

## PROJECT PROFILE ON NEON SIGN BOARDS

|                       |   |   |
|-----------------------|---|---|
| PRODUCT               | : | <b>NEON SIGN BOARDS</b>   |
| QUALITY AND STANDARDS | : | As per Customers Specification  |
| Production Capacity   | : | Quantity: 120 Nos.<br>(per annum)   |
|                       | : | Value : Rs. 24,00,000   |
| YEAR OF PREPARATION   | : | 2010-11   |
| PREPARED BY           | : | MSME Development Institute<br>(Ministry of MSME, Govt. of India)<br>65/1, Guindy, Chennai - 600032<br>Ph.& Fax: 044-22501475<br>Web site : <a href="http://www.msmedi-chennai.gov.in">www.msmedi-chennai.gov.in</a> |

## **I. Introduction:**

The Neon sign board is one of the most popular and attractive media of advertisement widely used by industrial and commercial firms to popularize their products among the general public. The neon sign board that is installed on tall buildings attracts the attention of people even from distant places and hence it is ideally suited for advertisement in busy places like big town and cities.

## **II. Market Potential:**

With the expansion of trade and industry the competition in every field is growing day by day. After liberalization of economic policy, variety of foreign goods are available everywhere at cheap rates creating tough competition for industrial and consumer goods in the

Local market and advertisement has become very essential for the success of any business activity. As such it is found to have scope for starting new small scale units for the manufacture of neon sign boards to meet the growing demand.

## **III. Basis and Presumptions:**

- a) The basis for calculation of production capacity has been taken on single shift basis on 75% efficiency.
- b) The maximum capacity utilization on single shift basis for 300 days a year. During first year and second year of operations the capacity utilization is 60% and 80% respectively. The unit is expected to achieve full capacity utilization from the third year onwards.
- c) The salaries and wages, cost of raw materials, utilities, rents, etc. are based on the prevailing rates in and around Chennai. These cost factors are likely to vary with time and location.
- d) Interest on term loan and working capital loan has been taken at the rate of 18 % on an average. This rate may vary depending upon the policy of the financial institutions/agencies from time to time.
- e) The cost of machinery and equipments refer to a particular make/model and prices are approximate.
- f) The break-even point percentage indicated is of full capacity utilization.
- g) The project preparation cost etc. whenever required could be considered under pre-operative expenses.
- h) The essential production machinery and test equipment required for the project have been indicated. The unit may also utilize common test facilities available at Electronics Test and Development Centers (ETDCs) and Electronic Regional Test Laboratories (ERTLs) and Regional Testing Centers (RTCs).

#### **IV. Implementation Schedule:**

The major activities in the implementation of the project have been listed and the average time for implementation of the project is estimated at 12 months:

| S. No | Activity   | Period (In Months) |
|-------|--|--------------------|
| 1     | Preparation of project report                        | 1                  |
| 2     | Registration and other formalities                   | 1                  |
| 3     | Sanction of loan by financial institutions           | 3                  |
| 4     | Plant and Machinery:                                 |                    |
|       | a) Placement of orders                               | 1                  |
|       | b) Procurement                                       | 2                  |
|       | c) Power connection/ Electrification                 | 2                  |
|       | d) Installation/Erection of machinery/Test Equipment | 2                  |
| 5     | Procurement of raw materials                         | 2                  |
| 6     | Recruitment of Technical Personnel etc               | 2                  |
| 7     | Trial production                                     | 11                 |
| 8     | Commercial production                                | 12                 |

#### **Notes**

1. Many of the above activities shall be initiated concurrently.
2. Procurement of raw materials commences from the 8th month onwards.
3. When imported plant and machinery are required, the implementation period of project may vary from 12 months to 15 months.

