MODEL PROJECT REPORT (For Twelve Surya automatic Looms)

OF

M/s Ansari Ltd., Malegaon - 423 203

PROJECT REPORT ON MODERNISATION OF M/S Ansari LTD., MALEGAON

1. Introduction:

Malegaon is well known as the "City of Powerloom". It has the distinction of having concentration of cotton textiles & also man – made textile industry. Another distinction is that both the textile items are entirely in the decentralised sector. Various types of textiles fabrics manufactured in Malegaon are cotton Poplin / Cambric cloth, Saree, synthetics grey fabrics. At present Malegaon produces 80 Lakhs meters grey fabrics per annum on maximum utilisation of loom installed and total numbers of looms are about one Lakhs. There are 75 no sizing units, two no. Process houses. The worker engaged in Textiles industry in these towns are near about 2.5 Lakhs, although there 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 modernise M/s Ansari ltd., by replacing old plain looms with 12 nos. Surya Automatic looms for manufacturing of Fancy Shirting under Technology Upgradation Fund scheme. The unit is presently equipped with old plain looms and weaving only low value synthetics 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 old plain looms for manufacturing of fancy blended shirting.

2. Basis & Assumption:

- A) The basis for the calculation of the production capacity is normally on 2-shift basis of twelve hours each & 350 working days in a year. It is presumed that the unit may utilize its production capacity at the rate of 70% in the first year and thereafter at 80% of its capacity.
- B) Non- refundable deposits, project report preparation costs etc., wherever need may be considered under pre- operative expenses etc.
- C) The rate of interest on term loan has been taken as @ 7% under TUFS and on working capital loan it is on @ 12%.
- D) The break-even point has been calculated on the Third year utilisation basis, i.e., 95%.
- E) The cost of machinery and equipments as indicated refer to a particular type. The prices are nearer to the true value/ approximate and the same may slightly vary.
- F) The provisions made in the respects viz. raw material, personnel, utilities, overheads etc., are drawn on the basis of standard operation and output ratios and the costs indicated against each are approximate and based on local market condition and observation.
- G) The power costs are calculated on two slabs. One for machine, which is under subsidised rate and another for lighting it, is unit rate basis.

3. General Characteristics of the Project:

- A) Products: Besides the existing low value synthetic grey fabrics, the unit will directly weave fancy shirting or any other sort as per the demand in market on job work basis.
- B) Marketing: It is expected that the new project will get sufficient job work order in local market and also from the garment manufacturers, as the machine is well equipped with sophisticated device for producing defect free fabrics.
- C) Quality: The proposed unit will appoint /hire experienced weaver / jobber capable of producing defect free quality fabrics. The jobbers and weaver will be given advanced training on such type of loom available at PSC-Malegaon. The unit will invariably get its products as well as raw material tested in the PSC-Laboratory located at Malegaon.

4. Entrepreneurs Details:

The promoter of Shri Ansari ltd. is a basically weaver and running a Power loom unit. Presently he is undertaking job work of weaving low value synthetics fabrics. As far as technical qualification concerned, the promoter has under gone Advanced Training on Rapier Loom at PSC-Malegaon.

Since the promoter possess creative nature and always tried to adopt new / Modernised techniques, he came forward to replace his old plain looms with rapier looms. Initially he made an extensive techno economic and market survey of the product and decided to go for the proposed Upgradation.

PROJECT AT A GLANCE

1. Installed Capacity	: 12 Looms
2. Type of Looms	: Automatic Looms (Surya)
3.Production Capacity/Day	: 67154 Pick-mtr./day
4.Project cost	: 54.37 Lakhs
5. Debt: Equity Ratio	: 1.9:1
6.Equity	: 18.37 Lakhs
7.Term Loan	: 36 .00 Lakhs
8.Sales Realisation	: 25.38 Lakhs
9.Cost of production	: 10.10Lakhs
10.Gross Profit	: 15.28Lakhs
11.Net Profit	: 7.029Lakhs
12. Break Even point	: 59.03%

