

MODEL PROJECT REPORT FOR WOVEN RMG UNIT WITH A
CAPACITY OF 150 STITCHING MACHINES, WITHOUT
PROCESSING

The Project details consists of the project cost estimates for land, building, plant & machinery, raw material requirement, working capital requirement, means of finance, power cost, maintenance cost, insurance, salaries & wages, depreciation, expenditure statement, profit statement, break-even analysis, Repayment schedule, etc. Each of the Estimates are furnished below in details.

1. Project Cost Estimates

Rupees in lakhs

1.1 Land measuring 10,000 Sq.ft at the rate of 480/sq. ft	:	48.00
1.2 Building (15,000 sq.ft) at the rate of Rs.500/sq.ft construction cost (Ground, 1 st & 2 nd floor)	:	75.00
1.3 Plant & machinery (imported)		
(a) Stitching machines and other machines (total 186 machines) including import duty & others taxes (as detailed in Annexure-I)	:	94.85
1.4 Plant and Machinery (Indigenous)		
(a) Fire fighting Equipment 15 Nos ABC type, Minimax make, 5 Kg capacity Rs.3700 each	:	0.56
(b) Weighing Equipments Avery Make 3 weighing machines of capacity 120 Kgs, 30 Kgs, & 6 Kgs (Rs.34,000/- 13,000/-, 11150/- respectively)	:	0.58
(c) Material Handling : 20 Nos Trollys, 150 bins and 200 No. storage bins (Rs.1,000/- each, Rs. 100/- each, Rs.100/- each respectively)	:	0.55
(d) Ramsons Boiler (for steam Ironing) 12 Kw/hr and 18 Kw/hr 1 No each (Rs. 55,400/- & Rs.78,640/- respectively)	:	1.34
(e) Steam irons (10 Nos) with tables (10 Nos) (Rs.1,200/- each & Rs.5,000/- each respectively)	:	0.62
Total	:	3.65

1.5 Miscellaneous fixed assets – Indigenous

(a) Diesel generator krilosker make		
1 set – 125 KVA, Rs.14 lakhs		
1 set – 110 KVA, Rs.7.22 lakhs	: 21.22	
(b) Tables (10 Nos – Rs.5000 each)	: 0.50	
(c) Office equipments/furniture/computer	: 6.00	
(d) Deposite to state electricity board for LT connection of 149 HP	: 2.50	
Total		: 30.22

1.6 Total cost of Plant and Machinery

(1.3+1.4+1.5) : **128.72**

1.7 Preliminary & Pre-operative expenses

(5% of 1.6) : **6.44**

1.8 Working Capital Margin

(25% of Rs.287.60 lakhs) : **71.90**

1.9 Total Cost

: **330.06**

1.10 Contingency

(5 % of PC- 5% of 330.06 lakhs) : **16.50**

1.11 Total cost of the project

(1.1 to 1.10) : **346.56**

2. Raw Material requirement for manufacture of Cotton Shirts & Cotton Bottoms:

	Shirts	Bottoms	Total
No. of machines producing the items	80	70	150
Production/day/machine	8 Nos	10 Nos	18 Nos
Production/day	640	700	1340
Production per annum	1,99,680 pcs	2,18,400 pcs	4,18,080 pcs
Raw material requirement/piece	2.20 mts	1.3 mts	-
Cost of Raw material/mtr	Rs.70	Rs.140	-

No. of hours working per day : 8 hours

No. of days working per month : 26 days

Cost of raw material of shirts/annum 199680 X 2.20 X 70	: 307.51	
Buttons/collars/cuffs/stitching thread @ Rs.15/shirt	: 30.00	
Cost of raw material for bottoms/annum 218400 X 1.3 X 140	: 397.49	
Zips/Buttons/Hooks/Stitching thread @ Rs.25/bottom	: 54.60	
Raw material requirement/annum		: 789.60

3. Sale Value

Sale value of Shirt	: Rs.200	
Sale value of Bottom	: Rs.350	
Total Sale Value/annum for shirts 200 X 199680	Rs.399.40	
Total Sale Value/annum for Bottoms 350 X 218400	: Rs.764.40	
Total		: 1163.80

4. Working capital requirement

(i) Cost of Raw material for 45 days	: Rs.113.88	
(ii) Finished goods for 45 days	: Rs.167.86	
(iii) Cost of consumable stores for 30 days (Rs.3/machine/day)	: Rs. 0.17	
(iv) Cost of maintenance spares etc for 90 days (Rs.10/machine/day)	:Rs. 1.67	
(v) Cost of packing material for 30 days (Rs.10/piece)	: Rs. 4.02	
Total Cost		: 287.60
Margin money on working capital 25%		: 71.90
Bank finance		: 215.70

