

# UP MSME 1-Connect

## PROJECT REPORT

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PROJECT:

**MENTHOL CRYSTAL UNIT**

# PROJECT REPORT

Of

## MENTHOL CRYSTAL UNIT

### PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Menthol Crystal 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.]

1 Name of the Entrepreneur

PROJECT AT A GLANCE

State: xxxxxxxxx

2 Constitution (legal Status)

xxxxxxxxxx

3 Father / Spouse Name

xxxxxxxxxx

4 Unit Address :

xxxxxxxxxxxx

xxxxxxxxxxxxxxxxxxxxxxxxxx

5 Product and By Product

District :

xxxxxxx

Pin:

xxxxxxx

Mobile

xxxxxxx

6 Name of the project / business activity proposed :

: MENTHOL CRYSTALS

7 Cost of Project

8 Means of Finance

MENTHOL CRYSTALS UNIT

Term Loan

Own Capital

Working capital

: Rs.36.56 Lakhs

9 Debt Service Coverage Ratio

Rs.27.9 Lakhs

10 Pay Back Period

Rs.3.66 Lakhs

11 Project Implementation Period

Rs.5 Lakhs

12 Break Even Point

: 2.39

13 Employment

: 5 Years

14 Power Requirement

: 5-6 Months

15 Major Raw materials

: 33%

16 Estimated Annual Sales Turnover (Max Capacity)

: 8 Persons

17 Detailed Cost of Project & Means of Finance

: 20.00 HP

: Mint Oil, Chemicals & other consumables, Packing material

COST OF PROJECT

: 143.70 Lakhs

(Rs. In Lakhs)

MEANS OF FINANCE

| Particulars              | Amount     |
|--------------------------|------------|
| Land                     | Own/Rented |
| Plant & Machinery        | 29.40      |
| Furniture & Fixtures     | 1.60       |
| Working Capital          | 5.56       |
| Total                    | 36.56      |
| Particulars              | Amount     |
| Own Contribution         | 3.66       |
| Working Capital(Finance) | 5.00       |
| Term Loan                | 27.90      |
| Total                    | 36.56      |

# MENTHOL CRYSTAL UNIT

**Introduction:** Mint oil and its derivative menthol is widely used as flavouring ingredient for various products such as tooth paste, dental cream, cough syrups, confectionery, pan masala, chewing gums and in pain relieving preparations. Mentha cultivation in India has proved quite remunerative to the growers, particularly to small holders and fitted well in the existing cropping system in mint growing area in the country, Mint growers consider mentha as a bonus crop as it does not disturb or replace the cultivation of any major winter (Rabi) or rainy season (Kharif) crop. Being a labour intensive crop mentha provides various employment opportunities in cultivation, distillation, processing field particularly in rural areas.



**Uses & Market Potential:** Mentha oil is obtained from the leaves/entire plant of various mentha species and varieties. The Japanese mint (*Mentha arvensis*) is mainly cultivated in our country. The oil of Japanese mint is used as a source of natural menthol and dementholized oil (DMO). Because of its refreshing aroma and cooling effect, Mints have very wide spread use as flavouring agent in different pharmaceutical preparations.

The mint oil and its derivatives, menthol and DMO are now being marketed at various locations in North India as also being exported. The marketing of Japanese mint oil and menthol is wide spread. India is the second largest country in production of mints and its derivatives. India is exporting mints and its derivatives throughout the world worth Rs. 60-70 crores annually.

**Raw material:** Major raw materials are as follows:

1. Mint Oil
2. Chemicals & other consumables
3. Packing material

**Machinery Requirements:** Basic machines & equipments are as follows:

| S<br>o.<br>N | Machine  | Unit | Price          |
|--------------|--|------|----------------|
| 1.           | Chilling plant cap. 492 litre, temp. (50°C ) chart type            | 12   | 900000         |
| 2.           | Centrifuge heavy duty R.P.M. 1200                                  | 4    | 300000         |
| 3.           | S.S. reaction vessel 6 with stirrer cap. 400kg                     | 6    | 600000         |
| 4.           | Dryer capacity 100 kg 12 trays with Thermostat temperature control | 2    | 600000         |
| 5.           | Vacuum filter  | 4    | 200000         |
| 6.           | S.S Tray for storage   | 24   | 240000         |
| 7.           | Other machines & equipments  | Ls   | 100000         |
|              | <b>Total Amount</b>  |      | <b>2940000</b> |

**Manufacturing Process:** Process of manufacture is

- Freezing of the mint oil.
- Removal of the oil crystals from the residual oil by centrifuging.
- Drying of the crystals.