Assumption

1. Status of the project	Sale in job work
2. No. of working days	350 days
3. No. of working hours/days	24 hours
4. Capacity Utilisation	70%/80% & 90% respectively
5. Cost of power	@ 310/- per hp/ month
6. Cost of water	@ 6.00/- per cu.mtr
7. Interest on Term Loan	@ 7%
8. Interest on working loan	@ 12%
9. Selling price	@ 0.12 paise per picks mtr
10.Picks per inch	40

Project Report Of 12 Surya Automatic looms for Ansari Textiles, malegaon

Weaving Production planning:

Automatics Shuttle Loom

100% Utilization

Loom Speed (RPM)	Efficiency %	Picks Per Day	Numbers of Looms	Total Picks/ Day	Picks metre/ Day
180	100%	220,320	12	2643840	67,154
First Year	70%				47,008
Second Year	80%				53,723
Third Year	90%				60,438

Estimates of Cost Of The Project

Summary of cost of project

Description	Rupee Cost (lakhs)	Total Cost (Lakhs)
Land	2.50	2.50
Site Development	-	-
Buildings	7.50	7.50
Plant & Machinery	33.44	33.44
Miscellaneous Fixed Assets	5.05	5.05
Preliminary and preoperative expenses	2.42	2.42
Provision for contingencies	2.55	2.55
Margin Money for working Capital	0.91	0.91
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Land & Site Development:

Cost of Land (Rs. 500 Sq.mtr) 500sq. mtr 2.50 Lakhs

Building & Civil Works:

Loom shed including store	250 sq .mtr
Average Cost Of construction @ Rs.3000 Sq.mtr	7.50 Lakhs

Plant & Machinery

Sr. No	Descripion	Unit Price (Rs/Lakhs)	No.of Units	Total Price (Rs./Lakhs)
1.	Surya Automatics Looms	2.50	12	30.00
2.	Pirn Winding 6 spindles	0.30	01	0.30
3.	Inspection Tables	0.10	01	0.10
	Total 1 to 3			30.40
	Other Expenses packing/			3.04
	transport etc. Grand Total			33.44

MFA –Indigenious

Description	Total (Rs./Lakhs)
Humidification	1.00
Electrical Installation	2.50
Water supply and drainage	0.25
Fire Fighting equipment	0.05
Air Compresseor	0.25
Weighing equipment	0.05
Workshop equipment	0.10
Material Handling	0.50
Office equipment	0.10
Computers	0.25
Total	5.05

Margin Money for Working Capital :

Bank Particulars Period in Amount % Margin month Finance Money @25% 0.07 0.06 0.01 Consumables stores & spares 75 1 month 20 days Work in progress 75 0.56 0.42 0.14 Factory overheads including 0.77 0.77 1 month wages Salaries & utilities 100 1.65 0.00 1.65 Debtors 1 month Total 3.04 2.13 0.91 Interest on working capital @ 0.26 12%

For Second Year

Total

0.29

For Third Year

Means Of Finance:-

Sr.No	Description	Amount (Rs./Lakhs)
1	Total Equity	18.37 (Rounded)
2.	Total Term Loan	36.00
	Total	54.37

Debt to equity ratio= 1.9:1 for the project

Operating Cost Details:-

Weaving (Store & Spares)	Rs./Day	Rs. Lakhs/Annum
Weaving section @ Rs.10/M/c/ Shift	360	1.26
Total		1.26
First Year 70% Utilisation		0.88
Second Year 80%		1.01
Third Year 90%		1.13

FIRST YEAR (Rs. In Lakhs)

0.32

Sr. No	Items	No.of M/c	KW/Inst per M/c		M/c to be	Work ing hours	KW x Hrs
					worked		
1	WeavingPirn winderLoomSub Total:1	1 12	0.50 1.50	0.50 18.00 18.50	1 12	22.50 24	11.00 432 443
2	Humidification Plant Air Compressor Miscellanous	1	2.00 0.50 0.50	2.00 0.50 0.50	0.50	24.00 2.00 4.00	48 1 2
3	Sub Total:2 Lighting Sub Total:3		3.00 3.75	3.00 3.75 3.75		16.00	51 60 60
	Grand Total			25.00			554

