## PROJECT REPORT

## Of

## TABLE FAN

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Table Fan Manufacturing unit.

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.]

PROJECT AT A GLANCE


## TABLE FAN MANUFACTURING UNIT

## Introduction:

Electric Table Fan is one of the common electric appliances used in houses, offices, shops, and business establishments to provide air circulation and to cool down the temperature. The fan circulates the air, which enhances the evaporation rate of sweat from the body, due to which the body is cooled. Table Fans are manufactured in $200 \mathrm{~mm}, 300$ mm , and 400 mm sweep sizes, but the one, which is most commonly used, is of 400 mm sweep size.


## Uses \& Market Potential:

Table fans are used in the summer season in houses, schools, colleges, factories, hospitals, andbusiness establishments, etc. The table fan market Expected to grow at a CAGR of $3.3 \%$ in the coming years. Table Fan has become a necessity in the summer season in houses, schools, colleges, factories, hospitals, and business establishments. Further Table Fan is extensively used in rural areas especially when:
(i) there is no ceiling overhead. (ii) Portability of this fan is better in comparison to the ceiling pedestaland exhaust fans. A product having low losses is more economical to the customers as well as having better cooling efficiency. The trend of purchasing new houses or residential flats is also expected to promote the use of table fans over the next few years.

## Product:

Table Fan

## Raw Material:

Basic raw material are:

- Electric components: Stator Core, Wires, Switch, Winding wire, Power cord, ControlPanel, capacitor etc.
- Table Fan Parts: Front Grill, Rare Grill, Motor Shaft, Base Plate, swing mechanism, FanBlades, Rotor, etc.
- General Consumables: Nut bolts, Paint, Solder wire, Insulating material, etc.


## Manufacturing Process:

## FLOW CHART OF THE PROCESS



## Area:

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and polishing area. Also, some of the area of building is required for office staff facilities, office furniture, etc. Thus, the approximate total area required for complete industrial setup is $1200-1800 \mathrm{Sqft}$.

## Cost of Machines:

| Machine | Qty | Rate | Price |
| :--- | :--- | :--- | :--- |
| Slot Paper inserting <br> machine | 2 | $1,90,000$ | $3,80,000$ |
| Automatic Stator Winding <br> Machine | 1 | $2,95,000$ | $2,95,000$ |
| Shaft Pressing Machine | 1 | $1,25,000$ | $1,25,000$ |


| Bearing Pressing Machine | 1 | 42,000 | 42,000 |
| :--- | :--- | :--- | :--- |
| Blade Angling Machine | 1 | 21,500 | 21,500 |
| Overhead Conveyor | 1 | $6,25,000$ | $6,25,000$ |
| Soldering Port | 1 | 6,500 | 6,500 |
| High Voltage Resistance | 1 | 13,500 | 13,500 |
| Tester |  |  |  |
| Tachometer | 1 | 15,500 | 15,500 |
| Testing Panel | 1 | 22,500 | 22,500 |
| SUB TOTAL |  |  | $\mathbf{1 5 , 4 6 , 5 0 0}$ |

Power Requirement- The estimated Power requirement is taken at 18 HP.

Manpower Requirement-Following manpower is required:

- Machine operator-2
- Skilled/unskilled worker-3
- Helper-4
- Manager cum Accountant-1
- Sales Personnel-1

