# PROJECT REPORT

# Of

# AUTOMOBILE TYRE RETREADING

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Automobile Tyre Retreading.

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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## PROJECT AT A GLANCE

| | | | | |
|---|---|---|---|---|
| 1 | Name of the Entreprenuer | | xxxxxxxxxx | |
| 2 | Constitution (legal Status) | | xxxxxxxxxx | |
| 3 | Father / Spouse Name | | xxxxxxxxxxxx | |
| 4 | Unit Address | : | xxxxxxxxxxxxxxxxxxxxxxx | |
| | | | District : xxxxxxx | |
| | | | Pin: xxxxxxx | State: xxxxxxxxxx |
| | | | Mobile xxxxxxx | |
| 5 | Product and By Product | : | **RETREADING CAR TYRES** | |
| 6 | Name of the project / business activity proposed : | | **AUTOMOBILE TYRE RETREADING UNIT** | |
| 7 | Cost of Project | : | Rs.22.26 Lakhs | |
| 8 | Means of Finance | | | |
| | Term Loan | | Rs.15.03 Lakhs | |
| | Own Capital | | Rs.2.23 Lakhs | |
| | Working capital | | Rs.5 Lakhs | |
| 9 | Debt Service Coverage Ratio | : | 1.98 | |
| 10 | Pay Back Period | : | 5 | Years |
| 11 | Project Implementation Period | : | 5-6 | Months |
| 12 | Break Even Point | : | 55% | |
| 13 | Employment | : | 8 | Persons |
| 14 | Power Requirement | : | 30.00 | HP |
| 15 | Major Raw materials | : | Precured Tread Rubber, Cushion Compound, Vulcanizing Solution, Envelope | |
| 16 | Estimated Annual Sales Turnover (Max Capacity) | : | 75.39 | Lakhs |
| 17 | Detailed Cost of Project & Means of Finance | | | |

COST OF PROJECT

(Rs. In Lakhs)

| Particulars | Amount |
|---|---|
| Land | Own/Rented |
| Plant & Machinery | 15.45 |
| Furniture & Fixtures | 1.25 |
| Working Capital | 5.56 |
| Total | **22.26** |

MEANS OF FINANCE

| Particulars | Amount |
|---|---|
| Own Contribution | 2.23 |
| Working Capital(Finance) | 5.00 |
| Term Loan | 15.03 |
| Total | **22.26** |

# AUTOMOBILE TYRE RETREADING

**Introduction:** When the sole portion of a tyre wears out, a new sole can be applied on it or the whole tyre up to tread can be renewed. This retreated tyre can be used again and almost are equivalent to new tyres and work quite satisfactorily for reasonable periods. A retreated tyre is expected to give about 3/4 of mileage or even more as that of a new one. With the advancement of science & technology and the ever increasing demand for vehicular traffic due to ever increase in trade & commerce, playing of more trucks, busses, cars & Jeeps etc. is a must and consequently these speak for better prospects of tyre retreading services. Retreading of damaged tyre is done by conventional hot matrix curing in most cases. But recently a new technology has been developed called "Precured Tread Rubber Retreading Process" which is commonly known as "Cold Process Retreading". In this process, the Precured Tread Rubber already has a tread pattern on it eliminating the need for a tread matrix at vulcanizing stage. Tread Rubber is precured along with other raw materials and manufactured in the factory under controlled conditions and given a well researched pattern ensuring that the transporter gets a reliable perfectly finish product. Retreading Tyre by precured method gives 50% more mileage than the tyre retreaded by conventional process. This report contains details of retreading Car Tyres.

**Product & its Application:** Tread assumes importance in either technology, hot or cold. It is that portion of the tyre, which is in contact with the road surface. It comprises of 20-25 per cent of the whole tyre body. The tyre body commands 75 to 80 per cent of the manufacturing cost of a tyre. Applying a new tread on the body of a worn tyre, gives it a fresh life. This fresh life, estimate industry experts, comes at half the price of a new tyre. An important criteria for retreading is however the quality of the fabric. If the core fabric of the tread is too damaged or already over used, retreading may not be possible. There are thus technological limitations too.

