

IX) MODEL PROJECT REPORT FOR WOVEN RMG UNIT WITH THE CAPACITY OF 300 STITCHING MACHINES WITH 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 16,000 Sq.ft at the rate of 450/sq. ft	: 72.00
1.2 Building (32,000 sq.ft) at the rate of Rs.500/sq.ft construction cost (consisting of Ground, 1 st & 2 nd floor)	: 160.00
1.3 Plant & machinery (imported)	
(a) Stitching machines and other machines (total 372 machines) including import duty & others taxes (as detailed in Annexure-I)	: 189.70
1.4 Plant and Machinery (Indigenous)	
(a) Processing Machine (as detailed in Annexure-II)	: 25.75
(b) Fire fighting Equipment 30 Nos ABC type, Minimax make, 5 Kg capacity Rs.3700 each	: 1.11
(c) Weighing Equipments Avery Make 5 weighing machines of capacity 120 Kgs, 30 Kgs(2 Nos) & 6 Kgs(2 Nos) (Rs.34,000/- 13,000/-,11150/- respectively)	: 0.82
(d) Material Handling : 40 Nos Trollys, 300 bins and 400 No. storage bins (Rs.1,000/- each, Rs. 100/- each, Rs.100/- each respectively)	: 1.10
(e) Boiler of 250 Kgs capacity	: 6.00
(f) Boiler (for steam Ironing) 12 Kw/hr and 18 Kw/hr 2 Nos each (Rs. 55,400/- & Rs.78,640/- respectively)	: 2.68
(g) Steam irons (20 Nos) with tables (20 Nos) (Rs.1,200/- each & Rs.5,000/- each respectively)	: 1.24
Total	: 38.70

1.5 Miscellaneous fixed assets – Indigenous

(a) Diesel generator krilosker make		
2 set – 125 KVA, Rs.14 lakhs		
2 set – 110 KVA, Rs.7.22 lakhs	: 42.44	
(b) Tables (25 Nos – Rs.5000 each)	: 1.25	
(c) Office equipments/furniture/computer	: 8.00	
(d) Deposite to state electricity board for HT connection & for installation of Transformer	: 10.00	
(e) Effluent Treatment Plant	: 10.00	
Total		: 71.69

1.6 Total cost of Plant and Machinery

(1.3+1.4+1.5) : **300.09**

1.7 Preliminary & Pre-operative expenses

(5% of 1.6) : **15.00**

1.8 Working Capital Margin

(25% of Rs.630.27 lakhs) : **157.57**

1.9 Total Cost

: **704.66**

1.10 Contingency

(5 % of PC- 5% of 704.66 lakhs) : **35.23**

1.11 Total cost of the project

(1.1 to 1.10) : **739.89**

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

	Shirts	Bottoms	Total
No. of machines producing the items	160	140	300
Production/day/machine	8 Nos	10 Nos	18 Nos
Production/day	1280	1400	2680
Production per annum	399360 pcs	436800 pcs	836160
Raw material requirement/piece	2.20 mts	1.3 mts	-
Cost of Raw material/mtr	Rs.75	Rs.150	-

No. of hours working per day : 8 hours

No. of days working per month : 26 days

Cost of raw material of shirts/annum 399360 X 2.20 X 75	: 658.94	
Buttons/collars/cuffs/stitching thread @ Rs.15/shirt	: 59.90	
Cost of raw material for bottoms/annum 436800 X 1.3 X 150	: 851.76	
Zips/Buttons/Hooks/Stitching thread @ Rs.25/bottom	: 109.20	
Chemicals (softner enzymes, Buffer agents, sequishing Agents for water softner etc)	: 60.00	
Water for processing	: 6.00	
Raw material requirement/annum		: 1745.80

3. Sale Value

Sale value of Shirt	: Rs.225	
Sale value of Bottom	: Rs.375	
Total Sale Value/annum for shirts 225 X 399360	Rs.898.56	
Total Sale Value/annum for Bottoms 375 X 436800	: Rs.1638.00	
Total		: 2536.56

4. Working capital requirement

(i) Cost of Raw material for 45 days	: Rs.251.80	
(ii) Finished goods for 45 days	: Rs.365.85	
(iii) Cost of consumable stores for 30 days (Rs.3/machine/day)	: Rs. 0.33	
(iv) Cost of maintenance spares etc for 90 days (Rs.10/machine/day)	: Rs. 3.35	
(v) Cost of maintenance spares etc for 90 days for processing machines	: Rs. 0.90	
(vi) Cost of packing material for 30 days (Rs.10/piece)	: Rs. 8.04	
Total Cost		: 630.27