After collection of the mint oil from farmers/brokers, it should be filtered prior to cooling as it usually contains some water and mucilaginous impurities, which prevent ready formation of the menthol crystals. For crystallization some producers use filter and centrifuge the oil. In the whole process menthol crystals and dementholized mint oil is formed which is packed and sent for sale.

### **Area:**

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500 to 2000Sqft.

**Power Requirement:** The power consumption required to run all the machinery could be approximated as 20hp

**Manpower Requirement-** There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 8 including 1 Supervisor, 1 Plant operator, 1 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

**Bank Term Loan:** Rate of Interest is assumed to be at 11%

**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
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.
- NOC from State Pollution Control Board

### **Implementation Schedule:**

| S No. | Activity   | Time required |
|-------|--|---------------|
| 1.    | Acquisition of premises                                      | 1-2 Months    |
| 2.    | Procurement & installation of Plant & Machinery              | 1-2 Months    |
| 3.    | Arrangement of Finance                                       | 1.5-2 Months  |
| 4.    | Requirement of required Manpower                             | 1 Month       |
| 5.    | Commercial Trial Runs  | 1 Month       |
|       | Total time Required (some activities shall run concurrently) | 5-6 Months    |

## FINANCIALS

| <u>PROJECTED CASH FLOW STATEMENT</u> |              |              |              |              |              |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|
| PARTICULARS                          | I            | II           | III          | IV           | V            |
| <u>SOURCES OF FUND</u>               |              |              |              |              |              |
| Own Contribution                     | 3.66         | -            |              |              |              |
| Reserve & Surplus                    | 6.83         | 10.72        | 16.59        | 22.37        | 28.37        |
| Depriciation & Exp. W/off            | 4.57         | 3.89         | 3.32         | 2.82         | 2.41         |
| Increase In Cash Credit              | 5.00         |              |              |              |              |
| Increase In Term Loan                | 27.90        | -            | -            | -            | -            |
| Increase in Creditors                | 1.37         | 0.19         | 0.12         | 0.12         | 0.12         |
| <b>TOTAL :</b>                       | <b>49.33</b> | <b>14.80</b> | <b>20.02</b> | <b>25.32</b> | <b>30.90</b> |

|                                   |              |              |              |              |              |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|
|                                   |              |              |              |              |              |
| <b><u>APPLICATION OF FUND</u></b> |              |              |              |              |              |
|                                   |              |              |              |              |              |
| Increase in Fixed Assets          | 31.00        | -            | -            | -            | -            |
| Increase in Stock                 | 4.71         | 0.58         | 0.50         | 0.51         | 0.52         |
| Increase in Debtors               | 2.54         | 0.37         | 0.32         | 0.33         | 0.34         |
| Repayment of Term Loan            | 3.10         | 6.20         | 6.20         | 6.20         | 6.20         |
| Taxation                          | 1.03         | 1.61         | 4.98         | 6.71         | 8.51         |
| Drawings                          | 5.00         | 6.00         | 7.00         | 10.00        | 15.00        |
| <b>TOTAL :</b>                    | <b>47.38</b> | <b>14.76</b> | <b>18.99</b> | <b>23.75</b> | <b>30.58</b> |
|                                   |              |              |              |              |              |
| Opening Cash & Bank Balance       | -            | 1.95         | 2.00         | 3.03         | 4.59         |
|                                   |              |              |              |              |              |
| Add : Surplus                     | 1.95         | 0.04         | 1.03         | 1.57         | 0.32         |
|                                   |              |              |              |              |              |
| Closing Cash & Bank Balance       | <b>1.95</b>  | <b>2.00</b>  | <b>3.03</b>  | <b>4.59</b>  | <b>4.92</b>  |