However, if the core fabric is in a good condition, the tyre is identified for potential retreading. Retreading is done either through a conventional method or a pre-cure method. The conventional method is sometimes referred to as the mould cure or hot cure process. An un-vulcanized rubber strip, after going through the process of vulcanization adapts to the mould, is applied to the buffed casing of the tyre. However, modern day processes have adapted to a pre-cure method. This modern method, also referred to as cold cure, has the strip already pressed while it is applied to the casing. The strip is stuck to the casing by a layer of compounded un-cured rubber also known as cushion or bonding gum. The un-cured rubber is vulcanized by applying heat and pressure. As of current, the patterns of retreading in India are 50 per cent pre-cured and 50 per cent conventional. Modern processing technology has enabled the process to run smoothly and seamlessly.

**Market Potential:** As day by day, more and more vehicles are running on roads, hence more tyres are required for replacement. With further growth of economy, there will be an increase in transport as well as passenger vehicles and hence more tyres will be required. Hence, there is a very wide scope for retread tyres as an original replacement. Retreading of tyres in the commercial vehicle segment is poised for growth. The biggest driver for growth will be the rising use of radial truck and bus tyres. The other drivers will include the rise in multi-axle trucks, road infrastructure and highway connectivity. It is the operational savings that have led to the rise in popularity of tyre retreading in India. In the commercial vehicle segment especially. No section in the commercial vehicle industry is immune to

retreading. May it be a 49-tonne tractor-trailer or a 1-tonne mini truck. Retreading of tyres is catching up. A retreaded tyre costs around 30 per cent less than a new tyre. At the other end, a retreaded tyre performs up to 80 per cent of a new tyre under similar operating conditions. It is the value for money a retreaded tyre offers, which has made it a favorite of a transporter.

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

1. Precured Tread Rubber
2. Cushion Compound
3. Vulcanizing Solution
4. Envelope

**Machinery Requirement:** Major machines and equipments are as follows:

| S No. | Name | Quantity | Amount |
|---|---|---|---|
| 1. | Buffing machine with dust collector builder tyre truck bonder/three tyre LCV/Passenger bonder with curing rims and Electric hoist | 1 | 850000 |
| 2. | Work bench envelope/ Tyre stand Gantry | 1 | 75000 |
| 3. | Boiler capacity . 300 kg/hrs. | 1 | 450000 |
| 4. | 100 Ibs working pressure Air compressor fitted with 5 H P Motor | 1 | 70000 |
| 5. | Cost of Auxiliary items. i.e. pipe erection Electric fittings, Retreading, Tools, Mechanical Hoist with Trolley etc. | Ls | 100000 |
| | **Total Amount** | | **1545000** |

**Manufacturing Process:** The manufacturing of retreading rubber is done in the following stages:

- Compounding: Removing unwanted materials such as nails, rivets etc.
- Mixing: Reclaimed rubber and oils;
- Extruding: The mixture of rubber so obtained is put into extruder to form rubber sheets.
- Retreading: Before retreading tyre is buffed and it is allowed to stick properly. Tyres are buffed properly to remove all undesired rubber and to clean surface. The retreading rubber is now put on its outer surface with an adhesive solution.

The tyre coming from the customers is cleaned dully. Dust and mud are removed. The casing is inspected for cuts, ply section, condition of beads etc., and based on the condition of the casing; the tyre is selected or rejected. Under inflated conditions the selected tyre's crown area is buffed to the required texture and contour. This is for better bonding of procured rubber to the casing. The buffed casing is mounted on the tread building machine. Cushion compound is applied on the buffed tread area over which the procured tread rubber is applied and stickled using rollers. The joint portion of the procured tread rubber is stepped to avoid possible opening during curing of the tyre. The buildup of the tyre is covered by a rubber envelope and placed in the “bonder” and the bonder steam is passed at specific temperature, which cures the cushion compound to complete the bonding of the tread on the casing.

