

2019

Business Plan for Production of Non Woven Mattress



1/1/2019

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SECTION ONE

EXECUTIVE SUMMARY

- 1.1 **The company, M/s J. S. Gautam Enterprise Limited**, (a.k.a. JSGEL), has been incorporated to carry on the business of the manufacture of various Technical Textile Production including thermo bonded mattress, Incorporated in June 2014 as a private limited liability company, its authorized and paid-up share capital currently of Rs. 9,00,000 (Rs 9 Lakhs) divided into Ninety Thousand ordinary shares of Rs 10.00 each.
- 1.2 **The company is incorporated for establishing this project by Mr. Jitendra Singh Gautam and Mr. Dharmendra Singh.** The following business plan relates to a proposal by the company to establish and operate facilities for the manufacture of:
- Thermo Bonded Polyester Mattress

This programme when fully implemented will enable the plant have the following installed capacities:

S.No	Products	Unit	Capacity
1.	Polyester Thermo Bonded Mattress	Kgs	10,700

The plant is capable to manufacture all required sizes of mattress available in market. For the business plan the following products have been identified:

S.No	Products	Unit	Capacity	Unit Weight/ Kg	Total Weight Kgs
1.	Economical Products	No	2,000	2.38	4757
2.	Mid Rangel Product	No	1,000	5.98	5947

1.3 **T**he proposed outputs are predicated on the company operating three shifts per day each of eight (8) hours per day and for 350 days per annum. The project's capacity utilization is expected to increase from 55% in the first year of commercial operations to 60% in the second year and progressing steadily to 80% from the fifth year onwards.

1.4 **W**hereas the company's registered and corporate office is situated at Plot No -848, Village & Plot Mauhar, Tehsil Bindhki, Distt. Fatehpur, U.P, the factory is being located on N.H.-2 Plot No -1124, Village & Plot Mauhar, Tehsil Bindhki, Distt. Fatehpur, U.P. The location is about 35 Kms from Kanpur City on National Highway No 2.

The factory and Corporate office is located on National Highway No 2 and about 35 Kms from Kanpur City. The site location is accessible all year round and is adequately served with such infrastructural facilities as electric power from the national grid and telecommunication facilities and water services. However, to avoid unintended interruptions to its operations, the company has made provisions for alternative power and water resources for its own use.

1.5 **T**he total cost of the project at the completion of programme implementation is estimated at **Rs 3,109 Lakhs** , including margin money of working capital of **Rs 201 Lakhs**

The total project cost of **Rs 3,109 Lakhs** at the end of programme implementation is expected to have been financed from Shareholders' total contribution of **Rs 1,208 Lakhs**, a long term loan of **Rs 1,812 Lakhs**. The proposed financing plan gives a long-term debt/equity ratio of **1.50: 1** and a Fixed Assets Coverage, FAC, of **156%**. These are considered acceptable for a project of this magnitude.

1.6 **M**arket investigations of the supply and demand scenarios reveal a substantial supply gap in the Price Range for the products planned by the company. Presently thermo bonded mattress are not manufactured in India, while these are very popular in various parts of the world.

1.7 **T**he financial projections on the commercial operations of the company reveal satisfactory levels of profitability and liquidity. With Net Sales Revenue of **Rs 5,198 Lakhs**, the company posts a Profit After Tax, PAT, of **Rs 318 Lakhs** in the very first year of full commercial operations. This profit level rises to **Rs 672 Lakhs** by the fifth year.

The Balance Sheet projections also show a healthy trend. The Shareholders' Funds increase from **Rs 1,208 Lakhs** in the first year of commercial operations to **Rs 3,662 Lakhs** by the fifth year.

The Break-Even Point Analysis reveals that the company can break even at **38%** of the installed capacity. This compares favourably with the proposed operational capacity of 55% in the first year of commercial operations. In the same vein, the Pay-Back period is estimated to be **4 years and 3 Months**. These are considered very satisfactory for a project of this magnitude.

SECTION TWO

THE COMPANY

2.1 BACKGROUND

M/s J. S. GAUTAM ENTERPRISE LIMITED (JSGEL) was incorporated in June 2014 as a private limited liability company with an Authorized Share Capital of Rs 9,00,000 Lakhs divided into 90,000 ordinary shares of Rs10.00 each. However based on the need for increased funding necessary for its level of business activities, the company will take steps to increase its Share Capital at the appropriate time.

- 1.5 The company's registered and corporate office is situated at Plot No -848, Village & Plot Mauhar, Tehsil Bindhki, Distt. Fatehpur, U.P, the factory is being located on N.H.-2 Plot No -1124, Village & Plot Mauhar, Tehsil Bindhki, Distt. Fatehpur, U.P. The location is about 35 Kms from Kanpur City on National Highway No 2.

2.2 OWNERSHIP

The shareholders of the company and their respective shareholding are as shown below:

Name	% Shareholding	Share Allotment
Mr. Jitendra Singh	50	45,000
Mr. Dharmendra Singh	50	45,000
	100	90,000

2.3 **MANAGEMENT**

This would be first major venture of the promoters and group. Although the promoters are Young and Dynamic with strong business acumen but they lack the Project Execution skills. For this the company has already discussed and appointed Mr. Sanjiv Kumar Singh, a Young Textile Technologist as director Project. Mr. Sanjiv Singh is well experienced and has already implemented textile projects more than Rs 1,000 Crores. The brief details of Mr. Sanjiv Singh are as follows:

Sanjiv Singh, Age 38 years is Bachelor of Technology (Textiles), has experience of more than 15 years. His vast experience include setting up Sheeting Project for Bombay Dyeing, Terry Towel Project for Alok Industries Ltd and 50 Tons/Day Terry Towel Project for Shree Laxmi Cotsyn Ltd. He has been responsible for complete implementation of Project, which are worth more than 1,000 Crores.

His vast experience would help in implementing and running the Project efficiently.

2.4 **TECHNICAL MANAGEMENT ASSISTANCE**

J. S. GAUTAM ENTERPRISE LIMITED has already appointed Onella Consulting Pvt Ltd to render technical management assistance for the complete implementation of this project on a technical turn-key basis. This includes all engineering services for the design, engineering drawings, electrical drawings, and assistance during installation of facilities for the plant, machinery and equipment for the factory. The company has equally approached renowned know-how suppliers for the project and has received confirmation for their complete assistance for the project.

2.5 **Promoters Background Details:**

Promoters young and dynamic entrepreneurs are from Kanpur, U.P with present Interest in Petrol Pump, Brick Manufacturing, Building Material Supply and Highway Hotel on N.H. -2.. The promoters are well known for their business and social activities.

Brief Details of each activity of Promoters is as follows:

J S Construction Co, Since 2008

J.S. Construction Co was established by Mr. Jitendra Singh for supply of Building Material. The activity involved supply of Sand, Bricks and Stones for construction activities. Presently the company has work order for about 15 Crs for supply of material for Highway Construction. The supply of these material is completed using the following vehicles in the names of company, Mr. Jitendra Singh, Mr. Dharmendra Singh and Mr. Pushpraj Singh. The details of vehicles are as follows:

Total No of Vehicles

Company owned	:	2 No Tata 3118 , 1 No JCB
Dharmendra Singh	:	4 No Tata 2515 (LPT)
Jitendra Singh	:	3 Nos 2515 (LPT)
Pushpraj Singh	:	1 No 2515

Financial Details of company

	2012-13	2013-14
J S Construction Co. Prop Jiternder Singh		
Sales (Lakhs)	370	409
Profit (Lakhs)	0.34	1.23

J.S. Brickfield,

J.S. Brickfield was established in year 2009 by Mrs. Preeti Singh (W/o Mr. Jitendra Singh). The Brickfield has capacity of about of 10,00,000 /- per cycle. with total cycles of 5 per year with the yearly capacity is about 50,00,000 Bricks.

Present Stock of the company is about 350 Lakhs. This stock would be sold in the next few months after monsoon period.

Financial Details of company

	2012-13	2013-14
J. S. BrickField		
Sales (Lakhs)	63.14	128
Profit (Lakhs)	4.25	8.40

Jeet Automobiles :

Jeet Automobile owns a Petrol Pump by BPCL on NH -2 by Mr. Pushpraj Singh. The petrol pump is on Main N.H. no 2 about 30 Kms from Kanpur.

Financial Details of company

	2012-13	2013-14
Jeet Automobiles		
Sales (Lakhs)	399	569
Profit (Lakhs)	3.0	6.24

Highway Hotel (Jeet Hotel on : NH-2)

This highway hotel is established in year 1980 and present Proprietor is Mr. Jitendra Singh is spread on a area of about 4 Acres. The establishment is well known by highway users especially Good Movement Vehicles. This serves more than 600 Vehicles/ Day.