| <b>PROJECTED BALANCE SHEET</b> |                   |           |                   |                   |                   |
|--------------------------------|-------------------|-----------|-------------------|-------------------|-------------------|
|                                |                   |           |                   |                   |                   |
| <b>PARTICULARS</b>             | <b>I</b>          | <b>II</b> | <b>III</b>        | <b>IV</b>         | <b>V</b>          |
|                                |                   |           |                   |                   |                   |
|                                |                   |           |                   |                   |                   |
| <b><u>SOURCES OF FUND</u></b>  |                   |           |                   |                   |                   |
| <b>Capital Account</b>         |                   |           |                   |                   |                   |
| Opening Balance                | -                 | 4.46      | 7.58              | 12.19             | 7.85 <sup>1</sup> |
| Add: Additions                 | 3.66              | -         | -                 | -                 | -                 |
| Add: Net Profit                | 5.81              | 9.11      | 1.61 <sup>1</sup> | 15.66             | 9.86 <sup>1</sup> |
| Less: Drawings                 | 5.00              | 6.00      | 7.00              | 10.00             | 5.00 <sup>1</sup> |
| <b>Closing Balance</b>         | 4.46              | 7.58      | 12.19             | 7.85 <sup>1</sup> | 22.71             |
| CC Limit                       | 5.00              | 5.00      | 5.00              | 5.00              | 5.00              |
| Term Loan                      | 4.80 <sup>2</sup> | 18.60     | 2.40 <sup>1</sup> | 6.20              | 0.00              |
| Sundry Creditors               | 1.37              | 1.56      | 1.68              | 1.80              | 1.92              |
|                                |                   |           |                   |                   |                   |
| <b>TOTAL :</b>                 | 5.64 <sup>3</sup> | 32.74     | 1.27 <sup>3</sup> | 30.85             | 9.63 <sup>2</sup> |
|                                |                   |           |                   |                   |                   |
|                                |                   |           |                   |                   |                   |
|                                |                   |           |                   |                   |                   |

| <u>APPLICATION OF FUND</u>  |                   |                         |                   |                         |                   |
|-----------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|
|                             |                   |                         |                   |                         |                   |
| <b>Fixed Assets (Gross)</b> | 31.00             | 1.00 <sup>3</sup>       | 31.00             | 1.00 <sup>3</sup>       | 31.00             |
| Gross Dep.                  | 4.57              | 8.46                    | 1.78 <sup>1</sup> | 14.60                   | 7.01 <sup>1</sup> |
| Net Fixed Assets            | 6.43 <sup>2</sup> | 22.54                   | 9.22 <sup>1</sup> | 16.40                   | 3.99 <sup>1</sup> |
|                             |                   |                         |                   |                         |                   |
| <b>Current Assets</b>       |                   |                         |                   |                         |                   |
| Sundry Debtors              | .54 <sup>2</sup>  | 2.91                    | 3.23              | 3.56                    | 3.90              |
| Stock in Hand               | 4.71              | 5.30                    | 5.79              | 6.30                    | 6.82              |
| Cash and Bank               | 1.95              | 2.00                    | 3.03              | 4.59                    | 4.92              |
|                             |                   |                         |                   |                         |                   |
| <b>TOTAL :</b>              | <b>35.64</b>      | <b>2.74<sup>3</sup></b> | <b>31.27</b>      | <b>0.85<sup>3</sup></b> | <b>29.63</b>      |

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| <u>PROJECTED PROFITABILITY STATEMENT</u> |       |        |        |        |        |
|--|-------|--------|--------|--------|--------|
|  |       |        |        |        |        |
| PARTICULARS                              | I     | II     | III    | IV     | V      |
| <b><u>A) SALES</u></b>                   |       |        |        |        |        |
| Gross Sale                               | 93.96 | 107.95 | 119.42 | 131.33 | 143.70 |
| By Product Sale                          | 14.85 | 16.82  | 18.90  | 21.09  | 23.40  |