Margin money on working capital 25% : **157.57**

Bank finance : **472.70**

5. Means of finance:

S.No	Description	Amount (Rs in lakhs)
1	Promoters contribution	246.63
2	Term loan	493.26
	Total	739.89

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	General Manager	1	40000	480000
2	Production Manager	2	25000	600000
3	Factory Manager	1	20000	240000
4	Manager accounts	1	14000	168000
5	Accountant	2	8000	192000
6	Floor-in-charge	2	10000	240000
7	Q.C. Manager	1	10000	120000
8	Cutting master	2	14000	336000
9	Pattern Master	2	10000	240000
10	Finishing-in-charge	1	9000	108000
11	Merchandise	1	14000	168000
12	Assistant Merchandiser	3	7000	252000
13	Production Co-ordinator	1	8000	96000
14	Q.C. Assistants	3	5000	180000
15	Asst. Cutting master	2	6000	144000
16	Store-in-charge	1	10000	120000
17	Sampling supervisor	1	6000d	72000
18	Floor line supervisor	6	6000	432000
19	Kaja button supervisor	1	6000	72000
20	Checking supervisor	1	6000	72000
21	Packing supervisor	1	6000	72000
22	Stores Assistant	1	4500	54000
23	Assistant Accountant	2	5000	120000
24	Clerical staff	8	3500	336000
25	Receptionist	1	6000	72000
26	Security persons	6	3000	216000
27	Peons	4	2000	96000
	Total	58	-	52,98,000
II	Labour			
28	Cutting helpers (Cutting section)	30	2500	900000
	<u>Sample section</u>			
29	Tailors	10	3000	360000
30	Helpers	3	2500	90000
	<u>Production department</u>			
31	Tailors	300	3000	10800000
32	Helpers	75	2500	2250000

33	Line checkers	24	2500	720000
	<u>Processing Section.</u>			
34	Supervisor	1	6500	78000
35	Operators	10	5000	600000
36	Helpers	10	2500	300000
37	<u>Finishing & packing Dept</u> Final checkers	10	2500	300000
38	Trimming helpers	15	2500	450000
39	Alteration Tailor	6	3000	216000
40	Ironing section	35	2500	1050000
41	Packing helpers	35	2500	1050000
42	<u>Stores Section</u> Stores helpers	3	2500	90000
43	Electrician	4	3500	168000
44	Mechanic	4	3000	144000
45	<u>Boiler Section.</u> Boiler Engineer	1	5000	60000
46	Boiler Attender	2	2500	60000
	Total	578	-	1,96,86,000
	GRAND TOTAL	636	-	2,49,84,000

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 7500/- p.m. 24.22

Total: 274.06

7. Power Cost

S.no	Item	No. of machines	KW/ machines	Total KW	Kw- 24 Hours
1	Machinery used for manufacture of garment	300 stitching machines + 60 additional machines & equipments	0.33 KW/ machines	120	960(8 hrs)
2	Machinery for processing	11	Different load	40	320
3	Lighting for 32,000 sq.ft	-	-	40	400(10 hrs)
4	4 Boilers for steam ironing + Iron press	4 boilers 20 Ironbox	-	60	480(8 hrs)
	Total			260	2160

Total Connected load	:260 KW
Power consumption in unit at power factor 70% utilization 95%	:2160 X 0.7 X 0.95 = 1436.4 KWH
Power cost/annum(at the rate of Rs.4.70/unit)	:1436.4 X 4.70X312 : 21.06

8. Maintenance stores/cost

Maintenance cost/machine/day	: Rs.10
No. of machines	: 372
No. of working days/annum	: 312
No. of shifts / annum	: 312
Maintenance cost of machines/annum	: Rs.11.60 lakhs
Maintenance cost of other equipments (Building, Boiler, Processing m/c, Generator, AC, Computer etc other than machines)	: Rs. 14.63 lakhs
Total	: 26.23

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 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.300.09
Depreciation 10%	: 30.01