The hotel was "Adjudged as Mahindra Navi Star, Excellence Award 2011 (Region North) for Best Dhaba Award"

Total valuation of the hotel is more than 200 Lakhs

Social Welfare Jobs:

Mr. Jitendra Singh is very active on Social front and is running charitable education society under than name of J. S. Gautam Siksha Prasar Samiti (No 986-2009-10)

The society is running an Co Education School for nearby villages Up to Class VIII at VPO : Mohuar, Dist. Fatehpur

SECTION THREE

GENERAL PERSPECTIVES OF THE PROJECT

3.1 INTRODUCTION

India is the one of the world's largest producers of textiles and garments. Abundant availability of raw materials such as cotton, wool, silk and jute as well as skilled workforce have made the country a sourcing hub. It is the world's second largest producer of textiles and garments. The Indian textiles industry accounts for about 24 per cent of the world's spindle capacity and 8 per cent of global rotor capacity. The potential size of the Indian textiles and apparel industry is expected to reach US\$ 223 billion by 2021, according to a report by Technopak Advisors.

The textiles industry has made a major contribution to the national economy in terms of direct and indirect employment generation and net foreign exchange earnings. The sector contributes about 14 per cent to industrial production, 4 per cent to the gross domestic product (GDP), and 27 per cent to the country's foreign exchange inflows. It provides direct employment to over 45 million people. The textiles sector is the second largest provider of employment after agriculture. Thus, the growth and all round development of this industry has a direct bearing on the improvement of the India's economy.

Market Size

The Indian textiles industry is set for strong growth, buoyed by strong domestic consumption as well as export demand.

The most significant change in the Indian textiles industry has been the advent of man-made fibres (MMF). India has successfully placed its innovative range of MMF textiles in almost all the countries across the globe. MMF production recorded an increase of 10 per cent and filament yarn production grew by 6 per cent in the month of February 2014. MMF production increased by about 4 per cent during the period April 2013–February 2014.

Cotton yarn production increased by about 10 per cent during February 2014 and by about 10 per cent during April 2013–February 2014. Blended and 100 per cent non-cotton yarn production increased by 6 per cent during February 2014 and by 8 per cent during the period April 2013–February 2014.

Cloth production by mill sector registered a growth of 9 per cent in the month of February 2014 and of 6 per cent during April 2013–February 2014.

Cloth production by power loom and hosiery increased by 2 per cent and 9 per cent, respectively, during February 2014. The total cloth production grew by 4 per cent during February 2014 and by 3 per cent during the period April 2013–February 2014.

Textiles exports stood at US\$ 28.53 billion during April 2013–January 2014 as compared to US\$ 24.90 billion during the corresponding period of the previous year, registering a growth of 14.58 per cent. Garment exports from India is expected to touch US\$ 60 billion over the next three years, with the help of government support, said Dr A Sakthivel, Chairman, Apparel Export Promotion Council (AEPC).

Technical Textile sector is one of the most innovative branch of the industry in the world, ranking as one the five high tech sectors with the greatest potential for development. The success of technical textiles is primarily due to the creativity, innovation and versatility in fibres, yarns and woven/knitted/nonwoven fabrics with applications spanning an enormous range of uses. The ability of technical textiles to combine with each other and with others to create a new functional products offer unlimited opportunity to growth.

In India also technical textiles is one of the fastest growing segment of the Indian economy. It has registered compounded annual rate of growth of 11% during 11th five year plan and the working group report for the twelveth five year plan has projected growth of 20% for technical textiles. This translate into market size increasing from USD 13 billion to USD 36 billion by 2016-17. The growth of the industry has been primarily due to the entrepreneurial ingenuity of the Indian industry supplemented by the scheme of the government of the Indian incentivizing the investment in the sector.

3.2 **PROJECT OBJECTIVE AND SCOPE**

The main objective of the company is to manufacture Thermobonde Non Woven mattress. The mattress industry in India is dominated by small-scale and unorganized firms. These businesses specialize in coir, cotton and foam mattresses, which constitute over 90 per cent of the country's total mattress requirement. Globally, the mattress industry has advanced, with several multinational brands in operation and technologically superior products available in the market. There are more than 12,000 retailers of different mattress product mix. Majority of retailers are in the unorganised sector (70-75 per cent) who are selling majorly low end cotton and foam fillers mattresses.

Thermobonded Mattress uses Recycled Polyester Fibre, which has major cost advantage as this is cheaper by 40% than the conventional raw material used for Rubber i.e. Latex or PU mattress. Adding to it is the advantage it is environment green project as it uses the waste PET Bottles and in the long run would also qualify for carbon credits.

Presently also major market share for rural and unorganized market is for Cotton, Low quality foam, Foam fillers and packing waste material products.

The company has planned for Non Woven thermobnded products which is much superior to the existing available products.

Thus the company is planning to manufacture the following products:

Non Woven Thermobonded Mattress

The plant as configured, while operating three shifts each of eight (8) hours per days and 350 days per annum, will have the following per day installed capacities:

S.No	Products	Unit	Capacity
1.	Polyester Thermo Bonded Mattress	Kgs	10,700

The plant is capable to manufacture all required sizes of mattress available in market. For the business plan the following products have been identified:

S.No	Products	Unit	Capacity	Unit Weight/ Kg	Total Weight Kgs
1.	Economical Products	No	2,000	2.38	4757
2.	Mid Rangel Product	No	1,000	5.98	5947

Total yearly production capacity would be about 1.05 Million Mattress.

Capacity utilization for the first year of operation is estimated to be 55%, rising to 60% in the second year and progressing steadily to 80% by the fifth year of resumed commercial operations. Actual production figures for these periods will be as follows:

	Production in Nos				
	2015-16	2016-17	2017-18	2018-19	2019-20
Capacity Utilization	55%	60%	70%	75%	80%
Yearly Production Kgs					
Economical Product	3,85,000	4,20,000	4,90,000	5,25,000	5,60,000
Mid Range Product	1,92,500	2,10,000	2,45,000	2,62,500	2,80,000
Total	5,77,500	6,30,000	7,35,000	7,87,500	8,40,000

3.3 LOCATION

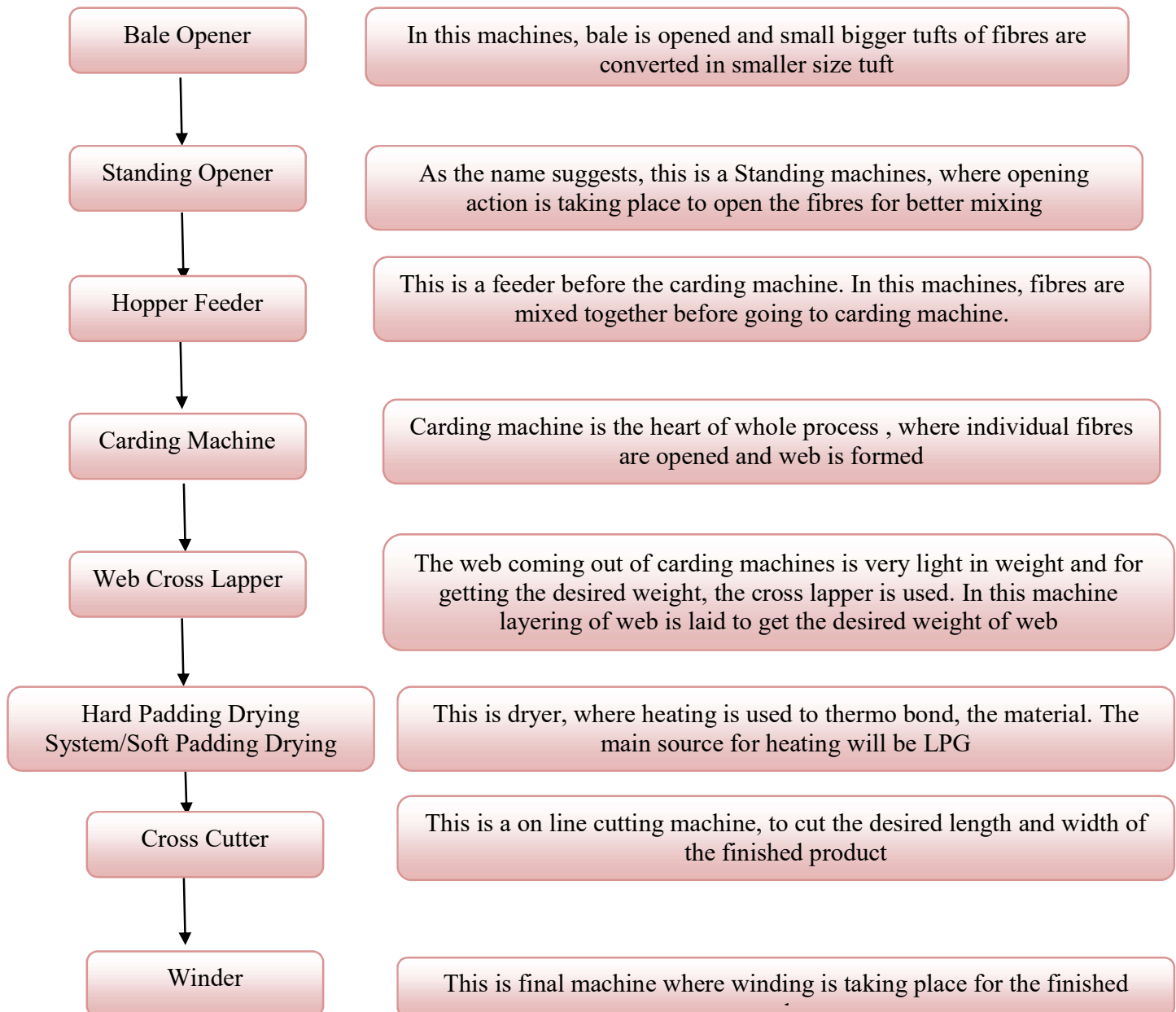
The proposed project will be carried out at the company's newly acquired Land, on N.H.-2 Plot No -1124, Village & Plot Mauhar, Tehsil Bindhki, Distt. Fatehpur, U.P. The location is about 35 Kms from Kanpur City on National Highway No 2.