**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 30 Hp

**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 Machine 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

| PROJECTED BALANCE SHEET | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| PARTICULARS | I | II | III | IV | V |
| | | | | | |
| | | | | | |
| **SOURCES OF FUND** | | | | | |
| **Capital Account** | | | | | |
| Opening Balance | - | 3.84 | 5.93 | 9.09 | 11.97 |
| Add: Additions | 2.23 | - | - | - | - |
| Add: Net Profit | 2.11 | 2.89 | 5.17 | 6.88 | 8.30 |
| Less: Drawings | 0.50 | 0.80 | 2.00 | 4.00 | 5.20 |
| **Closing Balance** | 3.84 | 5.93 | 9.09 | 11.97 | 15.08 |
| CC Limit | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 |
| Term Loan | 13.36 | 10.02 | 6.68 | 3.34 | - |
| Sundry Creditors | 0.61 | 0.69 | 0.73 | 0.78 | 0.83 |
| | | | | | |
| **TOTAL :** | **22.81** | **21.63** | **21.51** | **21.09** | **20.90** |
| | | | | | |
| | | | | | |
| | | | | | |
| **APPLICATION OF FUND** | | | | | |
| | | | | | |
| **Fixed Assets ( Gross)** | 16.70 | 16.70 | 16.70 | 16.70 | 16.70 |
| Gross Dep. | 2.44 | 4.52 | 6.30 | 7.81 | 9.11 |
| Net Fixed Assets | 14.26 | 12.18 | 10.40 | 8.89 | 7.59 |
| | | | | | |
| **Current Assets** | | | | | |
| Sundry Debtors | 3.25 | 3.74 | 4.15 | 4.58 | 5.03 |
| Stock in Hand | 3.49 | 3.87 | 4.23 | 4.60 | 4.98 |
| Cash and Bank | 1.82 | 1.86 | 2.74 | 3.03 | 3.30 |
| | | | | | |
| **TOTAL :** | **22.81** | **21.63** | **21.51** | **21.09** | **20.90** |

- - - - -

| **PROJECTED PROFITABILITY STATEMENT** | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| **PARTICULARS** | **I** | **II** | **III** | **IV** | **V** |
| | | | | | |
| **A) SALES** | | | | | |
| Gross Sale | 48.68 | 56.06 | 62.21 | 68.65 | 75.39 |
| | | | | | |
| **Total (A)** | **48.68** | **56.06** | **62.21** | **68.65** | **75.39** |
| | | | | | |
| **B) COST OF SALES** | | | | | |
| | | | | | |
| Raw Material Consumed | 26.24 | 29.52 | 31.48 | 33.45 | 35.42 |
| Elecricity Expenses | 3.20 | 3.42 | 3.65 | 3.88 | 4.11 |
| Repair & Maintenance | 0.97 | 1.12 | 1.24 | 1.37 | 1.51 |
| Labour & Wages | 7.18 | 7.54 | 8.30 | 9.54 | 10.97 |
| Depreciation | 2.44 | 2.08 | 1.78 | 1.51 | 1.29 |
| **Cost of Production** | 40.03 | 43.69 | 46.45 | 49.76 | 53.30 |
| | | | | | |
| **Add: Opening Stock /WIP** | - | 2.18 | 2.39 | 2.65 | 2.93 |
| **Less: Closing Stock /WIP** | 2.18 | 2.39 | 2.65 | 2.93 | 3.21 |
| | | | | | |
| Cost of Sales (B) | 37.85 | 43.47 | 46.19 | 49.49 | 53.01 |
| | | | | | |
| **C) GROSS PROFIT (A-B)** | 10.83 | 12.59 | 16.01 | 19.16 | 22.38 |
| | **22.24%** | **22.46%** | **25.75%** | **27.91%** | **29.68%** |
| D) Bank Interest (Term Loan ) | 1.63 | 1.33 | 0.96 | 0.60 | 0.23 |
| ii) Interest On Working Capital | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 |
| E) Salary to Staff | 6.05 | 7.26 | 8.71 | 10.45 | 12.54 |
| F) Selling & Adm Expenses Exp. | 0.49 | 0.56 | 0.62 | 0.69 | 0.75 |
| | | | | | |
| TOTAL (D+E) | **8.72** | **9.70** | **10.85** | **12.28** | **14.07** |
| | | | | | |
| H) NET PROFIT | 2.11 | 2.89 | 5.17 | 6.88 | 8.30 |
| | | | | | |
| I) Taxation | - | - | - | - | - |
| | | | | | |
| J) PROFIT (After Tax) | 2.11 | 2.89 | 5.17 | 6.88 | 8.30 |

