

PROJECT PROFILE FOR COIR NEEDLE FELT UNIT

PRODUCT	:	COIR NEEDLE FELT (4 FEET WIDTH) 1000 GSM
PRODUCTION CAPACITY (P.A) (100% CAPACITY)	:	480000SQ.METER
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.

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 PRESUMPTIONS

- 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/-

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	<i>sq.meter</i>	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	<i>sq.meter</i>	336000	384000	432000	432000	480000
Annual Sales Realization	<i>Rs. 32</i>	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	<i>Rs. 23,000/TON</i>	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 70%	2 80%	3 90%	4 90%	5 100%
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