3.4 PRODUCTION PROCESS

The manufacturing processes for the production of the company's products are shown schematically below:

3.4.1 PRODUCTION THERMOBONDED POLYESTER MATTRESS

Manufacturing process for the production of Thermobonded Products:



The company is focusing mainly on Polyester Mattress using the above technology, however there is a possibility to produce different products from the same machine set up.

3.5 RAW MATERIAL

The major raw material required are different type of Polyester Fibres. For this normally recycled fibres with different properties like High Crimp, Conjugated fibres are used. The fibres used are from 9 -15 Denier. For thermobonding of these fibres Low Melt fibre is used. During heating process Low Melt fibre is melts and make a bond with other fibres, giving Strength to complete product.

3.6 ENVIRONMENTAL IMPACT ASSESSMENT

The manufacturing process is very simple with no use of water or steam in manufacturing process. So there is no pollution generated due to manufacturing of the products. The process need LPG for heating, so the complete manufacturing can be called as Green Process.

3.7 UTILITIES

The following utilities are required by the project to ensure smooth operations:

- ❖ Electricity;
- ❖ Water;
- ❖ Compressed Air;
- ❖ Fuel;
- ❖ Fire fighting equipment;
- ❖ Material handling equipment.

(i) Electricity Supply

The transmission grid line of the is very close factory's vicinity. So power supply from the public grid will be obtained without much stress. However the company intends to buy a 500KVA Generator, for powering its plant and equipment as back up power supply.

The summary for the each machine used in the plant is as follows:

Description	No. of machines	Per machine	Total installed KW	Load factor	Actual Utilisation (KWH)
Non Woven Line	1	400	400	60%	240
Compressor	1	15	15	60%	9
Laboratory Equipments	1	10	10	50%	5
Water Treatment Plan	1	10	10	25%	2.5
Humidification Plant	1	25	25	60%	15
Electric Hoist, weighing machines etc.	1	15	15	20%	3
Other Office	1	20	20	50%	10
General lighting	1	25	25	60%	15
Non-factory area lighting	1	15	15	60%	9
Total			535		308.5

(ii) **Water Supply**

The company's water requirement is not very large, as water is required only for human consumption and air conditioning . The company intends to meet its water requirements from an small industrial borehole to be sunk in the factory premises, complemented by a Tanks about 200,000 Ltrs of tanks, with the associated piping works which include tanks for Fire Fighting also.

(iii) **Compressed Air**

To meet its compressed air need, the company will procure 1No. industrial Compressor. This will suffice for use when operations start.

(iv) **Material Handling & Fire Fighting Equipment.**

The operation of the company will involve the use of sundry material handling equipment. In addition, since the possibility of fire outbreak is quite real, the company will procure sufficient fire fighting equipment inclusive of Fire hydrants with standard gauges, valves, pumps and pipings stationed at strategic locations within the factory premises.

3.8 MANPOWER REQUIREMENT

At the commencement of operations, the company would give employment to about one hundred and Fifteen (115) persons, of which 10 will be in the managerial cadre.

3.9 IMPLEMENTATION SCHEDULE

The activities preceding the implementation of this project such as negotiations for the term loan facility, etc. are expected to be resolved before the start of actual implementation. This programme is envisaged to go into commercial operations after about eighteen (10) months from the start of active implementation. Given below is the schedule of implementation for this project.



Reach complete agreement on the Project & get a Loan offer	xxx										
Acceptance of Loan offer and signing of Agreement.	xxx										
Meeting pre-disbursement conditions & perfecting all Legal matters	xxx										
Loan draw down and ordering Plant & Machinery		xxx									
Award of construction contracts, commence & complete civil works and factory buildings			xxx	xxx	xxx	xxx	xxx	xxx	xxx		
Delivery & Installation of Plant and Machinery									xxx	xxx	
Test Run and Commissioning										xxx	xxx
Full Commercial Operations											

SECTION FOUR

TECHNICAL ASPECTS OF THE PROJECT

4.1 SUMMARY OF THE PROJECT COST

The total cost of the project is estimated at **Rs 3,019 Lakhs** after implementation of the Project and is expected to have been financed from Shareholders' total contribution of **Rs 1,208 Lakhs**, a long term loan of **Rs 1,812 Lakhs**

DETAILS OF PROJECT COST

		RS' LACS
S.No		
1	Land & Land Development	284
2	Building	332
3	Plant & machinery	1,582
4	Misc. fixed assets	253
6	Pre-operative expenses	247
7	Contingent expenditure	121
8	Working capital margin money (1st year)	201
	Total Project Cost	3,019

4.2 LAND, CIVIL WORKS AND BUILDINGS

4.2.1 LAND DEVELOPMENT

As stated earlier, the total Land area is about 11,000 Sq Mtrs. Land Development cost include cost of Boundary wall, Internal road, gate and levelling of land etc. The total estimated cost of Land Development is about Rs 131lakhs.

4.2.2 BUILDINGS

The project will require a number of buildings, including:

- Administrative Building complex;
- Main Factory Building – Production Halls;
- Warehouses/Storage Buildings;
- Utilities Buildings - Electrical Room, Workshop etc
- Loading and off loading Bays
- Stores for spare parts
- Maintenance Workshops

The total building cost is estimated at Rs 320.03 Lakhs.

The detailed building cost is as follows:

							Rs. In Lakhs	
SL.	Description	Length	Width	Height	Area (Sq mt)	Rates Rs/Sq Meter	Cost	Total Rs. Lacs
1	Non Woven Production Area							
	Production Hall	70	30	7	2100	8000	168.00	
	Sub Total				2100			168
B	Godown							
1	Raw Material	20	30	5.5	600	7500	45.00	
2	Finished Goods (Final Mattress)	20	30	5.5	600	7500	45.00	
	Sub Total				1200			90.00
C	Utilities							
	Stores	10	10		100	7500	7.50	
	Electrical substation	10	10	4.5	100	7500	7.50	
	DG house	5	10	8.00	50	7500	3.75	
	Boiler Room	10	0		0	7500	0.00	
	Sub Total				250			18.75
D	Water related work	Capacity						
1	Drainage system						2.00	
2	Overhead tank			20000		10.00	2.00	
3	Under ground water reservoir				1500		5.00	
4	Sewerage system					Lumpsum	2.00	
5	Sewerage treatment plant					Lumpsum	2.00	
	Sub Total				3500			13.00

F	General						
1	Admin block	15	10	150	14000	21.00	
5	Security Gate Block	10	5	50	6000	3.00	
	Sub Total			1200			24.00
G	Misl						10.00
	Sub-total						313.75
	Architect fee				2%		6.28
	Grand Total						320.03

4.3 PLANT AND MACHINERY

The items of plant and machinery will comprise complete facilities for the Mattress Production facility and Non Woven Thermobonded mat production facility.

The estimated C & F cost of the plant and machinery to be procured is put at US \$2,500,000 (USD 2.5 Million Only) or Rs 1448 Lakhs assuming USD to INR as Rs 60 to 1 USD.

The machinery to be acquired will be capable of producing high quality Thermobonded products of different qualities.

4.4 AUXILIARY EQUIPMENT

For a project of this magnitude, efficient and smooth operations will be attained in the factory during commercial operations by the acquisition of the following: Compressor, Laboratory, Diesel power Generators Electrical Panels, Material Handling Equipments, Work shop Equipments etc & all other equipment.

The estimated cost of these auxiliary utility plant and machinery to be procured is put at Rs 254 Lakhs.

