

PROJECT PROFILE
ON
ASSEMBLY OF VOLTAGE STABILIZER

Production Code (NEC) : 369902009

Quality and Standard : IS : 9815 (part-I) - 1994

Production Capacity : Qty-1500 Nos. per annum
Value - Rs. 1,32,000,00/-

Year of Preparation : March, 2007

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1. Introduction

Servo Voltage stabilizer is one of the most essential electrical item which is used by people in their day to day life. This item is used in homes, commercial establishments, Govt. establishments, financial institutions, education institutions etc according to their requirement. The people are procuring every necessary item to meet the seasonal climate such as fridge, Air Conditioners Geysers & some high capacity electronic items etc., accordingly the load increases, necessitating the use of servo stabilizers ranging from 4- 6.5 KW commonly is used by the consumers.

2. Market Potential

Exicutive voltage fluctuation are hazardires to castly electronic and electrical equipments like. T.V. sets, Refrigerations, Water Cooler, Washing Machine and scientific and medical equipments etc. therefore to protect these 2.7 cms from damage due to wide line voltage fluetuation, the voltage stablizer has become essential to use with them. The demand for this item is propotionati to demand of Electronic applianse which is increasing day by day. Itemes of here will be substanliat demand growth in the years to come. There is also great export potential for this product.

3. **Basis & presumptions**

- (i) The basis of calculation for assembling capacity has been on single shift basis on 75% efficiency
- (ii) The salaries & wages, cost of electrical goods, utilities, rent are based on prevailing rates. The cost factor are likely to vary with time & location
- (iii) The rate of interest both for fixed & working capital has been taken @ 16 % but may vary depending upon the policy of the govt.
- (iv) The cost of machinery & electrical tools refer to a particular make/ model are approximate
- (v) The margin money as applicable to the general categories of entrepreneurs may be 25 % of project cost
- (vi) The pay back period may be 5 years after the loan has been disbursed
- (vii) Rent for covered area for office & factory is 2000/ per month

4. **Implementation Schedule**

The major activities in the implementation of the project have been listed & average time for implementation on the project is estimated as 4 months .

S.No.	Major Activity	Period (in months) (Suggestive)
1.	Preparation of project report	1
2.	Registration & other formalities	1
3.	Sanction of loan by financial institution	3
4.	Plant & machinery	1 Month
	➤ Placement of orders	1
	➤ Procurement	2
	➤ Power connection/Electrification	2
	➤ Other formalities	2
5.	Procurement of raw material	2
6.	Recruitment of technical person etc.	2
7.	Trail Product	11
8.	Commercial Production	12

- Note :
1. Many of above activities shall be initiated concurrently.
 2. Procurement of raw materials commences from the 8th Month onwards.
 3. When imported plant & Machinery are required, the implementation period of product may vary from 12 months to 15 months

1. Process of Manufacture : The manufacture process basically

Consist of two stages @ Fabrication of cabinet, control panel etc. as per design (ii) Window of transformers and assembly of PCB's as per requirement

Special transformer needed for thsis product wind in the factory itself. the critical components which go to makeup the product are tested to ensure that they meet the required specefications. The components are fixed and soldered on printed circuits Board according to the designe circuit, control & socket assembled individually. Control panel and chasis, fabricated in the factory and fitted together and the controls circuits and socket are mounted. The PCB is fitted on the chasis and all the inter connections are made. The manufactured items are tested as per acceptance test of PB.

2. Quality Standards : IS : 9815 (Part - I) - 1994

3. Production Capacity per Annum

Qty : 1500 Nos.

Value : 1,32,00000/-

4. Motive Power : 5 kw

5. Pollution Control :

6. Energy Conservation :

1. Land and Building

Buistt up area	2000 sq.ft.
office, store	500 sq. ft.
Assembly & Testing	1500 sq. ft.
Rent Payble/annum	Rs. 24,000/-

(ii) Machinery and Equipments

S. No.	Description	Ind./Exp.	Qty. Nos.	Value Rs.
1.	Winding Machines	Ind.	1	4,000/-
2.	Hand lever shearing M/c	Ind.	2	10,000/-
3.	Hand Drill Machine	Ind.	1	4,000/-
4.	Multimedia	Ind.	5	5,000/-
5.	Testing equipments	Ind.		25,000/-
6.	Misc.			15,000/-
			Total	63,000/-
Other fixed Assets				
7.	Electrification charges @ 10% of cost of Machinery and equipments			6,300/-
8.	Office furniture, equipments & working Table etc.			25,000/-
9.	Tools, Tigs and fixure etc.			10,000/-
10.	Preoperative expanses			5,000/-
			Total	46,300/-
			Total fixed capital	1,09,300/-

9. Working Capital Per month

(i) Staff & Labour

S.No.	Designation	No of persons	Salary per Month @ (Rs.)	Total Salary per month (Rs.)
1	Supervisor	1	5000/-	5,000/-
2	Technicians	5	3000/-	15,000/-
3	Clerk	1	3000/-	3,000/-
4	Helper/Peon	1	2000/-	2,000/-
	Total			25,000/-
	Pre-requisite @ 15% of Salaries			3750/-
	Total			28,750/-

(ii) Raw Material per Month

(For one Stabilizer)

S. No.	Description	Ind./Imp.	Qty.	Value Rs.
1.	Tank	Ind.	1 No.	450/-
2.	Bobbin coil	Ind.	1	10/-
3.	Core	Ind.	23 Kg.	1495/-
4.	Copper Wire	Ind.	8 Kg.	4,000/-
5.	Power Relay	Ind.	1 No.	150/-
6.	Rotary Switch	Ind.	1 No.	200/-
7.	Relay	Ind.	1 No.	30/-
8.	Push Button	-	1 No.	20/-
9.	Auto Cut plate	-	1 No.	20/-