| PROJECTED CASH FLOW STATEMENT | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| **PARTICULARS** | **I** | **II** | **III** | **IV** | **V** |
| | | | | | |
| | | | | | |
| **SOURCES OF FUND** | | | | | |
| | | | | | |
| Own Contribution | 2.23 | - | | | |
| Reserve & Surplus | 2.11 | 2.89 | 5.17 | 6.88 | 8.30 |
| Depriciation & Exp. W/off | 2.44 | 2.08 | 1.78 | 1.51 | 1.29 |
| Increase In Cash Credit | 5.00 | | | | |
| Increase In Term Loan | 15.03 | - | - | - | - |
| Increase in Creditors | 0.61 | 0.08 | 0.05 | 0.05 | 0.05 |
| | | | | | |
| **TOTAL :** | **27.42** | **5.05** | **6.99** | **8.44** | **9.64** |
| | | | | | |
| | | | | | |
| **APPLICATION OF FUND** | | | | | |
| | | | | | |
| Increase in Fixed Assets | 16.70 | - | - | - | - |
| Increase in Stock | 3.49 | 0.38 | 0.36 | 0.37 | 0.39 |
| Increase in Debtors | 3.25 | 0.49 | 0.41 | 0.43 | 0.45 |
| Repayment of Term Loan | 1.67 | 3.34 | 3.34 | 3.34 | 3.34 |
| Taxation | - | - | - | - | - |
| Drawings | 0.50 | 0.80 | 2.00 | 4.00 | 5.20 |
| **TOTAL :** | **25.60** | **5.01** | **6.11** | **8.14** | **9.37** |
| | | | | | |
| Opening Cash & Bank Balance | - | 1.82 | 1.86 | 2.74 | 3.03 |
| | | | | | |
| Add : Surplus | 1.82 | 0.04 | 0.88 | 0.30 | 0.27 |
| | | | | | |
| Closing Cash & Bank Balance | **1.82** | **1.86** | **2.74** | **3.03** | **3.30** |

| **COMPUTATION OF RETREADING CAR TYRES** | | | |
|---|---|---|---|
| | | | |
| **Item to be Manufactured Retreading Car Tyres** | | | |
| Manufacturing Capacity per day | | 20 | Pcs |
| | | | |
| No. of Working Hour | | 8 | |
| | | | |
| No of Working Days per month | | 25 | |
| | | | |
| No. of Working Day per annum | | 300 | |
| | | | |
| Total Production per Annum | | 6,000 | Pcs |
| Total Production per Annum | | 6,000 | Pcs |
| Year | | Capacity | RETREADING CAR TYRES |
| | | Utilisation | |
| | | | |
| I | | 70% | 4,200.00 |
| II | | 75% | 4,500.00 |
| III | | 80% | 4,800.00 |
| IV | | 85% | 5,100.00 |
| V | | 90% | 5,400.00 |
| | | | |

