MODEL PROJECT REPORT

MANUFACTURE OF POLEYESTER CHECK & FANCY SHIRTING'S.

Semi Auto Loom Project

(Replacing old Looms) (12 Looms)



PROJECT AT A GLANCE

1	Name of the unit	:	M/s XYZ Ltd.
2	Address of the unit (Factory & Office)	:	M/s XYZ Ltd.
			BablaLahoti Compound
			Kalyan Road, Bhiwandi
3	Product	:	Check & Fancy shirting's.
4	Capacity	:	2,35,000 mtrs per annum.
5	Power required	:	20 HP.
6	Principal Raw Material	:	Polyester Filament blended
			spun plain & fancy yarn.
7	Cost of the project	:	Rs. 32.09 lakhs
8	Means of Finance:		
	a) Proposed Capital.	:	Rs. 06.12 lakh.
	b) Term loan	:	Rs. 20.52 lakh
	c) Margin money (NEF).	:	Rs. 04.00 lakh
	Total	:	Rs. 32. 09 lakh.
9	Cost of production per annum.	:	Rs 44.03. lakh.
10	Annual Turnover.	:	Rs. 50.84 lakh
11	Annual Profit.	:	Rs. 06.81 lakh.
12	Break-even point	:	54.13%.
13	Debt service coverage ratio.	:	1.71
14	Debt equity ratio.	:	2.01:1(67:33).

PROJECT REPORT ON MODERNISATION OF M/s. XYZ SILK MILLS

1. INTRODUCTION:

Bhiwandi is well-known name on the textile map of the country. It has the distinction of having big concentration of cotton textiles & also man-made textile industry. Another distinction is that both the textile items are entirely in the decentralized sector. Bhiwandi believes the 'small is beautiful". Various types of textile fabrics manufactured in Bhiwandi are sari, shirting, dress materials etc. At present Bhiwandi produces 630 lakh mtrs of grey fabric per annum on maximum utilization of looms installed & total numbers of looms are about 4.5 lakhs. There are 100 sizing units, 20 power process houses & 20 hand process houses. The workers engaged in textile industry in this town are about 6.5. lakh. \although thee are adequate number of traders in the field of raw material and cloth trading, major quantity was controlled by the traders located in Mumbai the nearest city.

It is proposed to modernize M/s XYZ Silk Mills., by replacing plain looms with 12 Semi-Automatic looms for manufacturing of fancy shirting. The unit is presently equipped with 24 plain looms and weaving only low value synthetic fabrics on job work. As the demand for medium quality shirting fabrics is growing and the demand for the present low quality fabric is decreasing day by day, it is proposed to replace all exiting 12 plain looms with 12 Semi-automatic looms for manufacturing of fancy blended shirting. The old looms will discarded / scrapped. The said new 12 loom will be equipped, Pirn Winding Machines and other accessories

2. BASIS & ASSUMPTIONS:

- 1. The basis for the calculation of the production capacity is normally on 3- shift basis & 25 working days in a month. It is presumed that the unit may utilize its production capacity at the rate of 80% in the first year and thereafter at 90% of its capacity.
- 2. Non-refundable deposits, project report preparation costs etc., wherever needed may be considered under pre-operative expenses etc.

- 3. The rate of interest on term loan has been taken as 12% under TUFS and on working capital loan it is 15%. The project also proposed to avail upfront capital subsidy of Rs.4 lakh.
- 4. The break-even point has been calculated on the full capacity utilization basis.
- 5. The cost of machinery & equipment as indicated refer to a particular type. The prices are nearer to the true value/approximate and the same may vary slightly.
- 6. The provisions made in other respects viz., raw materials, personnel, utilities, overheads etc., are drawn on the basis of standard operation & output ratios and the costs indicated against each are approximate and based on local market condition & observations.