10.	Control transformer	-	1 No.	50/-
11.	Strip	-	1 No.	30/-
12.	Indicator	-	1 No.	10/-
13.	Clamp	-	8 No.	160/-
14.	Nut & Bolt & other misc items (LS)	-	-	20/-
15.	Volt meter	-	1 No.	50/-
16.	Copper wire	-	6 mt	120/-
17.	Cotton Tape	-	1 Roll	20/-
18.	Diode	-	2 Nos.	10/-
19.	Capacitor	-	1 No.	10/-
20.	Transformer oil	-	13 Lt	520/-
21.	Bake lite Sheet	-	1 No.	20/-
			Total	7,395/-

Raw Material for 125 Voltage stabilizers = Rs 9,24,375

(ii). Other Contingent Expenses per month

1.	Rent		2,000/-
2.	Postage & stationery		200/-
3.	Repair & Maintenance		500/-
4.	Insurance		1,000/-
5.	Telephone charges		1,000/-
6.	Transportation charges		1,000/-
Total			5,700/-

12. Utilities Per month

Power	1,000/-
Water	300/-
Total	Rs. 1300/-

Total Recurring Expenditure per month = 28750+ 924375+ 5700+1300
(i + ii + iii + iv) = 9,60,125/

Total Capital investment

Total Fixed Capital	1,09,300/-
Working Capital for three months	2880375/-
Total	Rs. 29,89,675/-

Financial Analysis

Cost of production per annum

1	Total recurring expenditure per annum	1,95,21,500
2	Depreciation on Machinery and equipment @ 10%	6300/-
3.	Depreciation on Tools zigs & fixure @20%	2,500/-
4.	Depreciation on furniture equipments & working table etc. @ 20%	5,000/-
5.	Interest on total capital investment @ 16%	4,78,348/-
	Total	1,20,13,648/-
	OR SAY	12013600/-

16. Turn over per annum

Items	Qty. No.	Rate (Rs.)	Total Sales (Rs.)
Voltage Stabilizer 6.5 kw	1500	8800/-	1,32,00,000/-

17. Profit

Turnover - cost of production : (Turnover/annum - cost production/annum)

$$= 13200000/- - 12013600 = 11,86,400/-$$

$$\text{Profit Ratio} = \frac{\text{Pr ofit / annum}}{\text{Turnover / annum}} \times 100 = \frac{11,86,400}{13200000} = 8.9\%$$

$$\text{Rate of Return} = \frac{\text{Pr ofit / annum}}{\text{Total capital investment}} \times 100 = \frac{11,86,400}{29,89,675} \times 100 = 39.6\%$$

Fixed Cost

1.	Rent of Fixed cost per annum	24,000/-
2.	Depreciation on machinery @ 10%	6300/-
3.	Depreciation on Tools, zij & fixure @25%	2,500/-
4.	Depreciation on furniture, equipment & working table @ 20%	5,000/-
5.	Interest on total capital Investment @ 16%	4,78,348/-
6.	40% of Salaries	1,38,000/-
7.	Insurance	12,000/-
8.	40% of other contingent & utilities (Exeluding rent & insurances)	19,200/-
	Total	Rs. 6,61,348/-
	or say	Rs. 6,61,348/-

$$\text{BEP} = \frac{\text{Fixed cost}}{\text{Fixed cost} + \text{Pr ofit}} \times 100 = \frac{661348}{661348 + 1186400} \times 100$$

$$= 35.7\%$$

21. BREAK EVEN POINT

$$\frac{FC \times 100}{FC + \text{Pr ofit}} = \frac{635140 \times 100}{635140 + 1238960} = \frac{63514000}{1874100}$$

Additional Information :

- a. The Project profite may be modified/tailored bto suit the individual entrepreneurship quation/capacity, production programme and also to limit the locational charactersties, wherever applicable.
- b. The electronics technology is undergoing rapid strides of change and there is need for regular monitoring of national and international technology scanario. The unit may, therefore, keep abreast with the new technology in order to keep them in pace with the developments for global competition.
- c. Quality today is not only confined to the product or service alone. It also extends to the quality mangement systems and ISO 14001 defines standards for environmental management system for acceptbility at international level. The unit may therefor adopt these standards for global competition.
- d. The margin money recommended is 25% of working capital requirement at an aver- age. However, the percentage of margin mong may vary as per bank's discretion.

(i) List of Supplier's Machinery & equipments.

Machines :

01. M/s Automatic Electric Ltd.
Rectifier House, P.O. Box No. 7103,
Mumbai - 400031.
02. M/s Batliboi & Co.
TTK Road,
Chennai - 600018.
03. M/s Bharat Electronics & Electrical
Roman House, 169, Bakbay Reclamation,
Mumbai - 400020.

Testing equipments :

05. M/s Eastern Scientific corporation
B.K. Chowmuhani, Agartala.
06. M/s Aplab Ltd.
Eastern region, P-26/1, C.I.T. Road,
Kolkata - 700014
07. M/s Toshminal Bros. (P) Ltd.
85 A, Sarat Bose Road, Kolkata - 26
08. M/s Scientific Suppliers & Services
P - 39, Priricap Street, Kolkata - 26

List of Supplier's of Raw Material

01. M/s Asian Electronic Ltd.
221, Dr. D.N. Road, Mumbai - 400001.000
- 0.2 M/s OEN India Ltd.
Vytila, P.B. No. 2, Cochine - 682-019.
03. Pieco Electronics & Electrical Ltd.
Raman House, 169, Bakbay Reclamation,
Mumbai - 400020
04. L.S.