| **COMPUTATION OF RAW MATERIAL** | | | | | |
|---|---|---|---|---|---|
| Item Name | | Quantity of Raw Material | Unit | Unit Rate | Total CostPer Annum (100%) |
| Precured Tread Rubber | | 28.00 | MT | 1,15,000.00 | 32,20,000.00 |
| Cushion Compound | | 2,800.00 | Ltr | 120.00 | 3,36,000.00 |
| Vulcanizing Solution | | 100.00 | Ltr | 120.00 | 12,000.00 |
| Envelope | | 6,000.00 | Pcs | 30.00 | 1,80,000.00 |
| | | | | | |
| Total | | | | | **37,48,000.00** |
| | | | | | |
| Total Raw material in Rs lacs | | | | | 37.48 |

| Raw Material Consumed | Capacity | | Amount (Rs.) | | |
|---|---|---|---|---|---|
| | Utilisation | | | | |
| | | | | | |
| I | 70% | | 26.24 | | |
| II | 75% | | 29.52 | 5% Increase in Cost | |
| III | 80% | | 31.48 | 5% Increase in Cost | |
| IV | 85% | | 33.45 | 5% Increase in Cost | |
| V | 90% | | 35.42 | 5% Increase in Cost | |
| | | | | | |

| **COMPUTATION OF SALE** | | | | | |
|---|---|---|---|---|---|
| Particulars | **I** | **II** | **III** | **IV** | **V** |
| | | | | | |
| | | | | | |
| Op Stock | - | 210.00 | 225.00 | 240.00 | 255.00 |
| | | | | | |
| Production | 4,200.00 | 4,500.00 | 4,800.00 | 5,100.00 | 5,400.00 |
| | | | | | |
| | 4,200.00 | 4,710.00 | 5,025.00 | 5,340.00 | 5,655.00 |
| Less : Closing Stock(15 Days) | 210.00 | 225.00 | 240.00 | 255.00 | 270.00 |
| | | | | | |
| Net Sale | 3,990.00 | 4,485.00 | 4,785.00 | 5,085.00 | 5,385.00 |
| | | | | | |
| Sale Price per Tyre | 1,220.00 | 1,250.00 | 1,300.00 | 1,350.00 | 1,400.00 |
| | | | | | |
| **Sale (in Lacs)** | **48.68** | **56.06** | **62.21** | **68.65** | **75.39** |
| | | | | | |

| COMPUTATION OF CLOSING STOCK & WORKING CAPITAL | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| **PARTICULARS** | **I** | **II** | **III** | **IV** | **V** |
| | | | | | |
| | | | | | |
| **Finished Goods** | | | | | |
| (15 Days requirement) | 2.18 | 2.39 | 2.65 | 2.93 | 3.21 |
| **Raw Material** | | | | | |
| (15 Days requirement) | 1.31 | 1.48 | 1.57 | 1.67 | 1.77 |
| | | | | | |
| | | | | | |
| **Closing Stock** | **3.49** | **3.87** | **4.23** | **4.60** | **4.98** |

| COMPUTATION OF WORKING CAPITAL REQUIREMENT | | | |
|---|---|---|---|
| | | | |
| **Particulars** | **Amount** | **Margin(10%)** | **Net Amount** |
| Stock in Hand | 3.49 | | |
| Less: | | | |
| Sundry Creditors | 0.61 | | |
| **Paid Stock** | **2.88** | **0.29** | **2.59** |
| | | | |
| Sundry Debtors | 3.25 | 0.32 | 2.92 |
| **Working Capital Requirement** | | | **5.51** |
| | | | |
| **Margin** | | | 0.61 |
| | | | |
| **MPBF** | | | **5.51** |
| **Working Capital Demand** | | | **5.00** |

| **BREAK UP OF LABOUR** | | | | |
|---|---|---|---|---|
| | | | | |
| Particulars | | Wages | No of | Total |
| | | Per Month | Employees | Salary |
| Supervisor | | 18,000.00 | 1 | 18,000.00 |
| Machine Operator | | 15,000.00 | 1 | 15,000.00 |
| Unskilled Worker | | 10,000.00 | 1 | 10,000.00 |
| Helper | | 8,000.00 | 1 | 8,000.00 |
| Security Guard | | 6,000.00 | 1 | 6,000.00 |
| | | | | |
| | | | | 57,000.00 |
| Add: 5% Fringe Benefit | | | | 2,850.00 |
| Total Labour Cost Per Month | | | | 59,850.00 |
| Total Labour Cost for the year ( In Rs. Lakhs) | | | 5 | 7.18 |