GENERAL CHARACTERISTICS OF THE PROJECT:

i) Products:

The unit will directly weave fancy shirtings by procuring Polyester Filament Blended Spun plain and Fancy Yarns without any further processing. The Semi-Automatic looms selected can also produce fabric varieties like Dress materials. Fancy saris apart from Fancy shirtings. Typical fabric varieties, which could be produced are as under:

Table-I:

S. No	Descripti	on	Warp	Weft	Reed	Pick	Grey width
1.	Check Sh	irting	80D	84DTex	80	84	38"
2.	Fancy Shirting	Stripes	150D	84D	64	72	38"

Unit is expected to handle approximately 26.60 tons of yarn valued Rs.30 lakhs per annum to produce 2.36 lakh meters fabrics valued at Rs.50.84 lakh.

Marketing:

Raw material for the project is available locally at competitive prices. In and around Mumbai including Bhiwandi, there exists processing capacity of 205 lakh meters per annum by power operated process houses and 95 lakh meters per annum by hand process house in addition to regular trading activities both in Grey (loom State) and finished fabric. There is no difficulty envisaged in selling the produced fabric. As the machines are equipped with all devices for production of defect free fabric, fabric for export and garment manufacturing also could be produced.

The proposal for upgradation of loom is made keeping in view the demand for medium quality check & fancy shirtings and availability of raw material. M/s XYZ Silk Mills will be having an edge over local existing units as it produces to install semi-automatic looms & accessories.

ii) Quality:

The proposed unit will appoint / hire experienced weaver jobber capable of producing defect free quality fabric. The unit will invariably get it product tesed in the PSC laboratory located at Bhiwandi.

2. ENTEERPRENEUR DETAILS:

The promoter Shri PQR is basically weaver and running a powerloom unit with 12 plain looms. Presently, he is undertaking job work of weaving low value blended fabric. As for as technical qualification is concerned, the promoter passed 12the standard but gained experience in weaving and managing his powerloom unit successfully.

Since the promoter possess creative nature & always tried to adopt new / modern techniques, he came forward to replace his plain looms with semi-automatic looms initially and made an extensive techno-economic & market survey of the product & decided to go for the proposed upgradation.

PROJECT ECONOMICS

1. Fixed Assets:

i) Land:

S.No.	Details	Existing
1.	Location of the unit	Babla Compound, Bhiwandi
2.	Area	3000 sq.ft.
3.	Lease hold/Fire hold	Free hold
4.	Value of the land (own	4.00 lakh

ii) Building:

S.No.	Details	Existing	
1.	Location of the unit	Babla	Compound,
		Bhiwandi	
2.	Covered Area:		
	i) Ground floor:		
	To house 12 old looms	720 sq.ft.	
	To house 1 Pirn winding machine	80 sq.ft.	
	Admn. Office	200 sq.ft.	
	Storage Space	500 sq.ft.	
	Generator	150 sq.ft.	
	Security & Toilets.	50 sq.ft.	
	Total covered area	1700 sq.ft.	
3.	Owned or leased	Owned	
4.	Cost of the building Ground Floor -	4,50,000	
	- 1700 sq.ft. @ Rs.265 per sq.ft.		
	Total	4,50,000	

iii) Machinery & Equipments:

S. No	Details of machinery	Nos.	Machine original/ Estimated cost	Total value	Date of installation.
	Proposed				
	Machinery:				
1.	Under pick semi- automatic looms, 4/1-push button, anti crack device with complete accessories, speed 140 RPM	12	1,38.400	16,60,800	-
2.	Dobby 16 SH, climax with accessories	12	15,000	1,80,000	-
3.	Prin Winding, 4 spindles, Auto with accessories	2	36,000	72,000	-

4.	Erection	&	13	3,000	39,000	-
	commissioning	of				
	13 Machines.					
	Total (b)				19,51,800	

iv) Furniture & Fixtures:

Particulars	Numbers	Amount
Office Chairs	6	6,000
Office Tables	4	16,000
Other Office Equipment	-	10,000
PC, with software & printer	1	70,000
Total		1,02,000

II. Annual Production:

On semi-automatic looms (for own production): (in meters)

