

PROJECT PROFILE

ON

AUTOLOOM FABRICS

Month & Year

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AUTOLOOM FABRICS

INTRODUCTION:

Fabrics are required for domestic market and for exports. Fabrics are made with conventional power-looms. There are several disadvantages in this type of weaving and fabrics made with automatic looms have improved quality, good patterns, higher productivity which is required both by domestic users and overseas buyers. There is a good potential for making the fabric with auto-looms. The proposed unit is an export oriented one.

PRODUCT USES & SPECIFICATIONS:

Bureau of Indian Standards has prescribed ISI 3297:1993 for Dress Fabrics, 11195:1985 for Blend composition of Textiles. The fabrics are used for manufacturing garments, curtains, furnishings and various other uses.

MARKET POTENTIAL:

Indian textile industry has gone through the metamorphosis from being a 'cottage industry' to the state of supremacy. The industry is the second largest employer in India, next to agriculture. It generates employment opportunities for approximately 33.17 million workers directly, and 54.85 million workers indirectly, making a massive total of 88.02 million.

Until the clutch of recession took over, it was a doorsill of growth. Indian textile industry was one of the world's best performing industries, during the past few years, but now there is a downtrend in the industry graph.

The first to come out of the recession blues, the textiles industry – especially the spinning sector – holds promise.

Spinning is the largest organised sector in the textiles industry. It provides employment to nearly 1 million people. The installed capacity of spindles in India makes for 24 per cent share of the global market.

India is one of the biggest exporters of yarns. Having modern functions and favourable fiscal policies, the country accounts about 25 per cent of the world trade in cotton yarn.

Besides, there are a large number of subsidiary industries – machinery manufacturers, accessories, stores, ancillaries, dyes and chemicals – dependent on this sector.

Textile production (covering man-made fibre, filament yarn and spun yarn) showed a minor setback in 2008-09. However, this is set to rise in the coming days on a revival in demand and Government-supported initiatives such as the flagship Technology Upgradation Fund Scheme (recently frozen), setting up of integrated textile parks, allowing 100 per cent foreign direct investment in the textile sector through the automatic route and the Technology Mission on Cotton that has helped to increase output with lower contamination levels and better quality, making it much sought after on the export front.

Outlook

Billed as capital intensive, the spinning sector is a highly sophisticated vertical in the textiles industry. A CRISIL research report expects investments of Rs 20,600 crore during 2009-10 to 2011-12 in textiles. Of this, Rs 4,400 crore is likely to be pumped in to the spinning sector.

Higher demand

After witnessing a sharp decline in 2008-09, the demand for yarn is likely to grow at a healthy pace because of improved economic conditions globally.

Prices are likely to stay firm this year due to the availability of cotton yarn.

The imposition of 15 per cent regulatory duty on cotton yarn exports by Pakistan is likely to generate demand for Indian yarn. Cotton prices in India are also set to increase.

Pakistan will be passing the price hike to overseas buyers partly, as global demand is high. Thus, Pakistan's exports may shrink resulting in a demand for Indian yarn.

The Government has made cotton yarn exports less attractive by withdrawing duty refunds. The demand for yarn will subsequently send cotton prices to a high.

Despite the recession in exports, the domestic market for textiles is not affected very heavily as the local demand is still growing at a slower rate. In the export front also the hosiery exports from Tirupur, though the rate of growth has fallen down, it shows a marginal increase indicating the increase in consumption of yarn. It is expected that the market would pick up gradually.

Source: Economic Times

Modernisation and upgradation are very critical in textile industry for competing effectively in the changing market conditions. The complacency of exporting textile products using conventional production methods would no longer work in the changed environment. Weaving technology (fabric making) in textile industry has undergone changes with reference to quality requirements imposed by foreign buyers from time to time. The general improvement in standard of living of the people, the technological upgradation, identification of harmful chemicals and improved methods used for manufacturing textiles have resulted in adoption of latest technology in textiles fibres, yarns and fabrics. Adopting modern methods for converting yarn into fabric has emerged as an essentiality in textile industry as the conventional methods adopted in ordinary looms have become obsolete.

Weaving requires additional investment and more and more auto looms have to be installed

TECHNICAL ASPECTS:

INSTALLED CAPACITY:

The installed capacity is 2285 metres per day for 16 machines, on 3 shift basis. This works out to 800000 metres of fabric per annum for 350 working days. The capacity has been worked out based on a standard configuration of typical fabrics presently required by customers.