|                                 |               |               |               |               |               |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Total (A)</b>                | <b>108.81</b> | <b>124.77</b> | <b>138.32</b> | <b>152.43</b> | <b>167.10</b> |
|                                 |               |               |               |               |               |
| <b>B) COST OF SALES</b>         |               |               |               |               |               |
|                                 |               |               |               |               |               |
| Raw Material Consumed           | 58.80         | 66.89         | 72.03         | 77.18         | 82.32         |
| Electricity Expenses            | 1.93          | 2.10          | 2.26          | 2.42          | 2.58          |
| Repair & Maintenance            | 16.91         | 17.27         | 17.91         | 19.70         | 21.56         |
| Labour & Wages                  | 8.32          | 8.98          | 10.33         | 11.36         | 12.50         |
| Depreciation                    | 4.57          | 3.89          | 3.32          | 2.82          | 2.41          |
| <b>Cost of Production</b>       | <b>90.53</b>  | <b>99.13</b>  | <b>105.84</b> | <b>113.48</b> | <b>121.36</b> |
|                                 |               |               |               |               |               |
| <b>Add: Opening Stock /WIP</b>  | -             | 2.75          | 3.07          | 3.39          | 3.73          |
| <b>Less: Closing Stock /WIP</b> | 2.75          | 3.07          | 3.39          | 3.73          | 4.08          |
|                                 |               |               |               |               |               |
| Cost of Sales (B)               | 87.78         | 98.81         | 105.52        | 113.14        | 121.01        |
|                                 |               |               |               |               |               |
| <b>C) GROSS PROFIT (A-B)</b>    | <b>21.03</b>  | <b>25.95</b>  | <b>32.80</b>  | <b>39.29</b>  | <b>46.09</b>  |
|                                 | <b>19.33%</b> | <b>20.80%</b> | <b>23.71%</b> | <b>25.77%</b> | <b>27.58%</b> |
|                                 |               |               |               |               |               |
| D) Bank Interest (Term Loan )   | 3.03          | 2.47          | 1.79          | 1.11          | 0.43          |
| ii) Interest On Working Capital | 0.55          | 0.55          | 0.55          | 0.55          | 0.55          |
| E) Salary to Staff              | 5.92          | 6.81          | 7.90          | 8.69          | 9.56          |

|                                |              |              |              |              |              |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|
| F) Selling & Adm Expenses Exp. | 4.70         | 5.40         | 5.97         | 6.57         | 7.19         |
|                                |              |              |              |              |              |
| TOTAL (D+E)                    | <b>14.20</b> | <b>15.23</b> | <b>16.21</b> | <b>16.91</b> | <b>17.72</b> |
|                                |              |              |              |              |              |
| H) NET PROFIT                  | 6.83         | 10.72        | 16.59        | 22.37        | 28.37        |
|                                | <b>6.3%</b>  | <b>8.6%</b>  | <b>12.0%</b> | <b>14.7%</b> | <b>17.0%</b> |
| I) Taxation                    | 1.03         | 1.61         | 4.98         | 6.71         | 8.51         |
|                                |              |              |              |              |              |
| J) PROFIT (After Tax)          | 5.81         | 9.11         | 11.61        | 15.66        | 19.86        |

| <u>COMPUTATION OF MAKING OF STALS</u>                   |  |       |    |
|---|--|-------|----|
| <u>MENTHOL CR</u>                                       |  |       |    |
|   |  |       |    |
| <b>Item to be Manufactured Menthol Crystals(Flakes)</b> |  |       |    |
| Manufacturing Capacity per day                          |  | 30    | Kg |
|   |  |       |    |
| No. of Working Hour                                     |  | 8     |    |
|   |  |       |    |
| No of Working Days per month                            |  | 25    |    |
|   |  |       |    |
| No. of Working Day per annum                            |  | 300   |    |
|   |  |       |    |
| Total Production per Annum                              |  | 9,000 | Kg |

|                            |  |             |                     |
|----------------------------|--|-------------|---------------------|
| Total Production per Annum |  | 9,000       | Kg                  |
| Year                       |  | Capacity    | MENTHOL<br>CRYSTALS |
|                            |  | Utilisation |                     |
|                            |  |             |                     |
| I                          |  | 60%         | 5,400.00            |
| II                         |  | 65%         | 5,850.00            |
| III                        |  | 70%         | 6,300.00            |
| IV                         |  | 75%         | 6,750.00            |
| V                          |  | 80%         | 7,200.00            |
|                            |  |             |                     |