4.5 PRE-OPERATING EXPENSES

Total Pre-Operative expenses to start the Project are full operation would be as follows:

			RS' LACS
	DESCRIPTION		AMOUNT
1	Estimated time to Start Commercial Production (In Months)	4	
2	Establishment		
i)	6 Months Salary - Admin. Staff	1	3
ii)	3 months 25% salary of factory staff & workers	1	3
	Total		7
3	Product Promotion		100
4	Travelling	5	
5	Training Expenses	0	5
6	Interest during construction period		
a)	Cost of Land, building, plant and Machinery & M.F.A	2451	
b)	Funds utilised 100%	2451	
c)	Term Loan Utilised @2:1 ratio	1634	
d)	Interest During Construction	71	71
7	Insurance		
(i)	Cost of Bldg, Plant & Machinery & misc. fixed assets	2451	
(ii)	Funds Utilised 100%	2451	
(iii)	Insurance @ 0.30%	0.15%	4
8	Consultancy charges & Government Liaison	2.00%	49
9	Upfront Fees	0.75%	12
	TOTAL		247

4.6 **CONTINGENCY MARGIN**

A contingency margin of 5% on the cost of the fixed assets to be acquired has been provided for. This is to cover probable physical omissions, and any variations in prices and foreign exchange rate fluctuations during the implementation period. The estimate amounts to Rs 120 lakhs

Description	TOTAL	FIXED PROJECT COST	NON FIXED PROJECT COST	RS' LACS
				CONTINGENT EXPENDITURES 5%
Land & Land Development	284	284	-	0
Building	332	-	332	17
Plant & machinery	1,582	-	1,582	79
Misc. fixed assets	253	-	253	13
Preliminary expenses	-	-	-	0
Pre-operative expenses	247	-	247	12
Technical Know-how fees	-	-	-	0
Total	2,698	284	2,414	121

4.7 **WORKING CAPITAL REQUIREMENT**

Our detailed computation of the working capital needs of the company when it embarks on this project, in the first full year of commercial operations amounts to Rs 690 Lakhs Details of the working capital provisions for the first five years of commercial operations are shown in **Appendix III**. The summary for the first year's requirement are as shown below:

DESCRIPTION	No. of Months Required	Bank Margin Available (%)	Amount Required	1st Year Amount of Bank Finance	Margin Money Required
<u>STOCK OF INVENTORIES</u>					
1. Raw Material					
-Indigenous	0.50	75%	140	105	35
2. Consumables					
-Indigenous	1.00	75%	-	-	-
3. Stock of Work-In-Progress	0.25	75%	80	60	20
4. Stock of Finished Goods	0.50	75%	217	162	54
			436	327	109
<u>SUNDRY DEBTORS</u>					
5. Bill Receivable/ Goods in transit	0.50	75%	217	162	54
			217	162	54
<u>OTHER CURRENT ASSETS/ CONTINGENCIES</u>					
6. Utilities	0.50	0%	6	-	6
7. Labour & Plant Overheads	0.50	0%	11	-	11
8. Factory Overheads	0.50	0%	3	-	3
9. Administrative Expenses	0.50	0%	2	-	2
10. Other Expenses	0.50	0%	16	-	16
			37	-	37
Total			690	490	201
1. Increase in Working Capital			690		
2. Increase in Bank Borrowings				490	
3. Increase in Margin Money					201
4. Interest on Bank Borrowings @		13%		64	

4.8 FINANCING PLAN

It is proposed to finance the Project with Debt Equity ratio of 1.50:1, which is considered satisfactory to such projects. This works out to be total Loan of Rs 1,812 Lakhs. The loan would be covered under TUFs (Textile Up gradation Funds scheme) by Government of India. Under this scheme all the loan is entitled with an Interest Subsidy of 5% and Capital Subsidy of 10%. All these concessions are not considered in all the Project Calculations.

The proposed financing plan a Fixed Assets Coverage, FAC, of **1.56**. These are considered satisfactory ratios for a project of this magnitude.

		RS' LACS
Total Project Cost		3,019
Debt Equity Ratio	:	1.50: 1
Debts	1.50	
Equity	1	
Debt		1,812
- Foreign Currency Loan	:	-
- Rupee Term Loan	:	1,812
Equity Share Capital	:	1,208

SECTION FIVE

THE MARKET

5.1 PRODUCTION IDENTIFICATION

Product Details:

Product Usage

Different Applications for Polyester Thermo Bonded Products

- Automotive
- Filtration
- Acoustic
- Furniture & Bedding

Automotive

- The benefits of these products are being utilized in the automotive industry worldwide. Car manufacturers such as Ford, General Motors, Toyota and Mitsubishi are all taking advantage of the unique nature of the products which can be made.
- Because of the ability to manufacture base materials for both flat form and molded products from the same line, these unique structures can be constructed to meet the high technical demands of the automotive industry while achieving reduced weight/cost balance. It is this ability to fine tune the products manufactured that makes them ideal for applications such as door insulators, head liner pads, headliner base materials, under-carpet insulators, as well as hood liners and truck liner insulators.

Filtration

- In a typical Non Woven air filter made with superior Non Woven Technology has a higher efficiency with superior dust holding capability than standard filters made from other materials. The unique structure of random orientated fibers lets it hold a larger amount of coarse particles of dust on its surface while allowing finer particles to penetrate the web of fibers into the depth of the filter. The results in a filter with very low pressure drop and excellent dust holding capacity.

Acoustic

- The Polyester Non Woven products are one of the best Acoustic insulator. The product gives very good solution for Noise Insulation.
- People are using this product as Noise Insulators at following places:
 - Home
 - Along the Highways
 - Along train/Metro Routes

Furniture & Bedding

- These products can be used in many areas of the furniture and bedding industries; they provide special characteristics not available with other products. In mattress construction, for instance, they can be used with strong scrims for spring pocket insulator materials, and the same machine can manufacture replacement mattress topping materials which are much more foam-like.
- Special fibers can be used by some to give foam-like resilience by utilizing the unique nature of the structure to encourage compression of the fiber, improving its reliance and recovery while maintaining its 'soft touch' appeal.

Advantages of the products:

Furniture & Bedding

The Non Woven product can be used for many application for Home and & Office. The advantages for Engineered Non Woven for fabrics are

- **Heat and flame resistance**

Engineered nonwoven fabrics can be designed to have an extremely high melting point as well as dimensional stability at high temperatures.

- **Durability**

Relative to their weight, engineered nonwoven fabrics can be designed to wear better than comparable weights of woven or knitted materials. When used as backing material, engineered nonwoven fabrics can increase the longevity of upholstery by reducing internal abrasion (up to five times more durable than other traditional materials).

- **Anti-allergy and anti- microbial properties**

Engineered nonwoven composites can be laminated to bedding and mattress materials to protect allergy sufferers from dust and mites - without any chemical additives.

- **Strength and uniformity**

Many engineered nonwoven fabrics have higher tensile, tear, and burst strength than their traditional textile counterparts and can resist repeated load bearing. Home furnishings can thus retain their form and appearance over longer periods of time, making them very cost-effective.

- **Fluid resistance and retention**

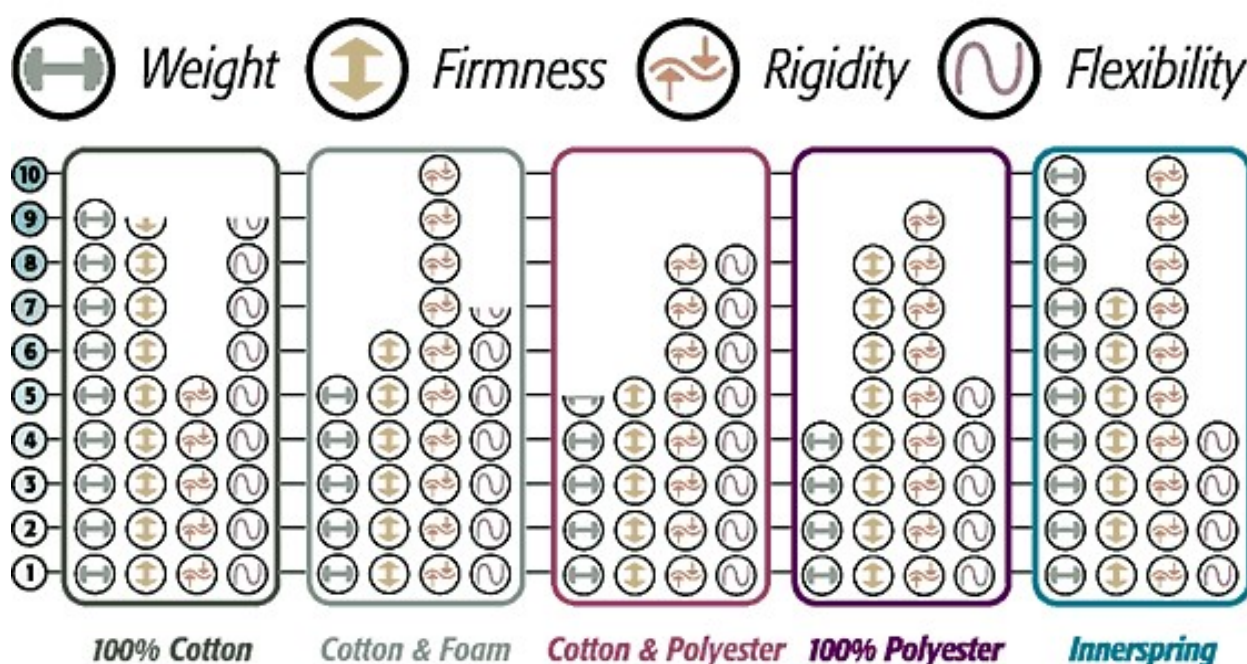
Engineered nonwoven fabrics can be designed to retain fluids and to resist staining. Engineered nonwoven fabrics can also be designed to resist attack by many solvents, alkalies, and other chemicals.