S N o.	Fabric details	Mtrs/ Day/ M/c 100% (Eff.& Utility	Effi- ciency	Utilisa- tion	Production/ Machine / day	No. of M/cs	Prod/ day	Monthl y Produc - tion	Annual Produc- tion.
i)	Sort A Warp-60. Weft-60, EPI-108, PPI-64, Reed-48 Width-45	80	85%	90%	61	6	366	9150	109800
	Sort A Warp-30. Weft-60, EPI-84, PPI-56, Reed-48 Width-45	92	85%	90%	70	6	420	10500	126000
							786	19650	2,35,800

III. Recurring Expenditure (per month):

a) Warp:

Fabric/Yarn details	Warp "A"	Warp "B"	Total Warp
Rate (Rs./kg)	100	120	-
Wt./Mtr.	0.052097	0.08104	-
Total Weight (Kg.)	563	1000	1563
Cost of the Warp	56,300	1,20,000	1,76,300
(in Rs)			

b) Weft

Fabric/Yarn details	Weft "A"	Weft "B"	Total Weft
Rate (Rs./kg)	100	120	-
Wt./Mtr.	0.030242	0.0264612	-
Total Weight (Kg.)	326	326	652
Cost of the Weft	32,600	39,120	71,720
(in Rs)			

c) Cost of the Yarn/month (a+b): 1,76,300 + 71,720 = 2,48,020.

Say: 2,48,000

ii) Power:

20 HP @ 450/- per HP/month (including lighting) = Rs.9,000/-

(Existing power supply is sufficient to meet the power requirement after upgradation by way of installation of new semi-automatic looms)

iii) Maintenance cost per month:

Maintenance cost for 27 machines @ 100/- per month per machine = Rs. 1300/-

iv) Salaries & Wages:

S.No.	Details of Employee	No.(s)	Rate	Amount
				(in Rs.)
1.	Jobber	1	4500	4,500
2.	Weaver	19,650	1.50 per mtr	29,475
3.	Pirn Winder	1	1.750	1,750
4.	Mazdoor	1	1,500	1,500
5.	Beam drawer		125/ beam	4,000

6.	Checker	1	3,000	3,000
7.	Total:			44,225

v) <u>Miscellaneous Expenditure:</u>

S.No.	Expenditure incurred	Amount (in Rupees)
1.	Travelling Expenses	2000
2.	Telephone charges	1000
3.	Transportation	1000
4.	Lubricants & other miscellaneous	500
	Total	4500

iv) Total recurring expenditure:

S.No.	Item of expenditure	Monthly expenditure	Annual expenditure
1)	Raw Material	2,48,000	29,76,000
2)	Power	9,000	1,08,000
3)	Maintenance	1,300	15,600
4)	Salaries & Wages	44,225	5,30,700
5)	Miscellaneous	4,500	54,000
	Total	3,07,025	36,84,300

IV. Working Capital Requirement:

S.No.	Particulars	Period	Value
1.	Yarn cost	15 days	1,24,000
2.	Work in progress	15 days	1,24,000
3.	Finished stock	1 week	1,08,075
4.	Credit sales (30%)	1 week	1,29,690
5.	Other expenses	1 month	96,720
6.	Working capital requirement		5,82,485 Say 5,82,000

7.	Working capital margin(25%)	1,45,500
8.	Working capital loan	4,36,500

V. Cost of the Project:

(in lakhs)

S.No.	Particulars	Proposed	Total
1.	Land	4.50	4.50
2.	Building	4.50	4.50
3.	Plant & Machinery	20.00	20.00
4.	Furniture & Fixers	1.02	1.02
5.	Contingency5%	.1.12	1.12
6.	Working capital margin	1.45	1.45
	TOTAL	32.09	32.09

VI Means of finance:

(in lakh)

Sr.	Particulars	Proposed	Total
No			
1.	Capital	06.12	06.12
2.	Term Loan (@ 12% interest after TUFS)	20.52	20.52
3.	Up from capital Subsidy	4.00	4.00
4.	Working capital margin (under NEF)	1.45	1.45
5.	Total	32.09	32.09
6.	Working capital loan @ 15% interest	4.365	4.365

