

MODEL PROJECT REPORT FOR WOVEN RMG UNIT WITH A
CAPACITY OF 100 STITCHING MACHINES ON OWN PRODUCTION,
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 5000 Sq.ft at the rate of 600/sq. ft	:	30.00
1.2 Building (8,000 sq.ft) at the rate of Rs.500/sq.ft construction cost (Ground & 1 st floor)	:	40.00
1.3 Plant & machinery (imported)		
(a) Stitching machines and other machines (total 120 machines) including import duty & others taxes (as detailed in Annexure-I)	:	54.54
1.4 Plant and Machinery (Indigenous)		
(a) Fire fighting Equipment 10 Nos ABC type, Minimax make, 5 Kg capacity Rs.3700 each	:	0.37
(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 : 10 Nos Trollys, 100 bins and 100 No. storage bins (Rs.1,000/- each, Rs. 100/- each, Rs.100/- each respectively)	:	0.30
(d) Ramsons Boiler (for steam Ironing) 12 Kw/hr 2 Nos (Rs. 55,400/- each)	:	1.11
(e) Steam irons (8 Nos) with tables (8 Nos) (Rs.1,200/- each & Rs.5,000/- each respectively)	:	0.50
Total	:	2.86

1.5 Miscellaneous fixed assets – Indigenous

(a) Diesel generator krilosker make 1 set – 125 KVA, Rs.14 lakhs	: 14.00	
(b) Tables (7 Nos – Rs.5000 each)	: 0.35	
(c) Office equipments/furniture/computer	: 3.00	
(d) Deposite to state electricity board for LT connection of 149 HP	: 2.50	
Total		: 19.85

1.6 Total cost of Plant and Machinery

(1.3+1.4+1.5) : **77.25**

1.7 Preliminary & Pre-operative expenses

(5% of 1.6) : **3.86**

1.8 Working Capital Margin

(25% of Rs.181.99 lakhs) : **45.50**

1.9 Total Cost

: **196.61**

1.10 Contingency

(5 % of PC- 5% of 196.61 lakhs) : **9.83**

1.11 Total cost of the project

(1.1 to 1.10) : **206.44**

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

	Shirts	Bottoms	Total
No. of machines producing the items	60	40	100
Production/day/machine	8 Nos	10 Nos	18 Nos
Production/day	480	400	880
Production per annum	1,49,760 pcs	1,24,800 pcs	2,74,560
Raw material requirement/piece	2.2 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 149760 X 2.2 X 70	: 230.63	
Buttons/collars/cuffs/stitching thread @ Rs.15/shirt	: 22.46	
Cost of raw material for bottoms/annum 124800 X 1.3 X 140	: 227.14	
Zips/Buttons/Hooks/Stitching thread @ Rs.25/bottom	: 31.20	
Raw material requirement/annum		: 511.43

3. Sale Value

Sale value of Shirt	: Rs.200	
Sale value of Bottom	: Rs.335	
Total Sale Value/annum for shirts 200 X 149760	Rs.299.52	
Total Sale Value/annum for Bottoms 340 X 124800	: Rs.418.08	
Total		: 717.60

4. Working capital requirement

(i) Cost of Raw material for 45 days	: Rs. 73.76	
(ii) Finished goods for 45 days	: Rs.104.40	
(iii) Cost of consumable stores for 30 days (Rs.3/machine/day)	: Rs. 0.11	
(iv) Cost of maintenance spares etc for 90 days (Rs.10/machine/day)	:Rs. 1.08	
(v) Cost of packing material for 30 days (Rs.10/piece)	: Rs. 2.64	
Total Cost		: 181.99
Margin money on working capital 25%		: 45.50
Bank finance		: 136.49

5. Means of finance:

S.No	Description	Amount (Rs in lakhs)
1	Promoters contribution	68.81
2	Term loan	137.63
	Total	206.44

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	20000	240000
2	Accountant	1	9000	108000
3	Cutting master	1	14000	168000
4	Merchandise	1	12000	144000
5	Pattern master	1	10000	120000
6	Stores-in-charge	1	6000	72000
7	Assistant Merchandiser	1	5500	66000
8	Assistant Cutting master	1	5500	66000
9	Assistant Accountant	1	5000	60000
10	Production coordinator	1	7000	84000
11	Supervisor	2	6000	144000
12	Clerical Staff	4	3500	168000
13	Receptionist	1	4000	48000
14	Security persons	2	2000	48000
15	Peons	2	2000	48000
	Total	21	-	1584000
II	Labour			
16	<u>Cutting section</u> Cutters & helpers	14	2200	369600
17	<u>Sample section</u> Tailors	4	2800	134400
18	Helpers	1	2200	26400
19	<u>Production department</u> Tailors	100	2800	3360000
20	Helpers	10	2400	288000
21	Line checkers	8	2400	230400
22	<u>Finishing & packing Dept</u> Final checkers	2	2400	57600
23	Trimming helpers	2	2400	57600
24	Alteration Tailor	2	2800	67200
25	Ironing section	10	2400	288000
26	Packing helpers	6	2400	172800
27	Electrician	1	3000	36000
28	Mechanic	1	2800	33600
	Total	161	-	51,21,600
	GRAND TOTAL	182	-	67,05,600