However the company is planning to manufacture only Polyester Mattress. In our opinion the company is entering only a small area of the complete production flexibility and capability of the plant.

Mattress and its End Uses

Presently Indian Mattress market is dominated by PU Foam and Cotton Fiber Mattress. These products has its own certain well know limitations. That forced to bring some alternative measures.

One important advantage of using synthetics is compliance to flammability laws. At this time FR foams and poly-cotton blends help manufacturers meet the federal FR cigarette test standards. Another big advantage is weight. Lower weight means lower shipping costs and a much more sellable product at the retail level, as the consumer attempts to move the futon around or change the cover.



Different Type of Mattress:

In the market different type and sizes of mattress are available. The lower end of mattress would start from 2" thickness and goes to 6" of thickness with various densities. The most common sizes of mattress in Indian market are:

Length	Width	Thickness
72" or 75"	24"	2", 3", 4", 4.5", 5", 6"
72" or 75"	30"	2", 3", 4", 4.5", 5", 6"
72" or 75"	36"	2", 3", 4", 4.5", 5", 6"
72" or 75"	40"	2", 3", 4", 4.5", 5", 6"
72" or 75"	48"	2", 3", 4", 4.5", 5", 6"
72" or 75"	60"	2", 3", 4", 4.5", 5", 6"
72" or 75"	72"	2", 3", 4", 4.5", 5", 6"

The product available are in various density which varies from 23 - 40 Kg/M³

Different Product Range:

Presently in the market product is available in different price category. The major different in the product is due to thickness, Density and type of cover.

Economical Range product:

Any economical range of Branded Mattress of 2"/ 3" is available in the price range of Rs 2200-2800 per pcs. In this a Foam sheet of Density of about 22 -24 Kg/M³ is covered with simple slip cover. Any unbranded product in the same range would be available at about Rs 1500 per pcs.



Medium Range Products:

Medium range branded product is available from price range of about Rs 3,500 - 4,500 per pcs, while unbranded product is available from about Rs 2,500 - Rs 3,000 for similar quality. In the price range the product is made with Mid Range foam density of about 28-30 Kg/M³ with medium quality fabric and quilted cover. In the price range mostly 3" and 4" mattress are sold.



High Price Range Products:

High price range products are starts from Rs 6,000 and goes up to Rs 20,000 per pcs. These mattress are normally combination of mattress of foam, with memory foam or visco elastic material. In this price range the product cover is also of high quality fabric. Inspring Mattress and Therapeutic mattress are also covered in the price range.





Ultra High Price Products:

In this price range, all the Imported Brands are sold with each product price ranges from Rs 25,000 onwards.

PRODUCTS PLANNED BY COMPANY:

The manufacturing line company is planning to establish, is very versatile and is capable to produce all the required sizes, densities and thickness of products.

The company is planning to produce the following complete range of Products:

1. Mattress

The company would be capable to produce all the products across all price ranges of products. For being conservative for projections, we have only projected to sale Economical and Mid Price Range of Products.

Ex Mill Sales Price of Economical Product is about Rs 600/- per pcs. The Sales Price of Consumer would is About Rs 1100 to Rs 1200 per pcs.

Ex Mill Sales Price of Mid Product is about Rs 1500/- per pcs. The Sales Price of Consumer would is About Rs 3000 to Rs 3500 per pcs.

The company would be producing complete range of products from beginning.

2. Furniture

The company would also be producing material for Seats to be used in furniture. For this normally size of seat is 18"x21", 18"x24" or other sizes. Market for Material required in furniture is more than size of Mattress market.

3. Hospital Mattress

The mattress made by Non Woven Polyester is very popular in countries like Japan, Korea and other Eastern Countries. This product reduce the chances of Bed Soars during treatment of patients. In hospital these mattress are used at Beds, Stretchers, X Ray Tables, Angiography Tables and other places.

4. Life Style Mattress:

Life Style mattress include

Yoga Mattress

Mattress for Children Rooms and other productss.

MARKETING PLAN

The company will adopt the following market strategies in order to achieve the projected sales targets and get the best from the market in terms of realizing its investment objectives.

ADVERTISING

The mass media, Local Television, Radio, Newspapers and Life Style Magazines will be widely used in publicizing the products and location of the project.

SALES PROMOTION

This shall take the form of appearances at, and participation in trade/fashion fairs to popularize the products of the company locally.

PHYSICAL DISTRIBUTION

The distribution network will cover all big cities across North India in the first phase which would be expanded to Pan India level.

SALES PROMOTIONS

This will be done regularly in public places and local fairs etc in order to attract attention and get wide publicity. Samples will be distributed on such occasions to enable the company's products gain popularity.

PRODUCTS' PRICING

As stated elsewhere, the company will adopt a market winning pricing strategy by being a High Quality and reasonable cost producer, The following prices are recommended for the company's products.

Product Type	Unit Sales Price (Rs/ Pcs)
Thermobobbed Mattress	
	<u>Ex Mill Price</u>
Economical Product	600.00
Mid Price Product	1500.00

These prices have been used in our financial analysis.

SECTION SIX

STRATEGY AND IMPLEMENTATION ISSUES

6.1 BUSINESS ISSUES

The success of every business idea lies amongst others, on its strategies and on implementation. Business success hinges mainly on the formulation of good strategies and their successful implementation afterwards. The management of this company recognizes this and will take steps to accurately implement its formulated strategies. The key business issues to deal with include:

- The highly capital-intensive nature of this manufacturing enterprise, making it a no-go area for many otherwise interested entrepreneurs;
- The products of this company are High Quality and yet reasonable priced products suitable to all type of markets. The product can easily be marketed in all segments. The product also need transfer of right technology and production process . This will create significant barriers to entry for other interested investors.

6.2 MARKETING & SALES STRATEGY

The Indian mattress market is having well established Distributor and Retails network. It is estimated to have about 12,000 Retailers all across Indian selling various kind of products. Company is also planning to use the existing network of Distributors and Retailers. The company has already approached many distributors for marketing for the products and have received favourable response. The company has already identified General Manager Marketing. The person is experienced in marketing of Mattress for more than 25 years with various Mattress manufacturing companies.

The company has already planned for Rs 100 Lakhs in the Product Promotion expenses in the Project cost as Pre Operative expenses.

6.3 PRICING STRATEGY

In the present organized market scenario no good quality product mattress is available at less than Rs 3,500/- per pcs at retail level. The product available at this price is also not very durable and are having many issue.

For the unorganized market, no product is available at the price of less than Rs 1500/- per pcs. Even reasonable quality cotton mattress are available at the price of about Rs 1000/-

The company is planning to Launch it Products slightly less than market prices with some added benefits like Guarantee for the product performance etc.

We are sure with the pricing strategy the Product would be get good support from market.

6.4 PROMOTION STRATEGY

Amongst several others, the company will employ the following strategies to position itself for the great challenges which its debut in the market will engender:

- Print media advertisement. The company's management will select a number of newspapers and related medical/health-focused journals that will give it mileage for this purpose;
- Sponsorship of related activities to announce its presence;
- Production of branded corporate gifts such as calendars, biros, diaries, towels, etc.;
- Production of brochures, leaflets, flyers, etc.; and
- The use of the Internet to disseminate information as much as possible.

6.5 KEY SUCCESS FACTORS

The company intends to be a highly distinguished and respectable player in the Mattress industry when it begins operations. The following are considered critical to the success of the company in its quest to become one of such:

(i) Customer Service

One of the factors that differentiates a business from the other is the quality of customer service and its ability to deliver branded or differentiated services or products. Successful companies invest substantially in product packaging to ensure good quality products and customer satisfaction. They also put in place internal structures for evaluating, maintaining and monitoring the delivery of customer service.