PROJECTED BALANCE SHEET

| PARTICULARS | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| SOURCES OF FUND |  |  |  |  |  |
| Capital Account |  |  |  |  |  |
| Opening Balance | - | 3.16 | 4.63 | 7.21 | 10.59 |
| Add: Additions | 2.33 | - | - | - | - |
| Add: Net Profit | 4.64 | 5.97 | 7.58 | 9.37 | 11.09 |
| Less: Drawings | 3.80 | 4.50 | 5.00 | 6.00 | 7.00 |
| Closing Balance | 3.16 | 4.63 | 7.21 | 10.59 | 14.67 |
| CC Limit | 6.11 | 6.11 | 6.11 | 6.11 | 6.11 |
| Term Loan | 13.17 | 9.88 | 6.58 | 3.29 | - |
| Sundry Creditors | 2.35 | 2.74 | 3.15 | 3.57 | 4.00 |
|  |  |  |  |  |  |
| TOTAL : | 24.80 | 23.36 | 23.06 | 23.56 | 24.79 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| APPLICATION OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Fixed Assets ( Gross) | 16.46 | 16.46 | 16.46 | 16.46 | 16.46 |
| Gross Dep. | 2.42 | 4.48 | 6.24 | 7.73 | 9.01 |
| Net Fixed Assets | 14.04 | 11.98 | 10.22 | 8.73 | 7.45 |
|  |  |  |  |  |  |
| Current Assets |  |  |  |  |  |
| Sundry Debtors | 3.54 | 4.36 | 5.05 | 5.78 | 6.56 |
| Stock in Hand | 5.61 | 6.56 | 7.52 | 8.52 | 9.56 |
| Cash and Bank | 1.61 | 0.47 | 0.26 | 0.53 | 1.23 |
|  |  |  |  |  |  |
| TOTAL: | 24.80 | 23.36 | 23.06 | 23.56 | 24.79 |

PROJECTED PROFITABILITY STATEMENT

| PARTICULARS | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A) SALES |  |  |  |  |  |
| Gross Sale | 75.81 | 93.40 | 108.26 | 123.94 | 140.47 |
| Total (A) | 75.81 | 93.40 | 108.26 | 123.94 | 140.47 |
| B) COST OF SALES |  |  |  |  |  |
| Raw Material Consumed | 47.04 | 54.84 | 62.92 | 71.31 | 80.01 |
| Elecricity Expenses | 1.41 | 1.61 | 1.81 | 2.01 | 2.22 |
| Repair \& Maintenance | 1.90 | 2.33 | 2.71 | 3.10 | 3.51 |
| Labour \& Wages | 12.35 | 15.44 | 18.21 | 21.13 | 24.09 |
| Depreciation | 2.42 | 2.06 | 1.76 | 1.50 | 1.28 |
| Cost of Production | 65.11 | 76.28 | 87.41 | 99.05 | 111.10 |
| Add: Opening Stock /WIP | - | 3.26 | 3.81 | 4.37 | 4.95 |
| Less: Closing Stock /WIP | 3.26 | 3.81 | 4.37 | 4.95 | 5.56 |
| Cost of Sales (B) | 61.86 | 75.72 | 86.86 | 98.47 | 110.50 |
| C) GROSS PROFIT (A-B) | 13.95 | 17.68 | 21.40 | 25.47 | 29.97 |
|  | 18.41\% | 18.93\% | 19.77\% | 20.55\% | 21.33\% |
| D) Bank Interest i) (Term Loan ) | 1.61 | 1.31 | 0.95 | 0.59 | 0.23 |
| ii) Interest On Working Capital | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| E) Salary to Staff | 5.67 | 6.69 | 7.89 | 9.08 | 10.17 |
| F) Selling \& Adm Expenses Exp. | 1.36 | 2.62 | 3.46 | 4.34 | 5.62 |
| G) TOTAL (D+E+F) | 9.31 | 11.29 | 12.98 | 14.68 | 16.69 |
| H) NET PROFIT | 4.64 | 6.39 | 8.42 | 10.79 | 13.28 |
|  | 6.1\% | 6.8\% | 7.8\% | 8.7\% | 9.5\% |
| I) Taxation | - | 0.42 | 0.84 | 1.42 | 2.19 |
| J) PROFIT (After Tax) | 4.64 | 5.97 | 7.58 | 9.37 | 11.09 |