| **BREAK UP OF SALARY** | | | | |
|---|---|---|---|---|
| | | | | |
| Particulars | | Salary | No of | Total |
| | | Per Month | Employees | Salary |
| Manager | | 20,000.00 | 1 | 20,000.00 |
| Accountant cum store keeper | | 16,000.00 | 1 | 16,000.00 |
| Sales | | 12,000.00 | 1 | 12,000.00 |
| Total Salary Per Month | | | | 48,000.00 |
| | | | | |
| Add: 5% Fringe Benefit | | | | 2,400.00 |
| Total Salary for the month | | | | 50,400.00 |
| | | | | |
| Total Salary for the year ( In Rs. Lakhs) | | | 3 | 6.05 |

| **COMPUTATION OF DEPRECIATION** | | | | |
|---|---|---|---|---|
| | | | | |
| Description | Land | Plant & Machinery | Furniture | **TOTAL** |
| | | | | |
| | | | | |
| Rate of Depreciation | | **15.00%** | **10.00%** | |
| **Opening Balance** | Leased | - | - | - |
| Addition | - | 15.45 | 1.25 | 16.70 |
| | - | 15.45 | 1.25 | 16.70 |
| | | - | - | |
| TOTAL | | 15.45 | 1.25 | 16.70 |
| Less : Depreciation | - | 2.32 | 0.13 | 2.44 |
| WDV at end of Ist year | - | 13.13 | 1.13 | 14.26 |
| Additions During The Year | - | - | - | - |
| | - | 13.13 | 1.13 | 14.26 |
| Less : Depreciation | - | 1.97 | 0.11 | 2.08 |
| WDV at end of IInd Year | - | 11.16 | 1.01 | 12.18 |
| Additions During The Year | - | - | - | - |
| | - | 11.16 | 1.01 | 12.18 |
| Less : Depreciation | - | 1.67 | 0.10 | 1.78 |
| WDV at end of IIIrd year | - | 9.49 | 0.91 | 10.40 |
| Additions During The Year | - | - | - | - |
| | - | 9.49 | 0.91 | 10.40 |
| Less : Depreciation | - | 1.42 | 0.09 | 1.51 |
| WDV at end of IV year | - | 8.06 | 0.82 | 8.89 |
| Additions During The Year | - | - | - | - |
| | - | 8.06 | 0.82 | 8.89 |
| Less : Depreciation | - | 1.21 | 0.08 | 1.29 |
| WDV at end of Vth year | - | 6.86 | 0.74 | 7.59 |