VII. Interest loans (per annum):

Sr. Paritculars	an Rate of Amount
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No		Amount	Interest	(in Rs.)
1.	Term Loan	4,36,500	15%	65.475
2.	Working Capital loan	20,52,000	12%	2,46,240
	Total			3,11,715

VIII. Depreciation (per annum)

Sr.	Paritculars	Value of	% of	Amount of
No		Asset	Depreciation	Depreciation
				(in Rs.)
1.	Land	4,00,000	5%	20,000
2.	Building	4,50,000	10%	45,000
3.	Plant & Machinery	20,00,000	10%	3,00,000
4.	Furniture & Fixtures	1,02,000	20%	20,400
	Total	29,52,000		3,85,400

IX. Insurance:

Sr. No	Paritculars	Value of Asset	% of Depreciation	Amount of Depreciation (in Rs.)
1.	Building	4,50,000	0.75%	3375
2.	Plant & Machinery	20,00,000	0.75%	15,000
3.	Furniture & Fixtures	1,02,000	0.75%	765
4.	Raw Material & Stock	2,32,000	1.00%	2320
	Total			21,460

X. Total cost of Production (per annum):

Sr. No.	Item of Expenditure	Amount (in Rupees)
1.	Total recurring expenditure	36,84,300

	Total	44,02,875
4.	Insurance	21,460
3.	Depreciation	3,85,400
2.	Interest on loans	3,11,715

XI. Annual Income:

Sr.	Production	Sales Value @ 22/-	Less Value	Net Sales.
No		per metre.	loss 2%	
5.	117900	24,75,900	49,518	24,26,382
6.	117900	27,11,700	54,234	26,57,466
	Total	51,87,600	1,03,752	50,83,848

XII. Profit Per Annum:

Annual Income	:	Rs. 5084000/-
Less cost of production	••	Rs. 4402875/-
Total	:	Rs. 6,81,000/-

XIII. Break even point (at 100% capacity utilization):

Fixed cost:					
Interest			Rs. 3,11,715/-		
Depreciation			Rs. 3,85,400/-		
Salaries of permanent employee	Rs. 42,000/-				
40% utilities			Rs. 43,200/-		
Insurance			Rs. 21,460/-		
Total	Rs. 8,03,775/-				
Break even point	:	Fixed Cost x 100			
		Fixed cost +Profit			

:	80375 x 100 803775 +681000 54134465
	54.13%

XIV. Interest Schedule:

Sr	Particulars	Preoperative of	I	II	III	IV	V	VI
No	of loan	loan (6 months)						
1.	Terms Loan:							
	1st quarter	61.56	61.56	61.56	54.72	41.04	27.36	13.68
	2nd quarter	61.56	61.56	61.56	51.30	37.62	23.94	10.26
	3rd quarter		61.56	61.56	47.88	34.20	20.52	6.84
	4th quarter		61.56	58.14	44.46	3078	17.10	3.42
	Sub Total:	123.12	133.88	123.71	198.36	143.64	88.92	34.20
2.	Working	16.37 (1st	61.56	65.48	65.48	65.48	65.48	65.48
	capital loan	quarter)	01.30	05.46	05.46	05.46	05.46	05.48
3.	Grand Total	139.49	311.72	308.30	263.84	209.12	154.40	99.68

XV. Loan Payment Schedule:

Sr	Particulars	Amount	Pre	I	II	III	IV	V	VI
No	of loan		operative						
			period						
1.	Terms			228	456	456	456	456	456
	Loan:			220	430	430	430	430	430
2.	Working	16.37							
	capital loan	(1st quarter)							
	Total			228	456	456	456	456	456

XVI. Depreciation Schedule:

Sr	Particulars	Value of a	Depre	I	II	III	IV	V	VI
No	of Asset	Asset (Rs)	ciation						
1.	Land	400	5%	20	19	18.5	17.147	16.290	15.475
2.	Building	450	10%	45	40.5	36.45	32.805	29.524	26.572
3	Machinery	2000	10%	200	180	162	145.8	131.22	118.09
4	Furniture & Fixtures	102	20%	20.4	16.32	13.056	10.444	8.356	6.685
	Total			285.4	225.82	229.56	206.20	185.39	166.83