Customer service is the interface between a company and its markets; it makes or breaks the company. To give its customers quality products, this company is planning to produce the complete range Mattress, thus making it a “One Stop Solution” for completely meeting the needs of the customer. In addition, with the state-of-the-arts plant and machinery it is acquiring, the production of quality products is assured.

(ii) Access To Market Intelligence

The company along with its associate, Onella Consulting Pvt Ltd and its know-how partners and marketing associates have necessary market intelligence and business intelligence to enable it access to major international markets. It will also be able to forecast new developments and trends in the products, in time to give it vital edge over its competitors.

(iii) Board and Management

The Board of Directors (BOD) has the responsibility for approving strategies and policies, understanding the risks run by the company, setting acceptable levels for these risks and ensuring that management takes the steps necessary to identify, monitor and control these risks.

Management has the responsibility for implementing strategies approved by the Board; setting appropriate internal control policies and monitoring the effectiveness of the internal control system.

Undoubtedly, the quality, capability and creativity of management can make or mar a company, as management is a critical success factor in any organization. For successful operations, any organization requires professional, skilled, experienced and disciplined management teams, which can apply management principles and best practices that guarantee success.

(iv) **Low Operating Costs**

The success of any company depends on its ability to efficiently and effectively utilize its scarce resources to achieve set targets. Very often, this is reflected by lower operating costs. Wastages are eliminated and all expenses are justified before commitments. Most of the successful companies have low cost structures matched with high-income patterns. The management of this company is very much aware of this.

(v) **High Utilization Rate**

With proper selection of machinery and co-ordinated production efforts as well as the experience of Know how providers, this company will be able to achieve better utilization rates of its plant and machinery and thereby reduce cost of production.

(vi) **Research & Development**

The company is planning to set up a standard Research and Development Centre to develop new products and improve the existing product lines.

SECTION SEVEN

FINANCIAL ANALYSIS

8.1 REVENUE STATEMENT

The Ex Mill sales revenue for the first year of commercial operation of this project at 55% capacity utilization is estimated at **Rs 5,198 Lakhs**. The yearly sales revenue for the next five years would be as follows:

Sales of Mattress	Rs. In Lakhs				
Yearly Sales Value	2015-16	2016-17	2017-18	2018-19	2019-20
Economical Product	2,310	2,520	2,940	3,150	3,360
Mid Range Product	2,888	3,150	3,675	3,938	4,200
Total Sales Value	5198	5670	6615	7088	7560

8.2 OPERATING COST ESTIMATES

The major operating cost elements in the operation of the factory are as detailed below:

8.2.1 RAW MATERIALS AND CONSUMABLES

The cost of raw materials and consumables for the first year of full operations, at 55% capacity utilization, would be Rs 3,356 lakhs. Yearly requirement of Raw Material would be as follows:

	Value in					Rs Lakhs
Summary	2015-16	2016-17	2017-18	2018-19	2019-20	
Polyester Fiber	1,831	1,998	2,331	2,497	2,664	
Low Melt Fiber	562	613	715	766	817	
Economical Product	385	420	490	525	560	
Mid Price Product	578	630	735	788	840	
Total Raw Material	3,356	3,661	4,271	4,576	4,881	

8.2.2 SALARIES AND WAGES

A total of 115 persons will be recruited – covering both Direct (105) and Indirect (10) employees. With this number of employees, the estimated cost of labour in terms of salaries and wages for the first full year of this project is put at Rs 265 Lakhs

8.2.3 ESSENTIAL SERVICES / UTILITIES

The utility requirements for this project are as follows:

(i) ELECTRICITY & FUEL

The installed power is estimated at about 535 KWH for both equipment and for general lighting, whereas actual utilization is put at 305KWH. The estimate of expenses on the consumption of electric energy is based on Present tariff code for heavy industrial users and Generator (75:25) is about Rs 125 Lakhs. LPG is required for heating purpose for Thermobonding. From 1 Kgs of LPG, total 15 Kgs of material is produced. It is estimated to consume LPG worth about Rs 16.00 Lakhs in the first year of operation.

(ii) WATER COST

The water requirement for this project is very small and is required for Human Consumption only. The company will depend largely on its own water supply system via its industrial borehole. To cover the expenses on water supply etc, a provision of Rs 1.00 Lakhs has been made.

Therefore, the total estimated cost of these and other utilities in the first year of commercial operations of this project is Rs 142 Lakhs. Yearly details of the utility Expenses are presented below:

Summary	2015-16	2016-17	2017-18	2018-19	2019-20
Capacity Utilization	55%	60%	70%	75%	80%
Cost of Electricity	125	137	159	171	182
Cost of Fuel	16	19	26	30	34
Cost of Water	1	1	1	1	1
TOTAL	142	156	186	201	217

8.2.4 **SALES EXPENSES**

A well co-ordinated and highly aggressive network for the sale of the company's product will be established. The sales campaign will be spearheaded by the Sales Team of the Commercial Division complemented by the Executive Management team. This will be supported by the use of the media – electronic and print – as well as other promotional tactics such as participation in both local and international trade fairs.

The company will consider appointing capable distributors of its products who have the financial muscle to pick up the products from the factory. To cover its packing expenses, advertisement costs, sales and business promotion and other related expenses, a provision of Rs 208 Lakhs which is equivalent to 4.0% of the net sales turnover for the first year has been made as operating cost under this subhead.

8.2.5 **GENERAL ADMINISTRATIVE EXPENSES**

The company's administrative costs will cover such usual office expenses as printing and stationery, rents and rates, postage & courier charges, transport & traveling as well as such other office expenses as entertainment & public relations. Others include medical expenses of staff, Directors' emolument as well as Audit, Legal, and other professional fees. Based on current cost levels adjusted upwards for normal inflationary increases, it is projected that these expenses will cost the company a total of Rs 104 Lakhs for the first year apart from the Administrative of Rs. 41 Lakhs.

8.2.6 MAINTENANCE OF ASSETS

This company will accord the highest priority to the maintenance of its assets given that the proper maintenance of equipment is very necessary for sustained commercial production activities. This item of expenditure is provided to cover the scheduled preventive and breakdown maintenance of the company's assets. A provision of approximately 1% of the project's total Fixed Capital cost, amounting to Rs 22 Lakhs has been made for this expense subhead in the first year of commercial operations. An annual increment of 10% on the first year's estimate has been applied in computing the maintenance costs for subsequent years. This is to cater for higher maintenance costs over the years due to increases in the number and aging of fixed assets.

8.2.7 DEPRECIATION AND AMORTIZATION

The depreciation charge on the fixed capital items is calculated on the straight-line basis to write off the cost of the assets over their expected useful lives. A depreciation allowance of Rs 214 Lakhs is provided for the first year of expanded operation.

8.2.8 FINANCE CHARGES

The interest payment on the long-term loan facility has been computed at **13%** per annum. The interest payment on working capital is also calculated on 13%, which is prevalent interest rate of commercial banks. Based on these, the finance charge for the first full year of commercial operations amounts to Rs 296 Lakhs. A provision of Rs 26 Lakhs (0.5%) of sales value of also considered as Bank Charges in first year of operation. Although loan would be covered under TUFs (Textile Up gradation Funds scheme) by Government of India. Under this scheme all the loan is entitled with an Interest Subsidy of 5% and Capital Subsidy of 10%, all these concessions are not considered in all the Financial Calculations.

8.3 PROFITABILITY ANALYSIS

The Profit and Loss Account projections for the first five years of commercial operation are shown in **Appendix VII**. Based on our analysis, the expected earnings are summarized below:

Rs in Lakhs

Description		2015-16	2016-17	2017-18	2018-19	2019-20
		55%	60%	70%	75%	80%
a. Cost of Production		3,836	4,163	4,814	5,142	5,470
b. Administrative Expenses						
-Administrative Salaries		41	41	41	41	41
- Other Admin. Overheads	1.00%	52	57	66	71	76
Total Admn. Expenses		93	97	107	112	116
c. Packing Expenses		116	126	147	158	168
d. Sale Expenses	4.00%	208	227	265	284	302
e. Total Cost Production		4,252	4,613	5,333	5,695	6,057
f. Expected Sales Ex-factory		5,198	5,670	6,615	7,088	7,560
h. Gross Profit Before interest		945	1,057	1,282	1,393	1,503
i. Financial Expenses						
-Interest on IC Loan		236	236	219	185	151
-Interest on Borrowing for Working Capital		64	69	81	81	81
-Bank Charges	0.5%	26	28	33	35	38
j. Total Financial Expenses		326	334	333	301	270
k. Depreciation		215	215	215	215	215
l. Operating Profit (h-j-k)		405	508	734	877	1,018
o. Profit/ Loss before Tax		405	508	734	877	1,018
p. Provision for Tax		86	138	228	288	347
q. Profit after Tax		318	370	506	588	672
s. Retained Profit		318	370	506	588	672
t. Add Depreciation		215	215	215	215	215
v. Net Cash Accruals		533	585	721	803	887

The table above shows that the company will post profits for all of the first five years at the resumption of commercial operations. Profitability is projected to increase from Rs 318 Lakhs in the first year to Rs 672 Lakhs by the fifth year.

