

PROJECT PROFILE FOR COIR FRAME MATS UNIT

PRODUCT	:	HOLLANDER MAT
QUALITY & STANDARD	:	NO.1 SIZE – WC₁ Quality
PRODUCTION CAPACITY (P.A)		
(100% CAPACITY)	:	180000 PIECES
VALUE	:	RS.167.58 LAKHS
MONTH & YEAR OF PREPARATION	:	JUNE 2018
PREPARED BY	:	COIR BOARD, MINISTRY OF MSME, GOVT OF INDIA

• INTRODUCTION

Frame mats such as Mesh mats, Sinnet mats, Corridor mats and Rope mats are manufactured without the aid of a loom, but with the help of a frame. The most common frame mat is Corridor mat. This mat is produced with the help of a designed frame and a pressing device. It is a mat in which both warp and weft strands are continuous without tucking in or binding. It is a non- brush type one and the weaving is of carpet weaving in which the weft is predominant and warp is concealed. The pattern effect being produced by the weft strands only and has rib effect on both sides. The iron rods temporarily function as the warp and the number of ends per foot is 14/15 and 18/19. It is available in a wide range of designs, stripes and also with rubber backing.

• PROCESS OF MANUFACTURE

It requires a wooden frame in which iron rods can be kept vertically through grooves cut on rails to the thickness of the iron rods. The iron rods temporarily function as warp. After arranging the rods, the weft yarn is passed in between the rods by hand alternately from one end to other and is turned back. This process of winding the yarn is continued until the required number of weft required for a particular width of mat is wound. For mats

having designs coloured threads are wound on the iron rods according to the designs. After completion of winding of yarn on one side the frame along with iron rods is turned to the other side so that the yarn can be wound on the latter portion of the iron rods. The process of winding the yarn on the iron rod is done similarly as with above case. The winding of yarn is done in this also as was done in the case of other half. Now the iron rods with yarn wound over it is removed from the frame and is placed in a pressing device.

The press consists of two iron rails out of which one is moveable by turning a handle. On the rails, small iron nails are fixed in such a way that the distance between the two iron nails equals to the distance between the grooves cut on the wooden frame to erect iron rods vertically to weave the yarn. This helps the iron rods to place them comfortably in the press while pressing. The iron rods with yarn placed on the two rails are subjected to pressing by turning the handle which causes the movable iron rail to move closer to the fixed rail to press the yarn to the required width. Now the iron rods are removed one by one and it then drawn roping yarn through the holes from where the rods are removed. All the iron rods are removed like this and the rope yarn is passed in. While passing the roping yarn through the holes at the extreme ends a single thread of coir yarn is also passed in along with the roping yarn so that the protruding ends of thread can be utilized for preventing the weft threads of the mat at 4 corners from being loosened or removed while in use. The mat is then removed from the press and the 4 corners of the mat are made in tact by taking the protruding threads suitably to interlace with the weft in the mat.

- **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 80%, 85%, 90%, 95% 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 Set of frame per day : 200 mats per set

Number of set of frame : 25

Number of Shift per day : 1

Working days p.a : 300 days

Yield wastage : 5%

Capacity Utilization

-First year : 80%

-Second year : 85%

-Third year : 90%

-Fourth year : 95%

-Fifth year : 100%

Rate of Average Sales Realization : Rs. 98000/- per ton

Rate of Average cost of raw material : Rs.48000/-per ton

Interest on term Loan : 12.50%

Interest on working capital : 12.50%

Manpower requirement

Supervisor : 1

Skilled worker : 30

- **FINANCIAL ASPECTS**

- i) **Cost of Project**

		Amount
• Land	:	Lease/owned
• Work shed	:	Rs. 500000/-
• Machinery & Equipments	:	Rs.1361000/-
• Working Capital		Rs .639000/-

Total	:	Rs. 2500000/-

Sl.No	Description of machines & equipments	Qty	Amount(Rs)
1	Corridor mat frames including Pressing machine (2 Corridor mat frames & 1 Pressing machine is treated as one set)	3 sets	787000.00
2	Supporting items such as Iron rod, Scissors, Brush		100000.00
3	Dye pots (50 kg capacity including bleach)	6 Nos	300000.00
4	Other Dying equipments		174000.00
Total			1361000.00

- ii) **Means of Finance**

• Promoters Capital	5%	:	Rs. 125000/-
• Bank Term loan	95%	:	Rs.1768000/-
• WC Loan from Bank	95%	:	Rs. 607000/-

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	Nos	200	200	200	200	200
Number of set of frames		3	3	3	3	3
Number of shift/day		1	1	1	1	1
Working days per annum		300	300	300	300	300
Installed production capacity per annum	Nos	180000	180000	180000	180000	180000
Capacity utilization		80%	85%	90%	95%	100%
Annual production quantity	Tons	144000	153000	162000	171000	180000
Annual Sales Realization	Rs.98000	134.06	142.44	150.82	159.20	167.58
Cost of Production						
Raw material requirement	Tons	143.64	152.62	161.60	170.57	179.55
Cost of raw material	Rs.48000	68.95	73.26	77.57	81.87	86.18
Dying charges		15.84	16.83	17.73	18.79	19.80
Spares, Repairs & maintenance	1%	0.14	0.15	0.16	0.18	0.20
Wages & salary		36.43	38.71	40.99	43.26	45.54
Cost of Production		121.36	128.95	136.45	144.11	151.72
Gross Profit		12.7	13.49	14.37	15.09	15.86
Administrative & selling expenses	1%	1.34	1.42	1.51	1.59	1.68
Interest on Term Loan		1.82	1.97	1.65	0.56	0.24
Interest on Working capital		0.76	0.76	0.76	0.76	0.76
Depreciation of machinery		1.36	1.36	1.36	1.36	1.36
Depreciation of building		0.25	0.25	0.25	0.25	0.25
Total		5.53	5.77	5.53	4.52	4.29
Net Profit		7.17	7.72	8.84	10.57	11.57

- ESTIMATION OF BREAK EVEN POINT**

Rs in Lakhs

Particulars	1	2	3	4	5
Capacity utilization	80%	85%	90%	95%	100%
Break-even point	65%	63%	54%	34%	28%
Break even Production	88	92	83	55	47

- DEBT SERVICE COVERAGE RATIO**

Rs in Lakhs

Particulars	1	2	3	4	5
Capacity utilization	80%	85%	90%	95%	100%
DSCR	3.35	2.45	2.83	4.04	4.74
Average DSCR	3.48				
DSCR weighted average	3.34				

- WORKING CAPITAL REQUIREMENTS**

Rs in Lakhs

Particulars	1	2	3	4	5
Capacity utilization	80%	85%	90%	95%	100%
Variable Cost	121.36	128.95	136.45	144.11	151.72
Fixed Cost	5.53	5.77	5.53	4.52	4.29
Working capital Gap	6.39	6.81	7.23	7.65	8.09