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). : Rs.6,51,683

Total : 73.57

7. Power Cost

S. No	Item	No. of machines	KW/ machines	Total KW	Kw - Hours
1	Machinery used for manufacture of garment	100 stitching machines + 20 additional machines & equipments	0.33 KW/ machines	39.6	317 (8 Hrs)
2	Lighting for 8,000 sq.ft	8,000 Sq.ft	-	10	100 (10 hrs)
3	2 Boilers for steam ironing + Iron press	2 boilers 10 Iron box	25	25	200(8 hrs)
Total				74.6	617

Total Connected load : 80 KW
Power cost Rs.4.70/unit at power factor 70% utilization 95% : 617 X 0.7 X 0.95 = 410.30 KWH

Power cost/annum : 410X4.70X312

: **6.01**

8. Maintenance stores/cost

Maintenance cost/machine/day : Rs.10
No. of machines : 120
No. of working days/annum : 312
No. of shifts / annum : 312
Maintenance cost of machines/annum : Rs.3.74 lakhs
Maintenance cost of other equipments (Building, Boiler, Generator, AC, Computer etc other than machines) : Rs.1.25 lakhs

Total : **4.99**

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.77.25	
Depreciation 10%		: 7.73

11. Income/annum

Production/annum:	Shirts	: 1,49,760 pcs)
	Bottoms	: 1,24,800 pcs)

	Total	2,74,560 pcs

Selling price Rs/pc.	Shirts	: Rs.100/pc
	Bottoms	: Rs.335/pc

Income by sales		: 717.60
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12. The value loss is assumed as 2% of the sale value **: 14.48**

13. Packing charges

Packing charges at the rate of Rs.10/- per piece for 274560 pcs		: 27.46
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14. The selling expenses has been assumed as 3% of sale value
Selling Expenses (3%) **: 21.52**

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.77.25 X 0.75%
: 0.56

16. EXPENDITURE STATEMENT

Year	1	2	3	4	5	6	7	8	9	10
R/M	511.43	511.43	511.43	521.66	521.66	521.66	532.09	532.09	532.09	542.73
Salary & wages	73.57	75.78	78.05	80.39	82.80	85.28	87.84	90.48	91.19	95.99
Power cost	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01
Maintenance	4.99	4.99	4.99	4.99	4.99	5.14	5.14	5.14	5.14	5.14
Int.term loan	8.26	8.26	8.26	7.23	6.19	5.16	4.13	3.10	2.07	1.03
Depreciation	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73
Int.wr/capital	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43
Values loss	14.48	14.48	14.48	15.20	15.20	15.20	15.96	15.96	15.96	16.76
Packing	27.46	27.46	27.46	28.00	28.00	28.00	28.56	28.56	28.56	29.13
Selling Exp.	21.52	21.52	21.52	22.60	22.60	22.60	23.73	23.73	23.73	24.92
Insurance	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Total	694.44	696.65	698.92	712.8	714.17	715.77	730.18	731.79	731.47	748.43

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	717.60	717.60	717.60	753.48	753.48	753.48	791.15	791.15	791.15	830.71
Expenditure	694.44	696.65	698.92	712.8	714.17	715.77	730.18	731.79	731.47	748.43
Profit	23.16	20.95	18.68	40.68	39.31	37.71	60.97	59.36	59.68	82.28
Depreciation	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73	7.73
Cash profit	30.89	28.68	26.41	48.41	47.04	45.44	68.70	67.09	67.41	90.01

Gross profit	23.16	20.95	18.68	40.68	39.31	37.71	60.97	59.36	59.68	82.28
Tax	8.10	7.33	6.53	14.23	13.75	13.19	21.33	20.77	20.88	28.79
Profit after tax	15.58	14.14	12.67	27.0	26.11	25.07	40.21	39.17	38.08	54.10

18. DEBT SERVICE COVERAGE RATIO (DSCR)

	Year	1	2	3	4	5	6	7	8	9	10
a	Profit	30.89	28.68	26.41	48.41	47.04	45.44	68.70	67.09	67.41	90.01
b	Int on term loan in lakhs	8.26	8.26	8.26	7.23	6.19	5.16	4.13	3.10	2.07	1.03
c	Installments	Nil	Nil	17.20	17.20	17.20	17.20	17.20	17.20	17.20	17.20
	DSCR	4.73	4.47	1.36	2.27	2.27	2.26	3.41	3.45	3.60	4.99