8.4 **BALANCE SHEET PROJECTIONS**

The Balance Sheet projections for the first five years of commercial operations are quite solid.

Rs in Lakhs

Description	Construction	2015-16	2016-17	2017-18	2018-19	2019-20
A. Assets						
Fixed Assets						
1. Gross Fixed Assets	2,819	2,819	2,819	2,819	2,819	2,819
2. Cumulative Depreciation		215	430	645	860	1,075
Net Fixed Assets	2,819	2,604	2,389	2,174	1,959	1,744
Current Assets						
3. Current Assets		690	751	874	874	874
4. Cash Balance	201	533	972	1,400	1,944	2,572
		1,224	1,723	2,274	2,818	3,446
Total (A)	3,019	3,827	4,112	4,448	4,777	5,190
B. Liabilities						
Net Worth						
1. Equity	1,208	1,208	1,208	1,208	1,208	1,208
2. Cumulative Profits	-	318	689	1,195	1,783	2,455
(Retained Profit)		1,526	1,896	2,402	2,990	3,662
Term Liabilities						
6. Term Loans	1,812	1,812	1,682	1,423	1,165	906
4. Unsecured Loans						
		1,812	1,682	1,423	1,165	906
Other Current liabilities						
7. Bank Borrowings		490	534	622	622	622
Total (B)	3,019	3,827	4,112	4,448	4,777	5,190

These projections indicate commendable and steady growth in Shareholders' Funds from Rs 1,526 Lakhs in the first year of operations to Rs 3,662 Lakhs by the fifth year.

8.6 BREAK-EVEN POINT ANALYSIS

The Break-Even Point Analysis on the company's operations reveals that it can break even at **38%** of installed capacity. However the company's operation is proposed to commence at a capacity utilization level of 55% in Year 1, growing to 60% in the second year of commercial operations. Details of the Break-Even computations are shown in **Appendix X**.

8.7 PAY-BACK PERIOD ANALYSIS

The Pay-Back Period Analysis, which shows the period of time it takes the original investment outlay of a project to be recovered from the earnings of the project itself, shows that this company can pay back itself in 4 years and 3 Months. This is quite commendable for a project of this magnitude. Details of the Pay-Back Period computations are shown in **Appendix XI**.

8.8 DEBT SERVICE COVERAGE ANALYSIS

The Debt Service Coverage Ratio, which measures a company's ability to produce enough cash to cover its debt payments (interests, principal, etc), shows that this project has an average Debt Coverage of **2.53** over the tenure of Loan Repayment. This is quite commendable for a project of this magnitude and shows more than sufficient cashflow to meet the company's debt obligations. Details of the Debt Service Coverage Analysis computations are shown in **Appendix XIb**.

Estimated Cost of Management and Labour

Direct Labour

PARTICULARS	Skilled				Semi-skilled			
	1st	2nd	3rd	Gen	1st	2nd	3rd	Gen
Non Woven Line	3	3	3	0	2	2	2	-
Quilting	4	4	4		2	2	2	
Mattress Making	6	6	6		2	2	2	0
Final Inspection	2	2	2		1	1	1	
Raw Material Handling	1	1	1		1	1	1	
Packing	2	2	2		0	0	0	
Maintenance	1	1	1		1	1	1	0
DG	1	1	1		0	0	0	
Electrical	1	1	1		0	0	0	
Total	21	21	21	0	9	9	9	0

Production Staff

Designation	Nos.	Salary per person/per month	Total Salary P.A.
Non Woven			
General manager	1	40,000	4.80
General Manager (Korean)	1	4,20,000	50.40
Manager Production	1	30,000	3.60
Shift Officers	4	25,000	12.00
Engineering			
Lab Incharge	1	50,000	6.00
Foreman	4	10,000	4.80
Total	10		81.60

Administrative Staff

Rs. in Lakhs

Designation	Nos.	Salary per person/per month	Total Salary P.A.
Marketing			
Manager	1	30,000	3.60
Executive	1	15,000	1.80
Clerical staff	1	12,000	1.44
Accounts Manager	1	25,000	3.00
Assistant	1	15,000	1.80
Commercial Manager	1	20,000	2.40
Managerial staff	1	10,000	1.20
Store in charge	1	10,000	1.20
Time office staff	6	9,000	6.48
Time office in charge	0	25,000	-
Security Guards	4	7,000	3.36
Drivers	2	6,000	1.44
Peons	2	5,500	1.32
Total	19		29.04

Appendix II

Estimated Cost of Raw Material

Raw Material Required Kgs/Year

	2015-16	2016-17	2017-18	2018-19	2019-20
Capacity Utilization	55%	60%	70%	75%	80%
Polyester Fibre	16,64,874	18,16,226	21,18,931	22,70,283	24,21,635
Low Melt Fibre	4,16,219	4,54,057	5,29,733	5,67,571	6,05,409
Total	20,81,093	22,70,283	26,48,663	28,37,854	30,27,044

No of Covers Nos/Year

	2015-16	2016-17	2017-18	2018-19	2019-20
Capacity Utilization	55%	60%	70%	75%	80%
Cover for Economical Product	3,85,000	4,20,000	4,90,000	5,25,000	5,60,000
Cover for Mid Range Product	1,92,500	2,10,000	2,45,000	2,62,500	2,80,000
Total	5,77,500	6,30,000	7,35,000	7,87,500	8,40,000

DESCRIPTION	% of Fibers	UNIT	RATE Rs/Unit
Polyester Fibre	80%	Kgs	110.00
Low Melt Fibre	20%	Kgs	135.00
Cover for Economical Product		No	100
Cover for Mid Range Product		No	300

Raw Material Value

Raw Material Value	2015-16	2016-17	2017-18	2018-19	2019-20
Polyester Fibre	1831	1998	2331	2497	2664
Low Melt Fibre	562	613	715	766	817
Economical Product	385	420	490	525	560
Mid Range Product	578	630	735	788	840
Total cost of Raw Material	3,356	3,661	4,271	4,576	4,881

Appendix III

Schedule of Working Capital Estimates

DESCRIPTION			1st Year		
	No. of	Bank	Amount	Amount	Margin
	Months	Margin	Required	of	Money
	Required	Available		Bank	Required
		(%)		Finance	
<u>STOCK OF INVENTORIES</u>					
1. Raw Material					
-Indigenous	0.50	75%	140	105	35
2. Consumables					
-Indigenous	1.00	75%	-	-	-
3. Stock of Work-In-Progress	0.25	75%	80	60	20
4. Stock of Finished Goods	0.50	75%	217	162	54
			436	327	109
<u>SUNDRY DEBTORS</u>					
5. Bill Receivable/ Goods in transit	0.50	75%	217	162	54
			217	162	54
<u>OTHER CURRENT ASSETS/</u>					
<u>CONTINGENCIES</u>					
6. Utilities	0.50	0%	6	-	6
7. Labour & Plant Overheads	0.50	0%	11	-	11
8. Factory Overheads	0.50	0%	3	-	3
9. Administrative Expenses	0.50	0%	2	-	2
10. Other Expenses	0.50	0%	16	-	16
			37	-	37
Total			690	490	201
1. Increase in Working Capital			690		
2. Increase in Bank Borrowings				490	
3. Increase in Margin Money					201
4. Interest on Bank Borrowings	@	13%		64	

Appendix IV
Projected Revenue Schedule
& Cost of Production per Pcs of Each quality of Product

Rs in Lakhs

Yearly Sales Value	2015-16	2016-17	2017-18	2018-19	2019-20
Economical Product	2,310	2,520	2,940	3,150	3,360
Mid Range Product	2,888	3,150	3,675	3,938	4,200
Total Sales Value	5198	5670	6615	7088	7560

Economical Product Costing Rs/ Per Mattress	Year1	Year2	Year3	Year4	Year5
Cost of Production of Mattress	376	373	369	367	366
Cost of Cover	100	100	100	100	100
Total Financial Cost	37	35	30	26	22
Depreciation	25	25	25	25	25
Sale Price (Ex Mill)	600	600	600	600	600
Gross Profit	62	67	77	82	87

Mid Price Product Costing Rs / Per Mattress	Year1	Year2	Year3	Year4	Year5
Cost of Production of Mattress	940	933	922	918	915
Cost of Cover	300	300	300	300	300
Total Financial Cost	93	87	75	64	55
Depreciation	61	61	61	61	61
Sale Price (Ex Mill)	1,500	1,500	1,500	1,500	1,500
Gross Profit	106	118	142	156	168

