PROJECT PROFILE FOR CURLED COIR PRODUCTION UNIT

PRODUCT	**:**	**CURLED COIR ROPE**
PRODUCTION CAPACITY (P.A)		
(100% CAPACITY)	**:**	**330 TONS**
VALUE	**:**	**RS.86.63 LAKHS**
MONTH & YEAR OF PREPARATION	**:**	**JUNE 2018**
PREPARED BY	**:**	**COIR BOARD, MINISTRY OF MSME, GOVT OF INDIA**

• INTRODUCTION

Curled coir rope is a product made out of mechanically extracted coir fibre by regulated and even feeding of the fibres with the help of a mechanical arrangement in curling machines to form a thick strand of evenly distributed parallelized fibers which is processed further to form twisted curled rope of continuous length. The texture of machine twisted curled fibre shall be hard twisted with curls evenly distributed along the length. Curled coir ropes are used in Coir mattress, Sofa, Couches in automobile and locomotive seats.

● PROCESS OF MANUFACTURE

Coir curling unit consist of a set of machineries used to produce curled coir rope out of Coir fiber. The coconuts are de-husked and the husks are soaked in water for a few days and then beaten in a Disintegrator and Decorticator set to remove the coir fibre. This fibre is then cleaned in Turbo Cleaner and spread out under the sun for drying. The dry fibre is then sieved in Revolving Screener to remove any pith, dust and baby fibre.

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These curled coir rolls are stored for 2 months in a dry, moisture-free and cool place. The 2 month long storage period helps to set the curl in the coir, thus making coir springs, to give springy effect in the mattress.

- **BASIS AND PRESUMTIONS**

  - The Project Profile is based on 8 working hours in a day and 25 days in a month and the Break Even efficiency has been calculated on 70%, 75%, 80%, 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 shift/machine	:	0.28 MT per shift
Number of curling machine	:	2
Number of shift per day	:	2
Working days p.a	:	300 days
Yield wastage	:	5%
Capacity Utilization		
-First year	:	70%
-Second year	:	75%
-Third year	:	80%
-Fourth year	:	90%

-Fifth year	:	100%
Rate of Average Sales Realization	:	Rs. 25000/- per ton
Rate of average cost of raw material	:	Rs.16000
Interest on term loan	:	12.50%
Interest on working capital	:	12.50%
Manpower requirement		
Supervisor	:	1
Skilled worker	:	8
Indirect workers	:	14
Total HP required	:	24 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	:	Rs.400000/-
• Machinery &Equipments	:	Rs.1502000/-
• Working Capital		Rs. 598000/-

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

Sl. No	Description of machines &equipments	Qty	Amount (Rs)
1	Hackling Machine (Single shaft) – 5 HP	1	100000.00
2	Curling machine – 7 HP (5 HP+ 2 HP)	2	1300000.00
3	Winding machine – 2 HP	1	50000.00
4	Electrical fitting & Panel board	….	52000.00
Total			1502000.00

ii) Means of Finance

- Promoters Capital 5% : Rs. 125000/-
- Bank Term loan 95% : Rs.1807000/-
- WC Loan from Bank 95% : Rs. 568000/-

Total : Rs.2500000/-

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

Rs.in Lakhs

Years		**1**	**2**	**3**	**4**	**5**
Installed Production capacity/machine/day	Tons	0.275	0.275	0.275	0.275	0.275
Number of machines		2	2	2	2	2
Number of shift/day		2	2	2	2	2
Working days per annum		300	300	300	300	300
Installed production capacity per annum		330	330	330	330	330
Capacity utilization		70%	75%	80%	90%	100%
Annual production quantity	Tons	243	260	277	312	347
Annual Sales Realization	Rs. 25000	60.64	64.97	69.30	77.96	86.63
Cost of Production						
Raw material requirement	Tons	243	260	277	312	347
Cost of raw material	Rs. 16000	38.81	41.58	44.35	49.90	55.44

Power cost		1.60	1.71	1.83	2.06	2.28
Spares, Repairs & maintenance	2%	0.30	0.33	0.36	0.40	0.44
Wages & salary		8.65	9.27	9.89	11.12	12.36
Insurance		0.06	0.06	0.06	0.06	0.06
Cost of Production		49.42	52.95	56.49	63.54	70.58
Gross Profit		**11.22**	**12.02**	**12.81**	**14.42**	**16.05**
Interest on Term Loan		1.87	2.01	1.68	0.57	0.25
Interest on Working capital		0.71	0.71	0.71	0.71	0.71
Depreciation of machinery		1.50	1.50	1.50	1.50	1.50
Depreciation of building		0.20	0.20	0.20	0.20	0.20
Total		**4.28**	**4.42**	**4.09**	**2.98**	**2.66**
Net Profit		**6.94**	**7.6**	**8.72**	**11.44**	**13.39**

- **ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

Particulars	**1**	**2**	**3**	**4**	**5**
	70%	75%	80%	90%	100%
Break-even point	68%	66%	56%	33%	26%
Break even Production	165	171	156	104	89

- **DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

Particulars	**1**	**2**	**3**	**4**	**5**
	70%	75%	80%	90%	100%
DSCR	3.24	2.39	2.76	4.28	5.27
Average DSCR	3.58				
DSCR weighted average	3.40				

- **WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

Particulars	**1**	**2**	**3**	**4**	**5**
	70%	75%	80%	90%	100%
Variable Cost	49.42	52.95	56.49	63.54	70.58
Fixed Cost	4.28	4.42	4.09	2.98	2.66
Working capital Gap	5.98	6.43	6.87	7.75	8.62