The general cotton fabrics required in foreign market are

2/40 x 20	2/17 x 2/17
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60 x 56	36 x 40

They are normally checked fabrics.

PLANT & MACHINERY:

SI	Particulars	Nos.	Rs.lakhs.
1	Rapier looms	16	128.00
2	Section warper	1	24.00
3	Hank to conewinder	1	18.00
4	Loom accessories	16	14.00
5	Beam lifting trolley		1.50
6	Warp tying M/c.		3.00
7	Batching M/c.		2.00
8	Bailing M/c.		2.00
9	Single folding		1.80
10	Cloth doffing		1.50
11	Lab equipment		3.00
	Total		198.80
	Electricals		6.00
	Genset		3.00
	Total		9.00

MANUFACTURING PROCESS:

THE WEAVING PROCESS CONSISTS OF:

1. WARPING:

The grey yarn and dyed yarn of required count number is first converted into a warp which will be used as longitudinal threads in weaving. For this, the yarn which is in cone form will be orderly arranged in a creel numbering 500 to 1000 metres. If the yarn is in hank form, the hand to cone winding machine is used to wind yarn on cones. The threads from the creel are taken through suitable guides and tensioners and through condensing reed to a warp beam. Then, in a warping machine, yarns are arranged in a mat form for facilitating the weaving process.

2. WEFT PREPARATION:

In weaving, we require (weft) cross wise threads with longitudinal threads. Therefore, the crosswise threads are inserted as weft in Rapier looms through double guided floating griper.

3. PROCESS WEAVING:

The weaving process in the loom shed effects interlocking of two sets of threads, one longitudinal termed as warp and other transverse, called as weft, to manufacture a fabric on the looms. The weaving process is accomplished by the operations of three primary loom motions, namely shedding, pricking and beating up. In order to produce figured patterns of fabrics shedding devices like dobbies and jacquards are attached to a loom.

Disadvantages:

To overcome disadvantages of shuttle-loom several different kinds of shuttleless looms have been developed. Rapier looms have double rapiers. One rapier feeds the filling yarn half way through the shed of warp yarns to the arm on the other side, which reaches in and fixes is across the rest of the way. They can produce a wide variety of fabrics, ranging from muslin to drapery and upholstery materials.

RAW MATERIALS

The raw material for weaving fabric is Cotton yarn. The yarn can be procured from textile spinning mills or from yarn dealers located in Salem, Erode, Tirupur Coimbatore. The yarn will be single or double. The regular counts used in

weaving are 17s, 20s, 40s, 60s and 80s. The yarn will be dyed according to requirements.

LAND & BUILDING:

Loom shed	4000 sqft.
Warping hall	1000 sqft.
Raw Material godown	300 sqft.
Finished Products godown	300 sqft.
Generator shed	300 sqft.
Admn. Office, Laboratory	300 sqft.
Toilet Block	300 sqft.

Rent Rs. 65000 per month as advance Rs. 6.50 lakhs.

UTILITIES

Electricity: For operating the machinery the power load required is about 67 HP.

Water: Water is not required for process and required only for human consumption.

Effluent Treatment: Not required

Man Power Requirement

Production		Rs./Month	Rs./Month	Rs.lakhs
Works Manager	1	12000	12000	0.12
Supervisors	3	8000	24000	0.24
Weavers	12	6000	72000	0.72
Helpers	2	4000	8000	0.08
Electricity fitters	2	4000	8000	0.08
Packing, Cutting, Folders	3	3000	9000	0.09
Loading & Unloading	2	3000	6000	0.06
Accountant	1	5000	5000	0.05
Assistants	3	4000	12000	0.12
Export Manager	1	8000	8000	0.08

				1.64
ADD: Benefits 20%				0.33
Total				1.97
Annually		Say	Rs.23.64 lakhs.	

IMPLEMENTATION SCHEDULE:

The project is implemented within 6 months' period.

COST OF PRODUCTION & PROFITABILITY

ASSUMPTIONS:

Installed capacity	800000 metres per annum of standard 50" fabrics. The production for 16 looms per day is 2285 metres will be produced. The production per loom works out to 143 metres per day on an average.
Capacity utilisation	Year-1 -60% Year -2 -70% Year-3 onwards- 80%
Selling price	Rs. 58 per meter
Duty Drawback	3% is assumed.
Raw materials	Yarn per metre is assumed at Rs.38/-.
Power	Rs. 22.16 lakh per annum at 100% capacity utilisation.
Wages and salaries	Rs. 23.62 lakhs as per the break up given above with increase of 5% every year.
Repairs and Maintenance	Rs. 1.20 lakhs per annum with annual increase of 10%.
Depreciation	Written down value method -15 % on machinery
General and administrative expenses	Rs.6.00 lakhs for the first year with annual increase by 5% on every year.
Selling expenses	2% on sales.