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

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

$$\text{Installment amount} = \frac{\text{Term loan}}{8} = \frac{137.63}{8} = 17.20 \text{ lakhs}$$

Maximum DSCR = 4.99

Minimum DSCR = 1.36

Average DSCR = 3.28

19. Break – Even Analysis:

Variable Cost	Rs. in lakhs
Raw material	511.43
Packing	27.46
Wages & Salaries – 50%	36.78
Selling expenses	21.52
Int. on Working Capital	18.43
Value loss	14.48
Power cost	6.01
Total	636.11

Fixed cost	Rs. in lakhs
Wages & Salaries – 50%	36.78
Repair & maintenance	4.99
Insurance	0.56
Depreciation	7.73
Interest on term loan	8.26
Total	58.32

Income by sales : Rs. 717.60 lakhs

Sales – Variable cost : Rs. 81.49 lakhs

Break-Even point : Fixed cost X 95

 Sales-Variable cost
 = $\frac{58.32 \times 95}{81.49}$
 = **67.98 %**

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

 Sales-Variable cost
 = $\frac{(58.32-7.73) \times 95}{81.49}$
 = **58.97 %**

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	137.63	8.26	Nil	Nil	137.63
2	137.63	8.26	Nil	Nil	137.63
3	137.63	8.26	17.20	25.46	120.43
4	120.43	7.23	17.20	24.43	103.23
5	103.23	6.19	17.20	23.39	86.03
6	86.03	5.16	17.20	22.36	68.82
7	68.82	4.13	17.20	21.33	51.63
8	51.63	3.10	17.20	20.30	34.42
9	34.42	2.07	17.20	19.27	17.20
10	17.20	1.03	17.20	18.23	0

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

21. EXPENDITURE & PROFIT PER PIECE

Expenditure : Rs. 694.44 lakhs
 Selling Price : Rs. 717.63 lakhs
 Profit : Rs. 23.19 lakhs
 Depreciation : Rs. 7.73 lakhs
 Cash profit : Rs. 30.92 lakhs

Profit/pc : 30.92 X 100000
 ----- = **Rs. 11.26 /pc**
 274560

22. INTERNAL RATE OF RETURN(IRR): Initial Investment = Cash flows

$$206.44 = \frac{287.88}{1 + IRR}$$

$$IRR = 39 \%$$

23. Pay Back period : **6 years 6 months**

PROJECT FOR 100 MACHINES

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	750	42,066	84,132
2	Oshima make Bandknife cutting m/c	1	3900	1,89,464	1,89,464
3	Juki make DDL 300 Model Single Needle stitching m/c	80	330	16,032	12,82,528
4	Juki make DDL 8700-7 model Electronic Single Needle stitching m/c	10	800	38,864	3,88,640
5	Juki make DLM 5200 Model single needle stitch and Trimmer m/c	4	955	46,394	1,85,578
6	Juki make LH 3128 Model Double Needle Stitching m/c	3	1320	64,126	1,92,378
7	Juki make LH 3168 Model Split Needle bar Double Needle Stitching machineries	3	1850	89,874	2,69,622
8	Juki Make Overlock m/c	4	850	41,294	1,65,176
9	Juki Make Feed of Arm	2	2200	1,06,877	2,13,754
10	Juki Made LK-1900 Model Bar Tack m/c	2	3025	1,69,666	3,39,332
11	Juki Make LBH-781 Button Hole M/c	1	2950	1,43,313	1,43,313
12	Juki Make MEB-2000 Button Hole M/c	1	10500	5,10,096	5,10,096
13	Juke Make LK 1903 Button stitching m/c	2	4000	2,24,351	4,48,702
14	Oshima Make Fusing m/c	1	3000	1,68,263	1,68,263
15	Kansari Make special m/c	2	2100		2,04,040
16	Oshime Make Cuff Turning m/c	1	4000	2,24,351	2,24,351
17	Oshima Make Collar Turning m/c	1	5100	2,86,048	2,86,048
	Total	120	-	-	5295417 (or) Rs.52.95

Note: Machines at S.No.2 to 9, 11, 12, 15 are having Import Duty of (Basic) 5.5% + 2% cess on Import duty.

Machines at S.No.1,10,13,14,16 & 17 are having In-built Motor therefore Import Duty is (Basic) 5.5% +(CVD)16% + 2% cess on Import Duty.

Erection Charges – 2% = 1.06

Local Transport Expenses-1% = 0.53

Total Cost of Imported machines

Rs. 54.54 lakhs