**COMPUTATION OF RAW MATERIAL**

| Item Name                     |          | Quantity of Raw Material | Unit         | Unit Rate of | Total Cost Per Annum (100%) |
|-------------------------------|----------|--------------------------|--------------|--------------|-----------------------------|
| Mint Oil                      |          | 22,500.00                | Kg           | 400          | 90,00,000.00                |
| Chemicals & other consumables |          |                          | Ls           |              | 5,00,000.00                 |
| Packing Material              |          |                          | Ls           |              | 3,00,000.00                 |
| Total                         |          |                          |              |              | <b>98,00,000.00</b>         |
|                               |          |                          |              |              |                             |
| Total Raw material in Rs lacs |          |                          |              |              | 98.00                       |
| Raw Material Consumed         | Capacity |                          | Amount (Rs.) |              |                             |

|  |             |          |          |                     |          |
|--|-------------|----------|----------|---------------------|----------|
|  | Utilisation |          |          |                     |          |
| I  | 60%         |          | 58.80    |                     |          |
| II   | 65%         |          | 66.89    | 5% Increase in Cost |          |
| III  | 70%         |          | 72.03    | 5% Increase in Cost |          |
| IV   | 75%         |          | 77.18    | 5% Increase in Cost |          |
| V  | 80%         |          | 82.32    | 5% Increase in Cost |          |
| <b>COMPUTATION OF SALE (Menthol Crystal)</b> |             |          |          |                     |          |
| Particulars                                  | I           | II       | III      | IV                  | V        |
|  |             |          |          |                     |          |
| Op Stock                                     | -           | 180.00   | 195.00   | 210.00              | 225.00   |
|  |             |          |          |                     |          |
| Production                                   | 5,400.00    | 5,850.00 | 6,300.00 | 6,750.00            | 7,200.00 |
|  |             |          |          |                     |          |
|  | 5,400.00    | 6,030.00 | 6,495.00 | 6,960.00            | 7,425.00 |
| Less : Closing Stock(10 Days)                | 180.00      | 195.00   | 210.00   | 225.00              | 240.00   |
|  |             |          |          |                     |          |
| Net Sale                                     | 5<br>220.00 | 5,835.00 | 6,285.00 | 6,735.00            | 7,185.00 |
|  |             |          |          |                     |          |
| Sale Price per kg                            | 1<br>800.00 | 1,850.00 | 1,900.00 | 1,950.00            | 2,000.00 |

|   |                 |                 |               |                             |               |
|---|-----------------|-----------------|---------------|-----------------------------|---------------|
|   |                 |                 |               |                             |               |
| <b>Sale (in Lacs)</b>                               | <b>93.96</b>    | <b>107.95</b>   | <b>119.42</b> | <b>131.33</b>               | <b>143.70</b> |
| <b>Computation of By Product(Dementholized oil)</b> |                 |                 |               |                             |               |
|   |                 |                 |               |                             |               |
| <b>Production</b>                                   | <b>Capacity</b> | <b>Unit(Kg)</b> | <b>Rate</b>   | <b>Total sale per annum</b> |               |
| I   | 60%             | 1350            | 1,100.00      | 14.85                       |               |
| II  | 65%             | 1462.5          | 1,150.00      | 16.82                       |               |
| III   | 70%             | 1575            | 1,200.00      | 18.90                       |               |
| IV  | 75%             | 1687.5          | 1,250.00      | 21.09                       |               |
| V   | 80%             | 1800            | 1,300.00      | 23.40                       |               |

**COMPUTATION OF CLOSING STOCK & WORKING CAPITAL**

| PARTICULARS           | I           | II          | III         | IV          | V           |
|-----------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Finished Goods</b> |             |             |             |             |             |
| (10 Days requirement) | 2.75        | 3.07        | 3.39        | 3.73        | 4.08        |
| <b>Raw Material</b>   |             |             |             |             |             |
| (10 Days requirement) | 1.96        | 2.23        | 2.40        | 2.57        | 2.74        |
| <b>Closing Stock</b>  | <b>4.71</b> | <b>5.30</b> | <b>5.79</b> | <b>6.30</b> | <b>6.82</b> |