#### **V. Technical Aspects:**

##### **1) Process of Manufacture:**

The Neon tubular lamp that is used in the Neon Sign Board is a cold cathode type discharge lamp in which discharge takes place between two electrodes placed at the ends of the tube. In long tubular lamps used for advertisement Purposes, several thousand volts are applied between electrodes for which supply is given through a high voltage transformer having high leakage reactance. The Neon lamp of different colours are used for advertisement purposes and the desired colour is produced either by filling lamp with suitable gas or by using glass tubes coated with suitable fluorescent material as per the requirements. Now a day's latter method is generally adopted for producing Neon lamp of different colours.

##### **2) Quality Control and Standards :**

As per customers specification.

##### **3) Production Capacity (per annum) :**

Quantity: 120 Nos. &  
Value: Rs.1200000

##### **4) Motive Power: 10 kw.**

## 5) Pollution Control:

The Government accords utmost importance to control environmental pollution. The small-scale entrepreneurs should have an environmental friendly attitude and adopt pollution control measures by process modification and technology substitution.

India having acceded to the Montreal Protocol in September 1992, the production and use of Ozone Depleting Substances (ODS) like Chlorofluoro Carbon (CFCs), Carbon Tetrachloride, Halons and methyl Chloroform etc. need to be phased out immediately with alternative chemicals/solvents. A notification for detailed Rules to regulate ODS phase out under the Environment Protection Act, 1986 have been put in place with effect from 19th July 2000.

## 6) Energy Conservation:

With the growing energy needs and shortage coupled with rising energy cost, a greater thrust in energy efficiency in industrial sector has been given by the Government of India since 1980s. The Energy Conservation Act, 2001 has been enacted on 18th August 2001, which provides for efficient use of energy, its conservation and capacity building of Bureau of Energy Efficiency created under the Act.

### **The following steps may help for conservation of electrical energy:**

- i) Adoption of energy conserving technologies, production aids and testing facilities.
- ii) Efficient management of process/manufacturing machineries and systems, QC and testing equipments for yielding maximum Energy Conservation.
- iii) Optimum use of electrical energy for heating during soldering process can be obtained by using efficient temperature controlled soldering and de-soldering stations.
- iv) Periodical maintenance of motors, compressors etc.
- v) Use of power factor correction capacitors. Proper selection and layout of lighting system; timely switching on-off of the lights; use of compact fluorescent lamps wherever possible etc.

## VI. Financial Aspects:

### a) Fixed Capital:

|  |        |
|--|--------|
| <b>(i) Land and Building</b> (Rented- per month) | (Rs.)  |
| Built Area 75 sq. meters (Rented)                | 20,000 |

**(ii) Machinery and Equipments:**

| Sl. No.   | Description  | Qty. | Price (Rs.)     |
|---|--|------|-----------------|
| 1   | Bombarding transformer 7.5 KVA<br>230/25000 V              | 1    | 60,000          |
| 2   | Agency Transformer 15000 V.60 ma.                          | 1    | 20,000          |
| 3   | Vacuum pump 1 Micron                                       | 1    | 20,000          |
| 4   | Gas Filling Unit   | 1    | 30,000          |
| 5   | Gas plant (petrol, argon type)                             | 1    | 30,000          |
| 6   | High frequency Vacuum Tester                               | 1    | 10,000          |
| 7   | Tipping, Torches, Splicing torches,<br>ribbon burners etc. | 1    | 18,000          |
| 8   | Hand sheering machine                                      | 1    | 18,000          |
| 9   | Hand operated sheet bending machine                        | 1    | 14,000          |
| 10  | Arc welding Transformer 12 kVA                             | 1    | 22,000          |
| 11  | Spot welding machine 2 kVA                                 | 1    | 16,000          |
| 12  | Bench Drilling machine 13 mm Dia                           | 1    | 12,000          |
| 13  | Bench Grinder  | 1    | 10,000          |
| 14  | Wheel valves, pressure Gauges, hand<br>tools               | L.S. | 20,000          |
|   | <b>Total</b>   |      | <b>3,00,000</b> |
| <i>Installation and Electrification charges @ 10%</i> |  |      | 30,000          |
| <i>Work benches and Office equipment</i>              |  |      | 30,000          |
| <b>(iii) Pre operative expenses :</b>                 |  |      | 40,000          |
| <b>Total Fixed Capital :</b>                          |  |      | <b>4,00,000</b> |