5. Means of finance:

S.No	Description	Amount (Rs in lakhs)
1	Promoters contribution	115.52
2	Term loan	231.04
	Total	346.56

Debt Equity ratio : 2 : 1

6. Salaries & Wages:**Rs.**

S. No	Description	Nos/ Day	Gross Salary/Wages per month	Total/ annum
I	Office & production staff:			
1	Production Manager	1	25000	300000
2	Factory Manager	1	20000	240000
3	Manager accounts	1	12000	144000
4	Accountant	1	9000	108000
5	Floor-in-charge	1	9000	108000
6	Q.C. Manager	1	9000	108000
7	Cutting master	1	12000	144000
8	Pattern Master	1	10000	120000
9	Finishing-in-charge	1	9000	108000
10	Merchandise	1	12000	144000
11	Assistant Merchandiser	1	8000	96000
12	Production Co-ordinator	1	8000	96000
13	Q.C. Assistants	2	5000	120000
14	Asst. Cutting master	1	6000	72000
15	Store-in-charge	1	7000	84000
16	Sampling supervisor	1	6000	72000
17	Floor line supervisor	3	6000	216000
18	Kaja button supervisor	1	6000	72000
19	Checking supervisor	1	6000	72000
20	Packing supervisor	1	6000	72000
21	Stores Assistant	1	4500	54000
22	Assistant Accountant	2	5000	120000
23	Clerical staff	4	3500	168000
24	Receptionist	1	4000	48000
25	Security persons	4	3000	144000
26	Peons	3	2200	79200
	Total	38	-	31,09,200
II	Labour			
27	Cutting helpers (Cutting section)	24	2500	720000
28	<u>Sample section</u> Tailors	7	3000	252000
29	Helpers	1	2500	30000
30	<u>Production department</u> Tailors	150	3000	5400000

31	Helpers	40	2500	1200000
32	Line checkers	12	2500	360000
<u>Finishing & packing Dept</u>				
33	Final checkers	5	2500	150000
34	Trimming helpers	10	2500	300000
35	Alteration Tailor	4	3000	144000
36	Ironing section	15	2500	450000
37	Packing helpers	15	2500	450000
<u>Stores Section</u>				
38	Stores helpers	3	2500	90000
39	Electrician	2	3700	88800
40	Mechanic	2	3000	72000
	Total	290	-	9706800
	GRAND TOTAL	328	-	12816000

Total :Rs. 128.16 lakhs

Statutory Contribution (Provident Fund @ 12% for all employees,
On basic salary, Contribution towards ESI @ 4.75 %of the basic
Salary for employees whose gross salary is less than Rs.7500/- p.m) : 12.40 lakhs

140.56

7. Power Cost

S.no	Item	No. of machines	KW/ machines	Total KW	Kw - Hours
1	Machinery used for manufacture of garment	150 stitching machines + 36 additional machines & equipments	0.33 KW/ machines	62.00	496(8 hrs)
2	Lighting for 14,000 sq.ft	14,000 Sq.ft	-	18	180(10 hrs)
3	2 Boilers for steam ironing + Iron press	2 boilers 10 Ironbox	-	30	240(8 hrs)
Total				110	916

Total Connected load :112 KW

Power cost Rs.4.70/unit :916 X 0.7 X 0.95
at power factor 70% = 609.14 KWH
utilization 95%

Power cost/annum :609X4.70X312

:

8.93

8. Maintenance stores/cost

Maintenance cost/machine/day	: Rs.10	
No. of machines	: 186	
No. of working days/annum	: 312	
No. of shifts / annum	: 312	
Maintenance cost of machines/annum	: Rs.5.80 lakhs	
Maintenance cost of other equipments (Building, Boiler, Generator, AC, Computer etc other than machines)	: Rs. 5 lakhs	
Total	:	10.80

9. The interest rate for the term loan has been assumed as 11% and the Net Interest rate will be 6% after taking into account TUFs interest subsidy of 5 %. The entire project cost is eligible under TUFs since the cost of land/building is less than 50% of the Total Project Cost and all the machines are new machines. The rate of interest for working capital has been assumed as 13.5%.