| COMPUTATION OF WORKING CAPITAL REQUIREMENT |             |             |             |
|--|-------------|-------------|-------------|
| Particulars                                | Amount      | Margin(10%) | Net Amount  |
| Stock in Hand                              | 4.71        |             |             |
| Less:                                      |             |             |             |
| Sundry Creditors                           | 1.37        |             |             |
| <b>Paid Stock</b>                          | <b>3.34</b> | <b>0.33</b> | <b>3.01</b> |

|                                    |      |      |             |
|------------------------------------|------|------|-------------|
|                                    |      |      |             |
| Sundry Debtors                     | 2.54 | 0.25 | 2.29        |
| <b>Working Capital Requirement</b> |      |      | <b>5.29</b> |
|                                    |      |      |             |
| <b>Margin</b>                      |      |      | 0.59        |
|                                    |      |      |             |
| <b>MPBF</b>                        |      |      | <b>5.29</b> |
| <b>Working Capital Demand</b>      |      |      | <b>5.00</b> |

| <b><u>BREAK UP OF LABOUR</u></b> |  |                    |                    |                 |
|----------------------------------|--|--------------------|--------------------|-----------------|
| Particulars                      |  | Wages<br>Per Month | No of<br>Employees | Total<br>Salary |
| Supervisor                       |  | 20,000.00          | 1                  | 20,000.00       |
| Plant Operator                   |  | 16,000.00          | 1                  | 16,000.00       |
| Unskilled Worker                 |  | 12,000.00          | 1                  | 12,000.00       |
| Helper                           |  | 10,000.00          | 1                  | 10,000.00       |

|   |  |          |   |           |
|---|--|----------|---|-----------|
| Security Guard                                |  | 8,000.00 | 1 | 8,000.00  |
|   |  |          |   |           |
|   |  |          |   | 66,000.00 |
| Add: 5% Fringe Benefit                        |  |          |   | 3,300.00  |
| Total Labour Cost Per Month                   |  |          |   | 69,300.00 |
| Total Labour Cost for the year ( In Rs. Lacs) |  |          | 5 | 8.32      |

| <b><u>BREAK UP OF SALARY</u></b>          |  |           |           |           |
|---|--|-----------|-----------|-----------|
|   |  |           |           |           |
| Particulars                               |  | Salary    | No of     | Total     |
|   |  | Per Month | Employees | Salary    |
| Manager                                   |  | 20,000.00 | 1         | 20,000.00 |
| Accountant cum store keeper               |  | 15,000.00 | 1         | 15,000.00 |
| Sales                                     |  | 12,000.00 | 1         | 12,000.00 |
| Total Salary Per Month                    |  |           |           | 47,000.00 |
|   |  |           |           |           |
| Add: 5% Fringe Benefit                    |  |           |           | 2,350.00  |
| Total Salary for the month                |  |           |           | 49,350.00 |
|   |  |           |           |           |
| Total Salary for the year ( In Rs. Lakhs) |  |           | 3         | 5.92      |

| <u>COMPUTATION OF DEPRECIATION</u> |        |                   |           |       |
|------------------------------------|--------|-------------------|-----------|-------|
|                                    |        |                   |           |       |
| Description                        | Land   | Plant & Machinery | Furniture | TOTAL |
|                                    |        |                   |           |       |
| Rate of Depreciation               |        | 15.00%            | 10.00%    |       |
| <b>Opening Balance</b>             | Leased | -                 | -         | -     |
| Addition                           | -      | 29.40             | 1.60      | 31.00 |
|                                    | -      | 29.40             | 1.60      | 31.00 |
|                                    |        | -                 | -         |       |
| TOTAL                              |        | 29.40             | 1.60      | 31.00 |
| Less : Depreciation                | -      | 4.41              | 0.16      | 4.57  |
| WDV at end of Ist year             | -      | 24.99             | 1.44      | 26.43 |
| Additions During The Year          | -      | -                 | -         | -     |
|                                    | -      | 24.99             | 1.44      | 26.43 |
| Less : Depreciation                | -      | 3.75              | 0.14      | 3.89  |
| WDV at end of IInd Year            | -      | 21.24             | 1.30      | 22.54 |
| Additions During The Year          | -      | -                 | -         | -     |
|                                    | -      | 21.24             | 1.30      | 22.54 |
| Less : Depreciation                | -      | 3.19              | 0.13      | 3.32  |
| WDV at end of IIIrd year           | -      | 18.06             | 1.17      | 19.22 |
| Additions During The Year          | -      | -                 | -         | -     |
|                                    | -      | 18.06             | 1.17      | 19.22 |