PROJECTED CASH FLOW STATEMENT

| PARTICULARS | I | II | III | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| SOURCES OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Own Contribution | 2.33 | - | - | - | - |
| Reserve \& Surplus | 4.64 | 6.39 | 8.42 | 10.79 | 13.28 |
| Depriciation \& Exp. W/off | 2.42 | 2.06 | 1.76 | 1.50 | 1.28 |
| Increase In Cash Credit | 6.11 | - | - | - | - |
| Increase In Term Loan | 14.81 | - | - | - | - |
| Increase in Creditors | 2.35 | 0.39 | 0.40 | 0.42 | 0.44 |
|  |  |  |  |  |  |
| TOTAL : | 32.66 | 8.84 | 10.58 | 12.71 | 14.99 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| APPLICATION OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Increase in Fixed Assets | 16.46 | - | - | - | - |
| Increase in Stock | 5.61 | 0.95 | 0.96 | 1.00 | 1.04 |
| Increase in Debtors | 3.54 | 0.82 | 0.69 | 0.73 | 0.77 |
| Repayment of Term Loan | 1.65 | 3.29 | 3.29 | 3.29 | 3.29 |
| Taxation | - | 0.42 | 0.84 | 1.42 | 2.19 |
| Drawings | 3.80 | 4.50 | 5.00 | 6.00 | 7.00 |
| TOTAL : | 31.05 | 9.98 | 10.79 | 12.44 | 14.29 |
|  |  |  |  |  |  |
| Opening Cash \& Bank Balance | - | 1.61 | 0.47 | 0.26 | 0.53 |
|  |  |  |  |  |  |
| Add : Surplus | 1.61 | - 1.14 | 0.21 | 0.27 | 0.70 |
|  |  |  |  |  |  |
| Closing Cash \& Bank Balance | 1.61 | 0.47 | 0.26 | 0.53 | 1.23 |

COMPUTATION OF CLOSING STOCK \& WORKING CAPITAL

| PARTICULARS | I | II | III | IV | V |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Finished Goods |  |  |  |  |  |
| (15 Days requirement) | 3.26 | 3.81 | 4.37 | 4.95 | 5.56 |
| Raw Material |  |  |  |  |  |
| (15 Days requirement) | 2.35 | 2.74 | 3.15 | 3.57 | 4.00 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Closing Stock | $\mathbf{5 . 6 1}$ | $\mathbf{6 . 5 6}$ | $\mathbf{7 . 5 2}$ | $\mathbf{8 . 5 2}$ | $\mathbf{9 . 5 6}$ |

COMPUTATION OF WORKING CAPITAL REQUIREMENT

| Particulars | Amount | Margin(10\%) | Net |
| :--- | ---: | ---: | ---: |
|  |  |  | Amount |
| Stock in Hand | 5.61 |  |  |
| Less: |  |  |  |
| Sundry Creditors | 2.35 |  |  |
| Paid Stock | $\mathbf{3 . 2 6}$ | $\mathbf{0 . 3 3}$ | $\mathbf{2 . 9 3}$ |
|  |  |  |  |
| Sundry Debtors | 3.54 | 0.35 | 3.18 |
| Working Capital Requirement |  | $\mathbf{6 . 1 1}$ |  |
|  |  |  |  |
| Margin |  |  | 0.68 |
|  |  |  | $\mathbf{6 . 1 1}$ |
| MPBF |  |  | $\mathbf{6 . 1 1}$ |
| Working Capital Demand |  |  |  |