Total Connected Load: 25 KW

Power cost:

- For M/c-----21.50 KW= 29 hp
- 29 hp x @ 310 x 12 ----- = 1.08 Lakhs
- For Lighting------3.75 KW
- 3.75 x 16-----60 KWH
- 60 x350 x @4.00 -----= 0.84 Lakhs
- Total Annum = 1.92 Lakhs

Water Requirement/ Cost:-

Human Consumption	0.50
Humidification	8.0
Total Requirement/Day	9.0 (Rounded)
Cost of water/ Annum @ 6.00/cu.mtr	0.18
Rs.Lakhs	
First Year 70% Utilisation	0.12
Second Year 80%	0.14
Third Year 90%	0.16

Labour Compliment and wages

Description	Work Load	SH	I F T	TOTAL
		First	Second	
Pirn Winder		1	1	2
Drawing-in	1 Drawers/stand	2		2
Weavers	12 looms/weaver	1	1	2
Jobbers		1	1	2
Reliver/ helper		1	1	2
Material handling		1		1
Watchman/ Sweper		1	1	2
Total Number of worker		8	5	13

Reliver working for	2
7 days	
Grand Total	15
Wages per Annum	3.60 Lakhs

Factory Supervisory and technical staff and their salaries:-

Designation	No. of persons engaged			gaged	Monthly salary in Rs.	Total salary per month Rs.	
	Gen	Ι	П	Total			
Production	-	1	-	1	5000.00	5000.00	
Supervisior							
Clerk	-	1	-	1	2500.00	2500.00	
Grand							
Total	-	2	-	2		7500.00	

Therefore total salary per annum = Rs. 0.90 Lakhs

Summary of Salaries and Wages

Description	1 St	2^{ND}	3 RD	4 Th	5 Th	6 Th	7 Th	8 Th	9 Th	10 Th
Wages per	3.60	3.78	3.97	4.17	4.38	4.59	4.82	5.07	5.32	5.58
annum										
Fringe	1.08	1.13	1.19	1.25	1.31	1.38	1.45	1.52	1.60	1.68
benefits										
Total	4.68	4.91	5.16	5.42	5.69	5.97	6.27	6.59	6.91	7.26
Staff	0.90	0.95	0.99	1.04	1.09	1.15	1.21	1.27	1.33	1.40
Salaries										
Fringe	0.27	0.28	0.30	0.31	0.33	0.34	0.36	0.38	0.40	0.42
benefits										
Total	1.17	1.23	1.29	1.35	1.42	1.49	1.57	1.65	1.73	1.82

Sales Realisation: Job work

Job Work	Picks mtrs per day	Rs. Per picks per mtr.	Rs./ Day	Rs. Lakhs/Annum
Job work on automatic shuttle loom	67154	0.12	8058	28.20
Total	67154			28.20
First year 70%				19.74
Second Year 80%				22.56
Third Year 90% Utilization				25.38

Financial projection Estimation of cost of Production

Operating years	1 st	2 ND	3 RD	4 Th	5 Th	6 Th	7 Th	8 Th	9 Th	10 Th
Installed Capacity	12	12	12	12	12	12	12	12	12	12
Capacity Utilisation	70	80	90	90	90	90	90	90	90	90
Estimated production picks mtrs/day	47003	53723	60438	60438	60438	60438	60438	60438	60438	60438
Raw material consumables	0.88	1.01	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Power	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Water	0.12	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Labour wages	4.68	4.91	5.16	5.42	5.69	5.97	6.27	6.59	6.91	7.26
Staff salaries	1.17	1.23	1.29	1.35	1.42	1.49	1.57	1.65	1.73	1.81
Repair & Maintt	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.11	0.12	0.13
Factory building repair	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.10	0.11	0.12
Insurance	0.15	0.17	0.18	0.20	0.22	0.24	0.27	0.29	0.32	0.35
Rent, rates & taxes	0.10	0.11	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.24
Total	9.12	9.61	10.09	10.45	10.85	11.25	11.69	12.13	12.61	13.13