|                           |   |       |      |       |
|---------------------------|---|-------|------|-------|
| Less : Depreciation       | - | 2.71  | 0.12 | 2.82  |
| WDV at end of IV year     | - | 15.35 | 1.05 | 16.40 |
| Additions During The Year | - | -     | -    | -     |
|                           | - | 15.35 | 1.05 | 16.40 |
| Less : Depreciation       | - | 2.30  | 0.10 | 2.41  |
| WDV at end of Vth year    | - | 13.04 | 0.94 | 13.99 |

| <u>REPAYMENT SCHEDULE OF TERM LOAN</u> |                 |        |           |       |          | 11.0%     |            |
|--|-----------------|--------|-----------|-------|----------|-----------|------------|
| Year                                   | Particulars     | Amount | Addition  | Total | Interest | Repayment | CI Balance |
| <b>I</b>                               | Opening Balance |        |           |       |          |           |            |
|  | Ist Quarter     | -      | 2<br>7.90 | 27.90 | 0.77     | -         | 27.90      |
|  | Iind Quarter    | 27.90  | -         | 27.90 | 0.77     | -         | 27.90      |
|  | IIIrd Quarter   | 27.90  | -         | 27.90 | 0.77     | 1.55      | 26.35      |
|  | Ivth Quarter    | 26.35  | -         | 26.35 | 0.72     | 1.55      | 24.80      |
|  |                 |        |           |       | 3.03     | 3.10      |            |
| <b>II</b>                              | Opening Balance |        |           |       |          |           |            |
|  | Ist Quarter     | 24.80  | -         | 24.80 | 0.68     | 1.55      | 23.25      |
|  | Iind Quarter    | 23.25  | -         | 23.25 | 0.64     | 1.55      | 21.70      |
|  | IIIrd Quarter   | 21.70  | -         | 21.70 | 0.60     | 1.55      | 20.15      |
|  | Ivth Quarter    | 20.15  |           | 20.15 | 0.55     | 1.55      | 18.60      |
|  |                 |        |           |       | 2.47     | 6.20      |            |
| <b>III</b>                             | Opening Balance |        |           |       |          |           |            |
|  | Ist Quarter     | 18.60  | -         | 18.60 | 0.51     | 1.55      | 17.05      |
|  | Iind Quarter    | 17.05  | -         | 17.05 | 0.47     | 1.55      | 15.50      |
|  | IIIrd Quarter   | 15.50  | -         | 15.50 | 0.43     | 1.55      | 13.95      |
|  | Ivth Quarter    | 13.95  |           | 13.95 | 0.38     | 1.55      | 12.40      |

|           |                 |       |   |       |      |      |        |
|-----------|-----------------|-------|---|-------|------|------|--------|
|           |                 |       |   |       | 1.79 | 6.20 |        |
| <b>IV</b> | Opening Balance |       |   |       |      |      |        |
|           | Ist Quarter     | 12.40 | - | 12.40 | 0.34 | 1.55 | 10.85  |
|           | Iind Quarter    | 10.85 | - | 10.85 | 0.30 | 1.55 | 9.30   |
|           | IIIrd Quarter   | 9.30  | - | 9.30  | 0.26 | 1.55 | 7.75   |
|           | Ivth Quarter    | 7.75  |   | 7.75  | 0.21 | 1.55 | 6.20   |
|           |                 |       |   |       | 1.11 | 6.20 |        |
| <b>V</b>  | Opening Balance |       |   |       |      |      |        |
|           | Ist Quarter     | 6.20  | - | 6.20  | 0.17 | 1.55 | 4.65   |
|           | Iind Quarter    | 4.65  | - | 4.65  | 0.13 | 1.55 | 3.10   |
|           | IIIrd Quarter   | 3.10  | - | 3.10  | 0.09 | 1.55 | 1.55   |
|           | Ivth Quarter    | 1.55  |   | 1.55  | 0.04 | 1.55 | - 0.00 |
|           |                 |       |   |       | 0.43 | 6.20 |        |

