</b>	<b>17.14</b>	<b>19.00</b>	<b>20.51</b>	<b>23.54</b>
<b><u>APPLICATION OF FUND</u></b>					
<b>Fixed Assets ( Gross)</b>	8.05	8.05	8.05	8.05	8.05
Gross Dep.	0.96	1.83	2.59	3.25	3.83
Net Fixed Assets	7.09	6.22	5.46	4.80	4.22
<b>Current Assets</b>					
Sundry Debtors	2.55	2.79	3.20	3.48	3.77
Stock in Hand	4.03	6.36	6.86	7.34	7.85
Cash and Bank	2.00	0.77	1.48	2.89	5.70
Deposits & Advances	1.00	1.00	2.00	2.00	2.00
<b>TOTAL :</b>	<b>16.66</b>	<b>17.14</b>	<b>19.00</b>	<b>20.51</b>	<b>23.54</b>

## PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<b><u>A) SALES</u></b>					
Gross Sale	50.94	55.75	63.95	69.60	75.46
<b>Total (A)</b>	<b>50.94</b>	<b>55.75</b>	<b>63.95</b>	<b>69.60</b>	<b>75.46</b>
<b>B) COST OF SALES</b>					
Raw Mateiral Consumed	22.04	23.73	25.43	27.12	28.82
Elecricity Expenses	1.40	1.50	1.61	1.72	1.83
Repair & Maintenance	-	0.56	0.64	0.70	0.75
Labour & Wages	9.50	10.45	11.50	12.65	13.91
Depriciation	0.96	0.87	0.76	0.66	0.58
Consumables and Other Expenses	2.55	2.79	3.20	3.48	3.77
<b>Cost of Production</b>	<b>36.44</b>	<b>39.90</b>	<b>43.13</b>	<b>46.33</b>	<b>49.66</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>1.82</b>	<b>3.99</b>	<b>4.31</b>	<b>4.63</b>
<b>Less: Closing Stock /WIP</b>	<b>1.82</b>	<b>3.99</b>	<b>4.31</b>	<b>4.63</b>	<b>4.97</b>
Cost of Sales (B)	34.62	37.74	42.81	46.01	49.33
<b>C) GROSS PROFIT (A-B)</b>	<b>16.33</b>	<b>18.01</b>	<b>21.14</b>	<b>23.59</b>	<b>26.13</b>
	<b>32%</b>	<b>32%</b>	<b>33%</b>	<b>34%</b>	<b>35%</b>
D) Bank Interest (Term Loan )	0.65	0.79	0.57	0.35	0.13
Bank Interest ( C.C. Limit )	0.53	0.53	0.53	0.53	0.53
E) Salary to Staff	4.09	4.50	4.95	5.45	5.99
F)Rental Expenses	3.00	3.00	3.00	3.00	3.00
F) Selling & Adm Expenses Exp.	1.02	1.11	1.28	1.39	1.51
<b>TOTAL (D+E)</b>	<b>9.29</b>	<b>9.93</b>	<b>10.33</b>	<b>10.72</b>	<b>11.16</b>
H) NET PROFIT	7.04	8.08	10.81	12.88	14.97
I) Taxation	0.70	0.81	2.16	2.58	2.99
J) PROFIT (After Tax)	6.33	7.28	8.65	10.30	11.98



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