11. Income/annum

Production/annum:	Shirts	: 3,99,360 pcs
	Bottoms	: 4,36,800 pcs
	Total	8,36,160 pcs
Selling price Rs/pc.	Shirts	: Rs.225/pc
	Bottoms	: Rs.375/pc
Income by sales		: 2536.56

12. The value loss is assumed as 2% of the sale value : **50.73**

13. Packing charges

Packing charges at the rate of Rs.10/- per piece for 836160 pcs : **83.62**

14. The selling expenses has been assumed as 5% of sale value

Selling Expenses (5%) : **126.83**

15. The cost of Insurance of stitching m/cs and other machines has been assumed at 0.75% of the cost

Insurance for machinery (0.75%) : Rs.300.09 X 0.75% : **2.25**

16. EXPENDITURE STATEMENT

Year	1	2	3	4	5	6	7	8	9	10
R/M	1745.80	1745.80	1745.80	1780.72	1780.72	1780.72	1816.33	1816.33	1816.33	1852.66
Salary & wages	274.06	282.28	290.75	299.47	308.45	317.70	327.23	337.05	347.16	357.57
Power cost	21.06	21.06	21.06	21.06	21.06	21.06	21.06	21.06	21.06	21.06
Maintenance	26.23	26.23	26.23	26.23	26.23	27.02	27.02	27.02	27.02	27.02
Int.term loan	29.60	29.60	29.60	25.90	22.20	18.50	14.80	11.10	7.40	3.70
Depreciation	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01
Int.wr/capital	63.81	63.81	63.81	63.81	63.81	63.81	63.81	63.81	63.81	63.81
Values loss	50.73	50.73	50.73	53.27	53.27	53.27	55.93	55.93	55.93	58.73
Packing	83.62	83.62	83.62	85.29	85.29	85.29	87.00	87.00	87.00	88.74
Selling Exp.	126.83	126.83	126.83	133.17	133.17	133.17	139.83	139.83	139.83	146.82
Insurance	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Total	2451.75	2459.97	2470.69	2521.18	2526.46	2532.8	2585.27	2591.39	2597.8	2652.37

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	2536.56	2536.56	2536.56	2663.39	2663.39	2663.39	2796.56	2796.56	2796.56	2936.39
Expenditure	2451.75	2459.97	2470.69	2521.18	2526.46	2532.8	2585.27	2591.39	2597.8	2652.37
Profit	84.81	76.59	65.87	142.21	136.93	130.59	211.29	205.17	198.76	284.02
Depreciation	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01	30.01
Cash profit	114.82	106.6	95.88	172.22	166.94	160.6	241.3	235.18	228.77	314.03
Gross profit	84.81	76.59	65.87	142.21	136.93	130.59	211.29	205.17	198.76	284.02
Tax	29.6	26.80	23.05	49.77	47.92	45.70	73.95	71.80	69.56	99.40
Profit after tax	55.21	49.79	42.82	92.44	89.01	84.89	137.34	133.37	129.2	184.62

18. DEBT SERVICE COVERAGE RATIO (DSCR)

	Year	1	2	3	4	5	6	7	8	9	10
A	Profit	114.82	106.6	95.88	172.22	166.94	160.6	241.3	235.18	228.77	314.03
B	Int on term loan in lakhs	29.60	29.60	29.60	25.90	22.20	18.50	14.80	11.10	7.40	3.70
C	Installments	Nil	Nil	61.66	61.66	61.66	61.66	61.66	61.66	61.66	61.66
	DSCR	4.87	4.60	1.37	2.26	2.25	2.23	3.34	3.38	3.41	4.86

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

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

$$\text{Installment amount} = \frac{\text{Term loan}}{8} = \frac{493.26}{8} = 61.66 \text{ lakhs}$$

$$\text{Maximum DSCR} = 4.86$$

$$\text{Minimum DSCR} = 1.37$$

$$\text{Average DSCR} = 3.25$$

19. Break – Even Analysis:

Variable Cost	Rs. in lakhs
Raw material	1745.80
Packing	83.62
Wages & Salaries – 50%	137.03
Selling expenses	126.83
Int. on Working Capital	63.81
Value loss	50.73
Power cost	21.06
Total	2228.88
Fixed cost	Rs. in lakhs
Wages & Salaries – 50%	137.03
Repair & maintenance	26.23
Insurance	2.25
Depreciation	30.01
Interest on term loan	29.60
Total	225.12