Estimates of Working Results

Operating years	1 St	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th
Cost of Production	9.12	9.61	10.09	10.45	10.85	11.25	11.69	12.13	12.61	13.13
Selling expenses .25%	0.0228	0.024	0.025	0.026	0.027	0.028	0.029	0.030	0.031	0.032
Cost of goods sold	9.12	9.63	10.10	10.47	10.87	11.27	11.71	12.16	12.64	13.16
Domestic sales: Job Work	19.74	22.56	25.38	25.38	25.38	25.38	25.38	25.38	25.38	25.38
Gross operating profit	10.62	12.93	15.28	14.91	14.51	14.11	13.67	13.22	12.74	12.22
Interest on rupee loan @ 7%	02.52	02.52	02.52	02.10	01.68	01.26	0.84	0.42	-	-
Interest on Working capital @ 12%	0.255	0.223	0.191	0.159	0.127	0.095	0.063	0.031	-	-
Total Interest	2.775	2.743	2.711	2.259	1.807	1.355	0.903	0.451	-	-
PBD	7.845	10.18 7	12.56 9	12.651	12.703	12.75 5	12.767	12.769	12.74	12.22
Depreciation (SLM)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
PBT	2.845	5.187	7.569	7.651	7.703	7.755	7.767	7.769	7.74	7.22
Corporate Tax	0.11	0.33	0.54	0.58	1.94	2.82	3.11	3.34	3.45	3.39
PAT	2.735	4.857	7.029	7.071	5.763	4.935	4.657	4.429	4.29	4.33

Calculation of Depreciation (SLM)

Factory Building	0.28
Plant & Machinery	3.74
Other Misc. Fixed assets	0.56
Furniture and fixtures	0.01
Total	5.00 Lakhs

Break even Points	
1) Sales (Net)	25.38 lakhs
2) Variables-	
- Consumables	1.13
- Utilities	2.08
-Interest on working	
Capital	0.191
- Selling expenses	0.025
ΤΟΤΑΪ	3.426 Lakhs
3) Contribution (A-B)	21.954 Lakhs
4) Fixed Cost	
- wages & salaries	6.45
-Factory Overheads	0.43
-Interst on term loan	2.52
-Depreciation	5.00
TOTAL	14.40
Break Even Point	$= \frac{14.40 \times 90 \text{ (for third Year)}}{21.954}$
	= 59.03 %

Repayment Schedule

Sr.No.	Opening	Installment	Balance	Interest	Total
	Balance				Amount
1	36.00	-	36.00	2.52	2.52
2.	36.00	-	36.00	2.52	2.52
3.	36.00	6.00	30.00	2.52	8.52
4.	30.00	6.00	24.00	2.10	8.10
5.	24.00	6.00	18.00	1.68	7.68
6.	18.00	6.00	12.00	1.26	7.26
7.	12.00	6.00	6.00	0.84	6.84
8.	6.00	6.00	-	0.42	6.42

Sr.No.	Opening	Installment	Balance	Interest	Total
	Balance				Amount
1.	2.130	0.26625	1.863	0.2556	0.5218
2.	1.863	0.26625	1.597	0.2235	0.4897
3.	1.597	0.26625	1.331	0.1916	0.4578
4.	1.331	0.26625	1.064	0.1597	0.4259
5.	1.064	0.26625	0.798	0.1276	0.3938
6.	0.798	0.26625	0.532	0.0957	0.3619
7.	0.532	0.26625	0.266	0.0638	0.3300
8.	0.266	0.26625	-	0.0319	0.2981

Repayment of Working Capital