**B. Working Capital:****i) Staff and Labour (per month):****(Rs.)**

|                                      |   |               |
|--------------------------------------|---|---------------|
| 1 Manager cum proprietor             | 1 | 12,000        |
| 2 Neon sign Technician               | 1 | 10,000        |
| 3 Skilled worker                     | 1 | 08,000        |
| 4 Semi-skilled worker                | 1 | 7,000         |
| 5 Helper                             | 1 | 6,000         |
| Total                                |   | 43,000        |
| <i>Perquisites @ 15% on Salaries</i> |   | 6,450         |
| <b>Total</b>                         |   | <b>49,450</b> |

|                  |               |
|------------------|---------------|
| <b>(OR ) Say</b> | <b>50,000</b> |
|------------------|---------------|

**ii) Raw Material (per month) :**

|   |   |               |
|---|---|---------------|
| 1 | Fluorescent coated Lead glass tube 8 mm to 12mm Dia 50 kgs @ Rs. 150 per kg     | 7,500         |
| 2 | Lamp Electrodes 300 Nos. @ Rs.45 per piece                                      | 13,500        |
| 3 | High voltage Transformer 7500 V - O - 7500 V 450 VA 10 Nos @ Rs. 1600 per piece | 16,000        |
| 4 | Argon/Neon gas 5' litres @ Rs-2500 per ltr.                                     | 12,500        |
| 5 | Acrylic Sheet 6'x4' -2 Nos @ Rs. 1500 per sheet                                 | 3,000         |
| 6 | M.S. Angle, Flat and Sheet 200 kgs @ Rs.80 per Kgs                              | 16,000        |
| 7 | Hard ware materials L.S.  | 2,000         |
| 8 | Painting material L.S.  | 4,000         |
| 9 | Miscellaneous items   | 3,000         |
|   | <b>Total</b>  | <b>70,000</b> |

|                                      |               |
|--------------------------------------|---------------|
| <b>(iii) Utilities (per month) :</b> | <b>(Rs.)</b>  |
| Fuel SBP Spirit or Leaded petrol     | 7,000         |
| Power                                | 3,000         |
| <b>Total</b>                         | <b>10,000</b> |

|             |   |               |
|-------------|---|---------------|
| <b>(iv)</b> | <b>Other Contingent Expenditure (per month) :</b> | <b>(Rs.)</b>  |
| 1           | Rent for Building                                 | 20,000        |
| 2           | Postage and Stationery                            | 1,000         |
| 3           | Telephone Charges                                 | 1,000         |
| 4           | Transport Charges                                 | 2,000         |
| 5           | Sales expenses                                    | 1,000         |
| 6           | Miscellaneous                                     | 1,000         |
|             | <b>Total</b>                                      | <b>26,000</b> |

|  |                 |
|--|-----------------|
| <b>(v) Working Expenditure (per month) :</b> |                 |
| Staff and Labour                             | 50,000          |
| Raw Materials                                | 70,000          |
| Utilities                                    | 10,000          |
| Other Contingent Expenditure                 | 26,000          |
| <b>Total</b>                                 | <b>1,56,000</b> |

|  |                 |
|--|-----------------|
| <b>(vi) Working Capital (for 3 Months) :</b> | <b>4,68,000</b> |
|--|-----------------|

**C. Total Capital Investment:**

|                                     |                 |
|-------------------------------------|-----------------|
| (i) Total Fixed Capital             | 4,00,000        |
| (ii) Working Capital (for 3 months) | 4,68,000        |
| <b>Total</b>                        | <b>8,68,000</b> |

**VII. Financial Analysis:**

|   | <b>Cost of Production (per year)</b>          | <b>Rs.</b>       |
|---|---|------------------|
| 1 | Total recurring cost                          | 18,72,000        |
| 2 | Depreciation on Machinery and Equipment @ 10% | 27,000           |
| 3 | Depreciation on tools @ 25%                   | 7,500            |
| 4 | Depreciation on office furniture @ 20%        | 6,000            |
| 5 | Interest on Capital Investment @ 18 %         | 1,56,240         |
|   | <b>Total</b>                                  | <b>20,68,740</b> |
|   | <b>Or say</b>                                 | <b>20,70,000</b> |