XVII. Profitability:

(**Rs.** In 000s)

Sr	Particulars	Pre	I	II	III	IV	V	VI
No	of loan	operative						
		period						
1.	Capacity		80	90	90	90	90	90
	utilization (%)		80	90	90	90	90	90
2	Sales		4067.2	4575.6	4575.6	4575.6	4575.6	4575.6
3	Total							
	Recurring		2947.44	3315.87	3315.87	3315.87	3315.87	3315.87
	expenditure							
4	Gross profit		1119.76	1259.73	1259.73	1259.73	1259.73	1259.73
	(2-3)		1119.70	1239.73	1239.73	1239.73	1239.73	1239.73
5	Insurance		21.46	21.46	21.46	21.46	21.46	21.46
6	Interest	139.49	311.72	308.3	263.84	209.12	154.44	99.68
7	Depreciation		285.40	255.82	229.56	206.20	185.39	166.83
8	Net profit	120.40	501.10	(74.15	744.07	022.05	000.40	01.76
	(4-5,6,7)	-139.49	501.18	674.15	744.87	822.95	898.48	91.76
9	Taxes		150.25	202.25	222.46	246.00	260.54	201.52
	(30% approx)		150.35	202.25	223.46	246.89	269.54	291.53
10	Net profit/loss	120.40	250.02	471.01	501.41	576.07	(20.04	000.22
	after taxes	-139.49	350.83	471.91	521.41	576.07	628.94	980.23

XVIII. Debt service coverage ratio:

Sr	Particulars of	Preoperative	I	II	III	IV	V	VI
No	loan	period						
1.	Profit after	(-) 139.49	350.8	471.9	521.4	576.0	628.9	680.2

	interest & taxes							
2	Depreciation		285.4	255.8	229.5	206.2	185.3	166.8
3	Repayment of term loan	0		22	45	45	45	45
4	Repayment of margin money	123.12	246.2	242.8	198.3	143.6	88.9	34
5	Interest due (term loan)	-0.13	3.5	2.0	1.4	1.5	1.6	1.8
6	DSCR	-139.49	350.8	471.9	521.4	576.0	628.9	680.2
7								

Average DSCR = 1.71.

XVIII. Debit equity = 2.52/6.12+40 = 2.01.1

XX Cash Flow \ Statement: (Rs. In lakhs)

Sr No	Particulars of loan	Pre operative period	I	II	III	IV	V	VI
A.	Sources:							
1	Owner's capital	6.12						
2	Term Loan	20.52						
3	Margin Money Assistance (NEF)	4						
4	Working capital loan	4.36						
5	Profit (before interest & after depreciation)		1098	12.38	12.38	12.38	12.38	12.38
6	Depreciation		2.8	2.5	2.3	2.0	1.8	1.6
7	Sale of old machinery							
	Total of A:	36.45	13.83	14.940	14.678	14.444	14.23	14.05
B.	Applications: Fixed Assets							

	Land	4						
	Building	4.5						
	Machinery	20					30*	20*
	Furniture & Fixtures	1.02	-					
2	Current Assets	5.82						
3	Repayment of term loan			2.28	4.56	4.56	4.56	4.56
4	Repayment of margin money assistance							
5	Interest	1.39	3.12	3.08	2.64	2.09	1.54	1.00
6	Contingency	1.20						
	Total of B	37.93	3.12	5.36	7.20	6.65	36.10	25.56
С	Opening balance:		-1.48	9.23	18.81	26.29	34.09	12.22
D	Net Surplus (A-B)	-1.48	10.72	9.58	7.48	7.79	-21.87	11.51
E	Closing Balance	-1.48	9.23	18.81	26.29	34.09	12.22	0.71

[•] It is proposed to install imported second hand shutteless looms in 5th & 6th year Production Sales & Expenditure etc., on operation of shutteless looms is not worked out **Return on investment:** = 21.2%