10. The Depreciation has been assumed at 10% under straight line method.

Value of machines	:Rs.128.72	
Depreciation 10%	:	12.87

11. Income/annum

Production/annum:	Shirts	: 1,99,680 pcs	
	Bottoms	: 2,18,400 pcs	
	Total	----- 4,18,080 pcs -----	
Selling price Rs/pc.	Shirts	: Rs.200/pc	
	Bottoms	: Rs.350/pc	
Income by sales		:	1163.80

12. The value loss is assumed as 2% of the sale value **:** **23.28**

13. Packing charges

Packing charges at the rate of Rs.10/- per piece for 418080 pcs	:	41.81
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14. The selling expenses has been assumed as 5% of sale value

Selling Expenses (5%)	:	58.19
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15. The cost of Insurance of garmenting m/c and other machines has been assumed at 0.75% of the cost

Insurance for machinery (0.75%)

: Rs.128.72 X 0.75%

: **0.97**

16. EXPENDITURE STATEMENT

Year	1	2	3	4	5	6	7	8	9	10
R/M	789.60	789.60	789.60	805.39	805.39	805.39	821.50	821.50	821.50	837.93
Salary & wages	140.56	144.78	149.12	153.59	158.20	162.39	167.84	172.88	178.07	183.41
Power cost	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93
Maintenance	10.80	10.80	10.80	10.80	10.80	11.12	11.12	11.12	11.12	11.12
Int.term loan	13.86	13.86	13.86	11.43	9.80	8.17	6.53	4.90	3.27	1.63
Depreciation	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87
Int.wr/capital	29.12	29.12	29.12	29.12	29.12	29.12	29.12	29.12	29.12	29.12
Values loss	23.28	23.28	23.28	24.44	24.44	24.44	25.67	25.67	25.67	26.95
Packing	41.81	41.81	41.81	42.65	42.65	42.65	43.50	43.50	43.50	44.37
Selling Exp.	58.19	58.19	58.19	61.10	61.10	61.10	64.16	64.16	64.16	67.37
Insurance	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Total	1129.99	1134.21	1138.55	1161.29	1164.27	1167.15	1192.21	1195.62	1199.18	1224.67

Assumptions:

- i) Raw material/packing charges : 2% increase after every 3 years
- ii) wages : 3% increase every year
- iii) Selling Expenses/value loss : 5% increase after every 3 years
- iv) Maintenance : 3% increase after every 5 years
- v) Selling Price : 5% increase after every 3 years

17. PROFIT STATEMENT

Year	1	2	3	4	5	6	7	8	9	10
Income	1163.80	1163.80	1163.80	1221.99	1221.99	1221.99	1283.09	1283.09	1283.09	1347.24
Expenditure	1129.99	1134.21	1138.55	1161.29	1164.27	1167.15	1192.21	1195.62	1199.18	1224.67
Profit	33.81	29.59	25.25	60.7	57.72	54.84	90.88	87.47	83.91	122.57
Depreciation	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87	12.87
Cash profit	46.68	42.46	38.12	73.57	70.59	67.71	103.75	100.34	96.78	135.44

Gross profit	33.81	29.59	25.25	60.7	57.72	54.84	90.88	87.47	83.91	122.57
Tax	11.83	10.35	8.83	21.24	20.20	19.19	31.80	30.61	29.36	42.89
Profit after tax	21.98	19.24	16.42	39.46	37.52	35.65	59.08	56.86	54.55	79.68

18. DEBT SERVICE COVERAGE RATIO (DSCR)

	Year	1	2	3	4	5	6	7	8	9	10
A	Profit	46.68	42.46	38.12	73.57	70.59	67.71	103.75	100.34	96.78	135.44
B	Int on term loan in lakhs	13.86	13.86	13.86	12.13	10.40	8.66	6.93	5.98	3.47	1.73
C	Installments	Nil	Nil	28.88	28.88	28.88	28.88	28.88	28.88	28.88	28.88
	DSCR	4.36	4.06	1.21	2.08	2.06	2.03	3.09	3.04	3.09	4.48

Two years moratorium & 8 years term loan repayment under TUFS scheme

$$* \text{DSCR} = \frac{\text{(cash) profit} + \text{Interest paid}}{\text{Installment paid} + \text{interest paid}} \quad \frac{a + b}{c + b}$$

$$\text{Installment amount} = \frac{\text{Term loan}}{8} = \frac{231.04}{8} = 28.88 \text{ lakhs}$$

$$\text{Maximum DSCR} = 4.48$$

$$\text{Minimum DSCR} = 1.21$$

$$\text{Average DSCR} = 2.95$$

19. Break – Even Analysis:

Variable Cost	Rs. in lakhs
Raw material	789.60
Packing	41.81
Wages & Salaries – 50%	70.28
Selling expenses	58.19
Int. on Working Capital	29.12
Value loss	23.28
Power cost	8.93
Total	1021.21

Fixed cost	Rs. in lakhs
Wages & Salaries – 50%	70.28
Repair & maintenance	10.80
Insurance	0.97
Depreciation	12.87
Interest on term loan	13.86
Total	108.78