| REPAYMENT SCHEDULE OF TERM LOAN | | | | | | 11.0% | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Year** | **Particulars** | **Amount** | **Addition** | **Total** | **Interest** | **Repayment** | **Cl Balance** |
| **I** | Opening Balance | | | | | | |
| | Ist Quarter | - | 15.03 | 15.03 | 0.41 | - | 15.03 |
| | Iind Quarter | 15.03 | - | 15.03 | 0.41 | - | 15.03 |
| | IIIrd Quarter | 15.03 | - | 15.03 | 0.41 | 0.84 | 14.20 |
| | Ivth Quarter | 14.20 | - | 14.20 | 0.39 | 0.84 | 13.36 |
| | | | | | 1.63 | 1.67 | |
| **II** | Opening Balance | | | | | | |
| | Ist Quarter | 13.36 | - | 13.36 | 0.37 | 0.84 | 12.53 |
| | Iind Quarter | 12.53 | - | 12.53 | 0.34 | 0.84 | 11.69 |
| | IIIrd Quarter | 11.69 | - | 11.69 | 0.32 | 0.84 | 10.86 |
| | Ivth Quarter | 10.86 | | 10.86 | 0.30 | 0.84 | 10.02 |
| | | | | | 1.33 | 3.34 | |
| **III** | Opening Balance | | | | | | |
| | Ist Quarter | 10.02 | - | 10.02 | 0.28 | 0.84 | 9.19 |
| | Iind Quarter | 9.19 | - | 9.19 | 0.25 | 0.84 | 8.35 |
| | IIIrd Quarter | 8.35 | - | 8.35 | 0.23 | 0.84 | 7.51 |
| | Ivth Quarter | 7.51 | | 7.51 | 0.21 | 0.84 | 6.68 |
| | | | | | 0.96 | 3.34 | |
| **IV** | Opening Balance | | | | | | |
| | Ist Quarter | 6.68 | - | 6.68 | 0.18 | 0.84 | 5.84 |
| | Iind Quarter | 5.84 | - | 5.84 | 0.16 | 0.84 | 5.01 |
| | IIIrd Quarter | 5.01 | - | 5.01 | 0.14 | 0.84 | 4.17 |
| | Ivth Quarter | 4.17 | | 4.17 | 0.11 | 0.84 | 3.34 |
| | | | | | 0.60 | 3.34 | |
| **V** | Opening Balance | | | | | | |
| | Ist Quarter | 3.34 | - | 3.34 | 0.09 | 0.84 | 2.50 |
| | Iind Quarter | 2.50 | - | 2.50 | 0.07 | 0.84 | 1.67 |
| | IIIrd Quarter | 1.67 | - | 1.67 | 0.05 | 0.84 | 0.83 |
| | Ivth Quarter | 0.83 | | 0.83 | 0.02 | 0.84 | - 0.00 |
| | | | | | 0.23 | 3.34 | |

| | | |
|---|---|---|
| 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** |
| | | | | | |
| | | | | | |
| | | | | | |
| **CASH ACCRUALS** | 4.55 | 4.97 | 6.94 | 8.39 | 9.60 |
| | | | | | |
| Interest on Term Loan | 1.63 | 1.33 | 0.96 | 0.60 | 0.23 |
| | | | | | |
| Total | 6.18 | 6.30 | 7.91 | 8.99 | 9.83 |
| | | | | | |
| **REPAYMENT** | | | | | |
| Repayment of Term Loan | 1.67 | 3.34 | 3.34 | 3.34 | 3.34 |
| Interest on Term Loan | 1.63 | 1.33 | 0.96 | 0.60 | 0.23 |
| | | | | | |
| Total | 3.30 | 4.67 | 4.30 | 3.94 | 3.57 |
| | | | | | |
| **DEBT SERVICE COVERAGE RATIO** | **1.87** | **1.35** | **1.84** | **2.28** | **2.75** |
| | | | | | |
| **AVERAGE D.S.C.R.** | | | **1.98** | | |
| | | | | | |

| | | | | |
|---|---|---|---|---|
| **COMPUTATION OF ELECTRICITY** | | | | |
| **(A) POWER CONNECTION** | | | | |
| | | | | |
| Total Working Hour per day | | Hours | 8 | |
| Electric Load Required | | HP | 30 | |
| Load Factor | | | 0.7460 | |
| Electricity Charges | | per unit | 7.50 | |
| Total Working Days | | | 300 | |
| **Electricity Charges** | | | | 4,02,840.00 |
| | | | | |
| Add : Minimim Charges (@ 10%) | | | | |
| | | | | |
| | | | | |
| **(B) DG set** | | | | |
| 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 | | | **0.54** | |
| | | | | |
| Total cost of Power & Fuel at 100% | | | | 4.57 |
| | | | | |
| **Year** | | **Capacity** | | **Amount** |
| | | | | **(in Lacs)** |
| | | | | |
| I | | 70% | | 3.20 |
| II | | 75% | | 3.42 |
| III | | 80% | | 3.65 |
| IV | | 85% | | 3.88 |
| V | | 90% | | 4.11 |
| | | | | |
| | | | | |

SAMADHAN
Nurturing Dreams - Innovative Solutions

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