| REPAYMENT SCHEDULE OF TERM LOAN |  |  |  |  | 11.0\% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Particulars | Amount | Addition | Total | Interest | Repayment | Cl Balance |
| I | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | - | 14.81 | 14.81 | 0.41 | - | 14.81 |
|  | Iind Quarter | 14.81 | - | 14.81 | 0.41 | - | 14.81 |
|  | IIIrd Quarter | 14.81 | - | 14.81 | 0.41 | 0.82 | 13.99 |
|  | Ivth Quarter | 13.99 | - | 13.99 | 0.38 | 0.82 | 13.17 |
|  |  |  |  |  | 1.61 | 1.65 |  |
| II | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 13.17 | - | 13.17 | 0.36 | 0.82 | 12.35 |
|  | Iind Quarter | 12.35 | - | 12.35 | 0.34 | 0.82 | 11.52 |
|  | IIIrd Quarter | 11.52 | - | 11.52 | 0.32 | 0.82 | 10.70 |
|  | Ivth Quarter | 10.70 |  | 10.70 | 0.29 | 0.82 | 9.88 |
|  |  |  |  |  | 1.31 | 3.29 |  |
| III | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 9.88 | - | 9.88 | 0.27 | 0.82 | 9.05 |
|  | Iind Quarter | 9.05 | - | 9.05 | 0.25 | 0.82 | 8.23 |
|  | IIIrd Quarter | 8.23 | - | 8.23 | 0.23 | 0.82 | 7.41 |
|  | Ivth Quarter | 7.41 |  | 7.41 | 0.20 | 0.82 | 6.58 |
|  |  |  |  |  | 0.95 | 3.29 |  |
| IV | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 6.58 | - | 6.58 | 0.18 | 0.82 | 5.76 |
|  | Iind Quarter | 5.76 | - | 5.76 | 0.16 | 0.82 | 4.94 |
|  | IIIrd Quarter | 4.94 | - | 4.94 | 0.14 | 0.82 | 4.11 |
|  | Ivth Quarter | 4.11 |  | 4.11 | 0.11 | 0.82 | 3.29 |
|  |  |  |  |  | 0.59 | 3.29 |  |
| V | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 3.29 | - | 3.29 | 0.09 | 0.82 | 2.47 |
|  | Iind Quarter | 2.47 | - | 2.47 | 0.07 | 0.82 | 1.65 |
|  | IIIrd Quarter | 1.65 | - | 1.65 | 0.05 | 0.82 | 0.82 |
|  | Ivth Quarter | 0.82 |  | 0.82 | 0.02 | 0.82 | 0.00 |
|  |  |  |  |  | 0.23 | 3.29 |  |
|  | Door to Door Period Moratorium Period Repayment Period | $\begin{array}{r} 60 \\ 6 \\ 54 \end{array}$ |  |  |  |  |  |

CALCULATION OF D.S.C.R

| PARTICULARS | I | II | III | IV | V |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| CASH ACCRUALS | 7.06 | 8.03 | 9.34 | 10.87 | 12.36 |
|  |  |  |  |  |  |
| Interest on Term Loan | 1.61 | 1.31 | 0.95 | 0.59 | 0.23 |
|  |  |  |  |  |  |
| Total | 8.67 | 9.34 | 10.29 | 11.46 | 12.59 |
|  |  |  |  |  |  |
| REPAYMENT |  |  |  |  |  |
| Repayment of Term Loan | 1.65 | 3.29 | 1.31 | 3.29 | 3.95 |
| Interest on Term Loan |  |  |  | 0.59 | 0.23 |
|  | 3.25 | 4.60 | 4.24 | 3.88 | 3.52 |
| Total |  |  |  |  |  |
|  | $\mathbf{2 . 6 6}$ | $\mathbf{2 . 0 3}$ | $\mathbf{2 . 4 2}$ | $\mathbf{2 . 9 5}$ | $\mathbf{3 . 5 8}$ |
| DEBT SERVICE COVERAGE RATIO |  |  |  |  |  |
|  |  |  | $\mathbf{2 . 6 8}$ |  |  |
| AVERAGE D.S.C.R. |  |  |  |  |  |

## Assumptions:

1. Production Capacity of Table Fan Manufacturing unit is taken at 80 Pcs per day. First year, Capacity has been taken @ 35\%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 14 days.
5. Credit period by the Sundry Creditors has been provided for 15 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at $11 \%$.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 18 HP .
10. Selling Prices \& Raw material costing has been increased by $3 \%$ \& $2 \%$ respectively in the subsequent years.

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