**(2) Turnover (per year) :****Rs.**

|  |           |
|--|-----------|
| By way of selling Neon Sign boards<br>including metal frames 120 Nos @ Rs. 20,000 each | 24,00,000 |
|--|-----------|

**(3) Net Profit (per year) :**

|   |                        |                 |
|---|------------------------|-----------------|
| Total Sales Turnover (-) Cost of production | 24,00,000 (-)20,70,000 | <b>3,30,000</b> |
|---|------------------------|-----------------|

**(4) Net Profit Ratio:**

|   |   |         |
|---|---|---------|
| $\frac{\text{Net profit} \times 100}{\text{Annual turnover}}$ | $\frac{3,30,000 \times 100}{24,00,000}$ | 13.75 % |
|---|---|---------|

**(5) Rate of Return :**

|  |  |      |
|--|--|------|
| $\frac{\text{Net profit} \times 100}{\text{Capital Investment}}$ | $\frac{3,30,000 \times 100}{8,68,000}$ | 38 % |
|--|--|------|

**(6) Break-even Point:****Fixed Cost :**

|   |                                      |                 |
|---|--------------------------------------|-----------------|
| 1 | Total Depreciation                   | 40,500          |
| 2 | Interest on Total Capital Investment | 1,56,240        |
| 3 | 40% of Salary and Wages              | 2,40,000        |
| 4 | 40% of Other Contingent expenses     | 28,800          |
| 5 | 100% of Rent                         | 2,40,000        |
|   | <b>Total</b>                         | <b>7,05,540</b> |

**B.E.P. :**

|  |                                       |      |
|--|---------------------------------------|------|
| $\frac{\text{Fixed cost} \times 100}{\text{Fixed cost} + \text{Profit}}$ | $\frac{330000 \times 100}{10,35,540}$ | 31 % |
|--|---------------------------------------|------|

## **VIII. Additional Information:**

- a. The Project Profile may be modified /tailored to suit the individual entrepreneurship qualities/capacity, production programme and also to suit the locational characteristics, wherever applicable.
- b. The Electrical Technology is undergoing rapid strides of change and there is need for regular monitoring of the national and international technology scenario. The unit may, therefore, keep abreast with the new technologies 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 process and environment in which they are generated. The ISO 9000 defines standards for Quality Management Systems and ISO 14001 defines standards for Environmental Management System for acceptability at international level. The unit may therefore adopt these standards for global competition.
- d. The margin money recommended is 25% of the working capital requirement at an average. However, the percentage of margin money may vary as per bank's discretion.



**IX. Addresses of Machinery and Equipment Suppliers:**

|  |  |
|--|--|
| M/s. Transformer Manufacturing and Repairing Works,<br>Vadanagar, North Gujarat. | M/s. Hind Vacuum Co. (P) Ltd.<br>B/92, Rajaji Nagar, Industrial Estate,<br>Bangalore |
| M/s. Toshniwal Brothers (P) Ltd.<br>Mount Road, Chennai-32                       | M/s. Key Engg. Works,<br>16/A, Najafgarh Road, New Delhi-1                           |
| M/s. National Neon Light<br>6, Kennedy Street, Chennai-4                         |  |

**X. Addresses Raw Material Suppliers:**

|   |  |
|---|--|
| . M/s. Philips India Ltd.<br>Shivsagar Estate, Block 11-A,<br>Dr. Annie Besant Road,<br>Mumbai.                   | M/s. Ashok Rubber Industries,<br>106 B, Narkel Dange North Road, Kolkata |
| M/s. Electrical and Glass Products,<br>52-A, Sidhpuz Industrial Estate, 5.V.<br>Road, Goregaon (West), Mumbai-52. |  |