Appendix V

Schedule of Depreciation and Amortization

Description		Building	Plant & Machinery	Misc Fixed Assets	Total
1. Total value of assets		332	1,582	253	2,166
4. Pre-Operative Expenses		38	181	29	247
Sub Total		369	1,763	282	2,414
					-
Contingency 5%		18	88	14	121
					-
TOTAL		388	1,851	296	2,534
Less residual value @ 8.50%		32.97	157.31	25.14	215.43
Vital Value		355	1,693	271	2,319
Depreciation (percent)		3.34%	10.34%	10.34%	
Depn. St. Line Method		12	175	28	215
Residual Value after 10 Yr		269	100	16	385

Appendix VI

Estimate of Finance Charges

Rs in Lakhs

Project Cost	:	3,019
Equity	:	1,208
Debt	:	1,812
Foreign Currency Reqd.	:	-
Indian Currency Reqd.	:	1,812
<u>INTEREST ON TERM LOAN</u>		
Interest on Term Loan		13%
No. of Instalments		28 Starting from 2nd Year

Description	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
	1,812								
Opening Balance	1,812	1,812	1,682	1,423	1,165	906	647	388	129
Repayment	-	129	259	259	259	259	259	259	129
Closing Balance	1,812	1,682	1,423	1,165	906	647	388	129	-
Interest	236	236	219	185	151	118	84	50	-

Appendix VII

Projected Profit and Loss Statement

All Figure in Rs in Lakhs

Description		2015-16	2016-17	2017-18	2018-19	2019-20
		55%	60%	70%	75%	80%
a. Cost of Production		3,836	4,163	4,814	5,142	5,470
b. Administrative Expenses						
-Administrative Salaries		41	41	41	41	41
- Other Admin. Overheads	1.00%	52	57	66	71	76
Total Admn. Expenses		93	97	107	112	116
c. Packing Expenses		116	126	147	158	168
d. Sale Expenses	4.00%	208	227	265	284	302
e. Total Cost Production		4,252	4,613	5,333	5,695	6,057
f. Expected Sales Ex-factory		5,198	5,670	6,615	7,088	7,560
h. Gross Profit Before interest		945	1,057	1,282	1,393	1,503
i. Financial Expenses						
-Interest on IC Loan		232	232	216	183	149
-Interest on Borrowing for Working Capital		64	69	81	81	81
-Bank Charges	0.5%	26	28	33	35	38
j. Total Financial Expenses		322	330	330	299	268
k. Depreciation		214	214	214	214	214
l. Operating Profit (h-j-k)		410	513	738	880	1,021
o. Profit/ Loss before Tax		410	513	738	880	1,021
p. Provision for Tax		88	140	230	290	348
q. Profit after Tax		321	373	509	590	674
s. Retained Profit		321	373	509	590	674
t. Add Depreciation		214	214	214	214	214
v. Net Cash Accruals		535	587	722	804	888

Appendix VII

Projected Cash Flow Statement

All Figure in Rs Lakhs

Description	Construction	2015-16	2016-17	2017-18	2018-19	2019-20
<u>CASH FLOW FROM OPERATING ACTIVITIES</u>						
Net profit before tax and extraordinary items		730	842	1,067	1,178	1,288
Adjustment for						
- Depreciation		215	215	215	215	215
- Interest on Bank Borrowings for Working Capital		(64)	(69)	(81)	(81)	(81)
- Bank Charges		(26)	(28)	(33)	(35)	(38)
Operating profit before working capital changes		856	959	1,168	1,277	1,384
Adjustment for						
Increase in bank borrowings for working capital		490	44	88	-	-
Increase in working capital		(690)	(61)	(122)	-	-
Cash generated from operation		655	942	1,134	1,277	1,384
Payment of direct taxes		(86)	(138)	(228)	(288)	(347)
Net cash from operating activities	-	569	804	906	988	1,038
<u>CASH FLOW FROM INVESTING ACTIVITIES</u>						
Capital Expenditure for the Project	(2,819)					
Net cash from investing activities	(2,819)	-	-	-	-	-
<u>CASH FLOW FROM FINANCING ACTIVITIES</u>						
Proceeds from issue of share capital	1,208					
Proceeds from long term loan	1,812					
Proceeds from unsecured loans						
Decrease in Secured Medium & Long Term Borrowings		-	(129)	(259)	(259)	(259)
Interest on Term Loans		(236)	(236)	(219)	(185)	(151)
	3,019	(236)	(365)	(478)	(444)	(410)
Net increase/(Decrease) in cash and cash equivalents	201	333	439	428	544	628
Cash and cash equivalents at the beginning of the year	-	201	533	972	1,400	1,944
Cash and cash equivalents at the end of the year	201	533	972	1,400	1,944	2,572

Appendix IX

Projected Balance Sheet

All Figure in Rs Lakhs

Description	Construction	2015-16	2016-17	2017-18	2018-19	2019-20
A. Assets						
Fixed Assets						
1. Gross Fixed Assets	2,819	2,819	2,819	2,819	2,819	2,819
2. Cumulative Depreciation		215	430	645	860	1,075
Net Fixed Assets	2,819	2,604	2,389	2,174	1,959	1,744
Current Assets						
3. Current Assets		690	751	874	874	874
4. Cash Balance	201	533	972	1,400	1,944	2,572
		1,224	1,723	2,274	2,818	3,446
Total (A)	3,019	3,827	4,112	4,448	4,777	5,190
B. Liabilities						
Net Worth						
1. Equity	1,208	1,208	1,208	1,208	1,208	1,208
2. Cumulative Profits	-	318	689	1,195	1,783	2,455
(Retained Profit)		1,526	1,896	2,402	2,990	3,662
Term Liabilities						
6. Term Loans	1,812	1,812	1,682	1,423	1,165	906
4. Unsecured Loans						
		1,812	1,682	1,423	1,165	906
Other Current liabilities						
7. Bank Borrowings		490	534	622	622	622
Total (B)	3,019	3,827	4,112	4,448	4,777	5,190

Appendix X

Break Even Point Analysis

All Figure in Rs Lakhs

			RS' LACS
DESCRIPTION	2015-16	2016-17	2017-18
A. Sales Realisation	5,198	5,670	6,615
B.- Raw material	3,356	3,661	4,271
- Consumables	-	-	-
- Interest on Working Capital	64	69	81
- Bank charges	26	28	33
- Utilities	142	156	186
- Sales Expenses	208	227	265
- Packing Expenses	116	126	147
Total B	3,911	4,268	4,983
C. Contribution (A-B)	1,287	1,402	1,632
D. Fixed costs			
- Salary & wages	265	265	265
- Factory overheads	74	81	92
- Administrative overheads	93	97	107
- Interest on F/C loan			
- Interest on R/C loan	236	236	219
- Depreciation & Preliminary Expenses	215	215	215
Total D	882	894	898
	-	-	-
BREAK EVEN POINT D/C (%)	69%	64%	55%
BREAK EVEN POINT OF CAPACITY (%)	38%	38%	39%

Appendix XIa

Pay Back Period Analysis

All Figure in Rs Lakhs

DESCRIPTION		2015-16	2016-17	2017-18	2018-19	2019-20
A. Investment						
1. Total Investment		3,019				
2. Less Margin Money		201				
Net Investment (1-2)		2,819				
B. Net Inflows						
1. Net Profit after Tax		318	370	506	588	672
2. Depreciation		215	215	215	215	215
Total		533	585	721	803	887
		-				
Cumulative		533	1,118	1,839	2,642	3,529
Payback Period	{	2,819	-	1,839	}	979
	3	+	-----	-----	-----	=
		{	2,642	-	1,839	}
						803
					=	1.22
	3	+	1.22	=	4.22	Years
						(or 4 years and 3 Months)

Appendix XIb

Debt Service Coverage Ratio Analysis

All Figure in Rs Lakhs

Description	2015-16	Year under Consideration for DSCR							
		16-17	17-18	18-19	19-20	20-21	21-22	22-23	2023-24
A) Numerator									
-Retained Profit	318	370	506	588	672	683	695	708	733
-Depreciation & Prelim	215	215	215	215	215	215	215	215	215
-Interest on Term Loan	236	236	219	185	151	118	84	50	-
Total - A	769	821	940	988	1,038	1,015	994	973	948
B) Denominator									
-Interest on Term Loan	236	236	219	185	151	118	84	50	-
-Instalment of Loan	-	129	259	259	259	259	259	259	129
Total - B	236	365	478	444	410	377	343	309	129
DSCR A/B	3.26	2.25	1.97	2.23	2.53	2.69	2.90	3.15	7.33

Average **2.53**