Interest on Term loan	12% per annum
Interest on working capital	12 % per annum
Income tax	33.22 % on profits

LIST OF MACHINERY SUPPLIERS

AUTOLOOMS

1. M/s. Himson Textile Engineering Ltd., 1101, Raheja Centre, Nariman Point, Mumbai - 400021
2. M/s.Lakshmi Automatic Loom Works Ltd., 1100, Avanashi Road, Coimbatore-37

SECTIONAL WARPING MACHINE

1. M/s. Essen Marketing Services, 4, Lower Ground Floor, Parsn's Trade Plaza, 156, Dr. Nanjappa Road, Coimbatore - 641018.

OTHER ACCESSORIES

1. M/s.Vibrant Engineers Pvt. Ltd., 36, SC, Palanisamy Gounder Street, Rathinapuram, Coimbatore - 641027.

RAW MATERIAL SUPPLIERS

All major spinning mills in Erode, Salem, Coimbatore, Dindigul areas.

FINANCIAL ASPECTS

1. COST OF PROJECT

	[Rs.lakhs]
Building (Advance)	6.00
Plant & Machinery	198.80
Electrical	9.00
Other Misc. assets	2.00
Pre-Operative expenses	8.05
Margin for WC	13.13
	<u>236.98</u>

2. MEANS OF FINANCE

Capital	101.98
Term Loan	135.00
	<u>236.98</u>

3. COST OF PRODUCTION & PROFITABILITY STATEMENTS

	[Rs.lakhs]			
Years	1	2	3	
Installed Capacity (Mtrs. in lakhs)	8	8	8	
Utilisation	60%	70%	80%	
Production/Sales (Nos. in lakhs)	4.80	5.60	6.40	
Selling Price	Rs.58.00	per metre		
Sales - Exports	278.40	324.80	371.20	
Add: Duty Drawback	3%	8.35	9.74	11.14
Sales Value (Rs.lakhs)	286.75	334.54	382.34	
Raw Materials	182.40	212.80	243.20	
Power	13.30	15.51	17.73	
Wages & Salaries	23.62	24.80	26.04	
Repairs & Maintenance	1.20	1.32	1.45	
Depreciation	32.58	27.70	23.55	
Cost of Production	253.10	282.13	311.97	
Admin. & General expenses	6.00	6.30	6.62	
Selling expenses	5.57	6.50	7.42	
Interest on Term Loan	16.20	14.18	10.13	
Interest on Working Capital	6.27	6.27	6.27	

Total	287.14	315.38	342.41
Profit Before Tax	-0.39	19.16	39.93
Provision for tax	0.00	6.36	13.26
Profit After Tax	-0.39	12.80	26.67
Add: Depreciation	32.58	27.70	23.55
Cash Accruals	32.19	40.50	50.22

4. WORKING CAPITAL:

	Months Consumptions	Values	%	Margin Amount	Bank Finance
Raw Materials	2.00	30.40	25%	7.60	22.80
Finished goods	0.50	10.55	25%	2.64	7.91
Debtors	1.00	23.90	10%	2.39	21.51
Expenses	1.00	0.50	100%	0.50	0.00
		<u>65.35</u>		<u>13.13</u>	<u>52.22</u>

5. PROFITABILITY RATIOS BASED ON 80% UTILISATION

$$\frac{\text{Profit after Tax}}{\text{Sales}} = \frac{26.67}{382.34} = 7\%$$

$$\frac{\text{Profit before Interest and Tax}}{\text{Total Investment}} = \frac{56.33}{289.20} = 19\%$$

$$\frac{\text{Profit after Tax}}{\text{Promoters Capital}} = \frac{26.67}{101.98} = 26\%$$

6. BREAK EVEN LEVEL

Fixed Cost (FC):

	[Rs.lakhs]
Wages & Salaries	26.04
Repairs & Maintenance	1.45
Depreciation	23.55
Admin. & General expenses	6.62
Interest on TL	<u>10.13</u>
	<u>67.79</u>

Profit Before Tax (P) 39.93

$$\text{BEL} = \frac{\text{FC} \times 100}{\text{FC} + \text{P}} = \frac{67.79}{107.72} \times \frac{80}{100} \times 100$$

50% of installed capacity