**PROJECT PROFILE FOR COIR NEEDLE FELT UNIT**

**PRODUCT : COIR NEEDLE FELT (4 FEET WIDTH)**

 **1000 GSM**

**PRODUCTION CAPACITY (P.A)**

**(100% CAPACITY) : 480000SQ.METERE**

**VALUE : RS.153.60 LAKHS**

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

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

 **GOVT OF INDIA**

* **INTRODUCTION**

Coir needle felt is a non-woven fabric made from decorticated coir fibre. The coir needle felt has number of applications in the value addition of coir and some of the uses are making garden articles, door panels, roofing sheets, cocolawn, geo textile, rubber mattress etc.

* + - 1. **PROCESS OF MANUFACTURE**

In the manufacturing process of coir needle felt, well cleaned coir fibre of good staple length passes through the cleaning machines by pneumatic suction and is needled by the loom on one side to evolve felts of different density, punching intensity, needle penetration and thickness. The fibre is mechanically bonded (interlocked) to form a continuous length of sheet. No bonding material is used in the manufacture of coir needled felt.

It can be manufactured in thickness from 10 mm to 20 mm with a density varying from 500 to 1500 g/sq.metre. The felt is available in the form of rolls of 4 ft. width and 25 meter length.

**BASIS AND PRESUMTIONS**

* The Project Profile is based on 8 working hours for 2 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 : 800 sq.meter

Number of Shift per day : 2

Working days p.a : 300 days

Yield wastage : 5%

Capacity Utilization

-First year : 70%

-Second year : 80%

-Third year : 90%

-Fourth year : 90%

-Fifth year : 100%

Rate of Average Sales Realization : Rs. 32 per sq.meter

Rate of Average cost of raw material : Rs.23000

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

**Manpower requirement**

 Supervisor : 1

 Unskilled worker : 7

* **FINANCIAL ASPECTS**

**i) Cost of Project**

 **Amount**

* Land : Lease/owned
* Work shed : Lease/owned
* Machinery &Equipments : Rs.1991000/-
* Working Capital Rs. 509000/-

 **---------------------- Total : Rs. 2500000/-**

 **----------------------**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.****No** | **Description of machines &equipments** | **Qty** | **Amount (Rs)** |
| 1 | Fiber Cleaning machine | 1 |  |
| 2 | Coir needle felt machine | 1 |  |
| 3 | Electrical works |  |  |
| **Total** |  | 1991000.00 |

**ii) Means of Finance**

* Promoters Capital 5% : Rs. 125000/-
* Bank Term loan 95% : Rs.1891000/-
* WC Loan from Bank 95% : Rs. 484000/- ---------------------

**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 set of frame per day | *sq.meter* | 800.00  | 800.00  | 800.00  | 800.00  | 800.00  |
| Number of shift/day |  | 2 | 2 | 2 | 2 | 2 |
| Working days per annum |  | 300  | 300  | 300  | 300  | 300  |
| Installed production capacity per annum |  | 480000  | 480000  | 480000  | 480000  | 480000  |
| Capacity utilization |  | 70% | 80% | 90% | 90% | 100% |
| Annual production quantity | *sq.meter* | 336000  | 384000  | 432000  | 432000  | 480000  |
| **Annual Sales Realization** | *Rs. 32*  | 107.52  | 122.88  | 138.24  | 138.24  | 153.60  |
| Cost of Production  |
| Raw material requirement |  | 352.80  | 403.20  | 453.60  | 453.60  | 504.00  |
| Cost of raw material | Rs. 23,000/TON | 81.14 | 92.74  | 104.33  | 104.33  | 115.92  |
| Power cost |  | 0.71  | 0.81  | 0.91  | 0.91  | 1.02  |
| Rent |  | 1.80  | 1.80  | 1.80  | 1.80  | 1.80  |
| Wages & salary |  | 8.32  | 9.50  | 10.69  | 10.69  | 11.88  |
| **Cost of Production** |  | **91.97**  | **104.85**  | **117.73**  | **117.73**  | **130.62**  |
| **Gross Profit** |  | **15.55** | **18.03** | **20.51** | **20.51** | **22.98** |
| Administrative & selling expenses | 2% | 2.15  | 2.46  | 2.76  | 2.76  | 3.07  |
| Interest on Term Loan |  | 1.97  | 2.10  | 1.75  | 0.62  | 0.26  |
| Interest on Working capital |  | 0.61  | 0.61  | 0.61  | 0.61  | 0.61  |
| Depreciation of machinery |  | 1.99  | 1.99  | 1.99  | 1.99  | 1.99  |
| **Total** |  | **6.72** | **7.16** | **7.11** | **5.98** | **5.93** |
| **Net Profit** |  | **8.83**  | **10.87**  | **13.40**  | **14.53**  | **17.05**  |

**ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
|  | 70% | 80% | 90% | 90% | 100% |
| Break-even point | 71% | 65% | 56% | 45% | 39% |
| Break even Production  | 238382  | 248516  | 239760  | 194646  | 186237  |

* **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
| Capacity utilization | 70% | 80% | 90% | 90% | 100% |
| DSCR | 3.78  | 3.05  | 3.76  | 5.00  | 6.27  |
| Average DSCR | 4.37 |  |  |  |  |
| DSCR weighted average | 4.20 |  |  |  |  |

* **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Particulars** | **1** | **2** | **3** | **4** | **5** |
|  | 70% | 80% | 90% | 90% | 100% |
| Variable Cost | 91.97 | 104.85 | 117.73 | 117.73 | 130.62 |
| Fixed Cost | 6.72 | 7.16 | 7.11 | 5.98 | 5.93 |
| Working capital gap | 5.09 | 5.82 | 6.56 | 6.59 | 7.34 |