**PROJECT PROFILE FOR RUBBER MOULDED COIR COIR UNIT**

**PRODUCT : RUBBER MOULDED MAT (SIZE 45 CM\***

**75 CM)**

**PRODUCTION CAPACITY (P.A)**

**(100% CAPACITY) : 400 MATS**

**VALUE : RS.336 LAKHS**

**MONTH & YEAR OF PREPARATION : JUNE 2018**

**PREPARED BY : COIR BOARD, MINISTRY OF MSME,**

**GOVT OF INDIA**

* **INTRODUCTION**

Rubber backed coir products finds extensive use as flooring material. It is manufactured by hot pressing of compounded rubber based on natural, synthetic and reclaimed rubber or its blends on the back side of coir products such as mats/matting.

For the preparation of Rubber backed matting mats ,coir mattings are cut into the sizes of mats and the edges are finished with all- round rubber edging or tucked back or stitched.

* **PROCESS OF MANUFACTURE**

Rubber and various ingredients for backing are mixed on a two roll mill and allowed to mature overnight. The compound so prepared is made into sheet of desired thickness on a mixing mill or calendar.

Prepare blanks of compounded rubber sheet of size equal to that of the coir mat to be backed. The mould is heated and sprayed with a suitable mould releasing agent and the blank rubber compound sheet is kept in the mould and the coir material to be backed is placed over the blank rubber sheet. The combination is then placed in between the platens of a steam/electrically heated hydraulic press/hand fly press. It is then pressed at the appropriate temperature and pressure for the specified time. The press is opened and the product removed from the mould, cooled and trimmed.

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* **BASIS AND PRESUMTIONS**
* The Project Profile is based on 8 working hours for2 shifts in a day and 25 days in a month and the Break Even efficiency has been calculated on 70%, 80%, 90%, 90% and 100% capacity utilization.
* The rate of interest both for fixed asset and working capital have been taken as 12.5% p.a.
* **TECHNICAL ASPECTS**

Installed Production capacity per day : 400 mats

Number of Shift per day : 2

Working days p.a : 300 days

Capacity Utilization

-First year : 70%

-Second year : 80%

-Third year : 90%

-Fourth year : 90%

-Fifth year : 100%

Rate of Average Sales Realization : Rs. 140 per mat

Rate of Average cost of raw material

(Including cost of matting & rubber) : Rs.115

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

**Manpower requirement**

Supervisor : 1

Skilled worker : 16

Total HP required : 70 HP

***All the machineries and equipments mentioned in the Project profile are of indigenous make and are of medium price.***

* **FINANCIAL ASPECTS**

**i) Cost of Project**

**Amount**

* Land : Lease/owned
* Work shed : Lease/owned
* Machinery &Equipments : Rs.2074000/-
* Working Capital Rs. 426000/-

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**Total : Rs. 2500000/-**

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|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.**  **No** | **Description of machines &equipments** | **Qty** | **Cost (Rs.)** |
| 1 | Mixing mill (14”\*36”) 40 HP | 1 |  |
| 2 | Hydraulic Press (36”\*36”) 15 HP | 1 |  |
| 3 | Moulds (as per requirement) |  |  |
| 4 | Water pump (for reducing heat) |  |  |
| **Total** | |  | 2074000.00 |

**ii) Means of Finance**

* Promoters Capital 5% : Rs. 125000/-
* Bank Term loan 95% : Rs.1970000/-
* WC Loan from Bank 95% : Rs. 405000/- ---------------------

**Total : Rs.2500000/-**

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* **DETAILS OF THE PROFITABILITY OF THE PROJECT**

Rs.in Lakhs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Years** |  | **1** | **2** | **3** | **4** | **5** |
| Installed Production capacity per day | No.3 size | 400 | 400 | 400 | 400 | 400 |
| Number of shift /day |  | 2 | 2 | 2 | 2 | 2 |
| Working days per annum |  | 300 | 300 | 300 | 300 | 300 |
| Installed production capacity per annum | Nos | 240000 | 240000 | 240000 | 240000 | 240000 |
| Capacity utilization |  | 70% | 80% | 90% | 90% | 100% |
| Annual production quantity |  | 168000 | 192000 | 216000 | 216000 | 240000 |
| **Annual Sales Realization** | ***Rs. 140*** | **235.20** | **268.80** | **302.40** | **302.40** | **336.00** |
| Cost of Production | | | | | | |
| Cost of raw material | Rs. 115 | 193.20 | 220.80 | 248.40 | 248.40 | 276 |
| Spares, Repairs & maintenance | 2.00% | 0.41 | 0.46 | 0.50 | 0.55 | 0.61 |
| Power cost |  | 5.42 | 6.19 | 6.97 | 6.97 | 7.74 |
| Insurance |  | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Wages & salary |  | 21.42 | 24.48 | 27.54 | 27.54 | 30.60 |
| **Cost of Production** |  | **220.55** | **252.03** | **283.51** | **283.56** | **315.05** |
| **Gross Profit** |  | **14.65** | **16.77** | **18.89** | **18.84** | **20.95** |
| Lease rent |  | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 |
| Administrative & selling expenses | 1.00% | 2.35 | 2.69 | 3.02 | 3.02 | 3.36 |
| Interest on Term Loan |  | 2.07 | 2.18 | 1.81 | 0.65 | 0.28 |
| Interest on Working capital |  | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 |
| Depreciation of machinery |  | 2.07 | 2.07 | 2.07 | 2.07 | 2.07 |
| **Total** |  | **8.8** | **9.25** | **9.21** | **8.05** | **8.02** |
| **Net Profit** |  | **5.84** | **7.52** | **9.68** | **10.78** | **12.93** |

* **ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | 1 | 2 | 3 | 4 | 5 |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| Break-even point | 58% | 54% | 48% | 42% | 37% |
| Break even Production | 97888 | 103758 | 102899 | 89649 | 88937 |

* **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | 1 | 2 | 3 | 4 | 5 |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| DSCR | 2.80 | 2.28 | 2.83 | 3.71 | 4.68 |
| Average DSCR | 3.26 |  |  |  |  |
| DSCR weighted average | 3.14 |  |  |  |  |

* **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Particulars | 1 | 2 | 3 | 4 | 5 |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| Variable Cost | 220.55 | 252.03 | 283.51 | 283.56 | 315.05 |
| Fixed Cost | 8.8 | 9.25 | 9.21 | 8.05 | 8.02 |
| Working capital gap | 4.26 | 4.87 | 5.49 | 5.53 | 6.16 |