Door to Door Period 60 Months

Moratorium Period 6 Months

Repayment Period 54 Months **CALCULATION OF D.S.C.R**

| PARTICULARS          | I     | II    | III   | IV    | V     |
|----------------------|-------|-------|-------|-------|-------|
|                      |       |       |       |       |       |
|                      |       |       |       |       |       |
|                      |       |       |       |       |       |
| <b>CASH ACCRUALS</b> | 10.38 | 13.01 | 14.93 | 18.48 | 22.27 |
|                      |       |       |       |       |       |

|                                    |             |             |             |             |             |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Interest on Term Loan              | 3.03        | 2.47        | 1.79        | 1.11        | 0.43        |
|                                    |             |             |             |             |             |
| Total                              | 13.41       | 15.48       | 16.72       | 19.59       | 22.69       |
|                                    |             |             |             |             |             |
| <b><u>REPAYMENT</u></b>            |             |             |             |             |             |
| Repayment of Term Loan             | 3.10        | 6.20        | 6.20        | 6.20        | 6.20        |
| Interest on Term Loan              | 3.03        | 2.47        | 1.79        | 1.11        | 0.43        |
|                                    |             |             |             |             |             |
| Total                              | 6.13        | 8.67        | 7.99        | 7.31        | 6.63        |
|                                    |             |             |             |             |             |
| <b>DEBT SERVICE COVERAGE RATIO</b> | <b>2.19</b> | <b>1.78</b> | <b>2.09</b> | <b>2.68</b> | <b>3.42</b> |
|                                    |             |             |             |             |             |
| <b>AVERAGE D.S.C.R.</b>            |             |             | <b>2.39</b> |             |             |

| <u>COMPUTATION OF ELECTRICITY</u> |  |          |        |                    |
|-----------------------------------|--|----------|--------|--------------------|
| <u>(A) POWER CONNECTION</u>       |  |          |        |                    |
|                                   |  |          |        |                    |
| Total Working Hour per day        |  | Hours    | 8      |                    |
| Electric Load Required            |  | HP       | 20     |                    |
| Load Factor                       |  |          | 0.7460 |                    |
| Electricity Charges               |  | per unit | 7.50   |                    |
| Total Working Days                |  |          | 300    |                    |
| <b>Electricity Charges</b>        |  |          |        | <b>2,68,560.00</b> |
|                                   |  |          |        |                    |
| Add : Minimim Charges (@ 10%)     |  |          |        |                    |
|                                   |  |          |        |                    |
|                                   |  |          |        |                    |
| <u>(B) DG set</u>                 |  |          |        |                    |
| No. of Working Days               |  |          | 300    | days               |
| No of Working Hours               |  |          | 0.3    | Hour per day       |
| Total no of Hour                  |  |          | 90     |                    |
| Diesel Consumption per Hour       |  |          | 8      |                    |
| Total Consumption of Diesel       |  |          | 720    |                    |

|                                    |  |                 |             |                  |
|------------------------------------|--|-----------------|-------------|------------------|
| Cost of Diesel                     |  |                 | 65.00       | Rs. /Ltr         |
| Total cost of Diesel               |  |                 | 0.47        |                  |
| Add : Lube Cost @15%               |  |                 | 0.07        |                  |
| Total                              |  |                 | <b>0.54</b> |                  |
|                                    |  |                 |             |                  |
| Total cost of Power & Fuel at 100% |  |                 |             | 3.22             |
|                                    |  |                 |             |                  |
| <b>Year</b>                        |  | <b>Capacity</b> |             | <b>Amount</b>    |
|                                    |  |                 |             | <b>(in Lacs)</b> |
|                                    |  |                 |             |                  |
| I                                  |  | 60%             |             | 1.93             |
| II                                 |  | 65%             |             | 2.10             |
| III                                |  | 70%             |             | 2.26             |
| IV                                 |  | 75%             |             | 2.42             |
| V                                  |  | 80%             |             | 2.58             |

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