Income by sales : Rs. 1163.80 lakhs

Sales – Variable cost : Rs. 142.59 lakhs

Break-Even point : Fixed cost X 95

 Sales-Variable cost
 $= \frac{108.78 \times 95}{142.59}$
 $= 72.47\%$

Cash Break-Even Point : Fixed cost- Depreciation X 95

 Sales-Variable cost
 $= \frac{(108.78-12.87) \times 95}{142.59}$
 $= 63.89 \%$

20. BANK LOAN REPAYMENT SCHEDULE

Interest @ 11% (net Interest = 6% Interest reimbursement under TUFs =5%)

Year	Opening balance	Interest	Principal payment	Total	Closing Balance
1	231.04	13.86	Nil	Nil	231.04
2	231.04	13.86	Nil	Nil	231.04
3	231.04	13.86	28.88	42.74	202.16
4	202.16	12.13	28.88	41.01	173.28
5	173.28	10.40	28.88	39.28	144.40
6	144.40	8.66	28.88	37.54	115.52
7	115.52	6.93	28.88	35.81	86.64
8	86.64	5.98	28.88	34.86	57.76
9	57.76	3.47	28.88	32.35	28.88
10	28.88	1.73	28.88	30.61	0

Two years moratorium & 8 years term loan repayment under TUF scheme

21. EXPENDITURE & PROFIT PER PIECE

Expenditure : Rs. 1129.99 lakhs
 Selling Price : Rs. 1163.80 lakhs
 Profit : Rs. 33.81 lakhs
 Depreciation : Rs. 12.87 lakhs
 Cash profit : Rs. 46.68 lakhs

Profit/pc : $\frac{46.68 \times 100000}{418080} = \text{Rs. 11.16/pc}$

22. Internal Rate of Return (IRR) : Initial Investment = $\frac{\text{Cash flows}}{1 + \text{IRR}}$
 $346.56 = \frac{479.16}{1 + \text{IRR}}$
IRR = 38%

23. Pay Back Period : **6 years 1 month**

Annexure-I

1.3 Plant & Machinery (Imported)

S.No	Name	No. of Machines	Rate/ machine in Dollars	Rate in Rs. with Import Duty	Total cost of machines in Rs.
1	Oshima Make End cutter	2	450	25,240	50,480
2	Oshima Make Hand cutting m/c	2	750	42,066	84,132
3	Oshima make Bandknife cutting m/c	1	3900	1,89,464	1,89,464
4	Juki make DDL 8300 Model Single Needle stitching m/c	109	330	16,032	17,47,488
5	Juki make DDI 8700-7 model Electronic Single Needle stitching m/c	25	800	38,864	1,71,600
6	Juki make DLM 5200 Model single needle stitch and Trimmer m/c	4	955	46,394	1,85,576
7	Juki make LH 3128 Model Double Needle Stitching m/c	6	1320	64,126	3,84,756
8	Juki make LH 3168 Model Split Needle bar Double Needle Stitching machineries	6	1850	89,874	5,39,244
9	Kansai Make Special M/c	4	2100	1,02,019	4,08,076
10	Juki Make Overlock m/c	8	850	41,294	3,30,352
11	Juki Make Feed of Arm	4	2200	1,06,877	4,27,508
12	Juki Made LK-1900 Model Bar Tack m/c	2	3025	1,69,666	3,39,332
13	Juki Make MEB 2000 Model Button Hole m/c	2	10500	5,10,096	10,20,192
14	Juki Make LBH-781 Button Hole M/c	2	2950	1,43,313	2,86,626
15	Juki Make LK-1903 Button stitching M/c	4	4000	2,24,351	8,97,404
16	Oshima Make Cuff Turning m/c	1	4000	2,24,351	2,24,351
17	Oshime make Collar Turning m/c	1	5100	2,86,048	2,86,048
18	Oshima Make Fusing m/c	2	3000	1,68,263	3,36,526
19	CAD System (Indigenous)	1	-	5,00,000	5,00,000
	Total	186	-	-	92,09,155 (or) Rs.92.09 lakhs

Note: Machines at S.No.3 to 11, 13, 14 are having Import Duty of (Basic) 5.5% + 2% cess on Import duty.

Rupees in Lakhs

Machines at S.No.1,2,12,15,16,17 & 18 are having In-built Motor therefore Import Duty is (Basic) 5.5% +(CVD)16% + 2% cess on Import Duty.

Erection Charges – 2% = 1.84

Local Transport Expenses-1% = 0.92

Total Cost of Imported machines Rs. 94.85