Income by sales : Rs. 2536.56 lakhs

Sales – Variable cost : Rs. 307.68 lakhs

Break-Even point : Fixed cost X 95

 Sales-Variable cost

$$= \frac{225.12 \times 95}{307.68} = \mathbf{69.50 \%}$$

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

 Sales-Variable cost

$$= \frac{(225.12 - 30.01) \times 95}{307.68} = \mathbf{60.22 \%}$$

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	493.26	29.60	Nil	29.60	493.26
2	493.26	29.60	Nil	29.60	493.26
3	493.26	29.60	61.66	29.60	431.60
4	431.60	25.90	61.66	29.60	369.94
5	369.94	22.20	61.66	29.60	308.28
6	308.28	18.50	61.66	29.60	246.62
7	246.62	14.80	61.66	29.60	184.97
8	184.97	11.10	61.66	29.60	123.32
9	123.31	7.40	61.66	29.60	61.66
10	61.66	3.70	61.66	29.60	0

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

21. EXPENDITURE & PROFIT PER PIECE

Expenditure	:	Rs. 2451.75 lakhs
Selling Price	:	Rs. 2536.56 lakhs
Profit	:	Rs. 84.81 lakhs
Depreciation	:	Rs. 30.01 lakhs
Cash profit	:	Rs. 114.82 lakhs
Profit/pc	:	114.82 X 100000
		----- = Rs. 13.73/pc
		836160

22. Internal Rate of Return (IRR) : Initial Investment = Cash flows

$$739.89 = \frac{998.55}{1 + \text{IRR}}$$

IRR = 35%

23. Pay Back Period : **5 Years 6 Months**

Rupees in lakhs

Rupees in Lakhs

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	4	450	25,240	100960
2	Oshima Make Hand cutting m/c	4	750	42,066	168264
3	Oshima make Bandknife cutting m/c	2	3900	1,89,464	378928
4	Juki make DDL 8300 Model Single Needle stitching m/c	218	330	16,032	3494976
5	Juki make DDI 8700-7 model Electronic Single Needle stitching m/c	50	800	38,864	343200
6	Juki make DLM 5200 Model single needle stitch and Trimmer m/c	8	955	46,394	371152
7	Juki make LH 3128 Model Double Needle Stitching m/c	12	1320	64,126	769512
8	Juki make LH 3168 Model Split Needle bar Double Needle Stitching machineries	12	1850	89,874	1078488
9	Kansai Make Special M/c	8	2100	1,02,019	816152
10	Juki Make Overlock m/c	16	850	41,294	660704
11	Juki Make Feed of Arm	8	2200	1,06,877	855016
12	Juki Made LK-1900 Model Bar Tack m/c	4	3025	1,69,666	678664
13	Juki Make MEB 2000 Model Button Hole m/c	4	10500	5,10,096	2040384
14	Juki Make LBH-813 Button Hole M/c	4	2950	1,43,313	573252
15	Juki Make LK-1903 Button stitching M/c	8	4000	2,24,351	1794808
16	Oshima Make Cuff Turning m/c	2	4000	2,24,351	448702
17	Oshime make Collar Turning m/c	2	5100	2,86,048	572096
18	Oshima Make Fusing m/c	4	3000	1,68,263	673052
19	CAD System (Indigenous)	2	-	5,00,000	1000000
	Total	372	-	-	1,84,18,310 (or) 184.18 Lakhs

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

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

Errecta Charges – 2% = 3.68

Local Transport Expenses = 1.84

Total Cost of Imported machines Rs. 189.70 lakhs

Rupees in lakhs

Rupees in lakhs

1.4(a) Processing Machinery (Indigenous)

S.No	Name	No. of M/cs	Rate/ M/c in Rs.	Total Cost in Rs.
1	Washing Machine 150 Kgs capacity (Belley m/c)	3	475000	1425000
2	Hydro Extractor 100 Kgs capacity	1	200000	2,00,000
3	Drying Machine capacity 100 Kgs	4	150000	6,00,000
4	Washing m/c for sampling 35 Kgs capacity	2	100000	2,00,000
5	Hydro Extractor for sampling 25 Kgs capacity	1	75000	75,000
			Total	25,00,000

Erect Charges 2 % = 50,000

Local Transport charges 1 % = 25,000

=25,75,000

Total Cost of Processing machinery =Rs. 25.75 lakhs