HEALTHCARE PRODUCTS

1. INTRODUCTION:

Textiles find use in several sectors. Healthcare industry is one such user where products like surgical gowns, Examination Coats / Aprons, Scrubs, Caps, Head/face covers, Masks, Curtains, Partitions and Bed covers etc. are commonly used.

2. PRODUCT & ITS APPLICATION:

Surgical gowns, Head/Face covers, Bed covers, and Draw Sheets and Partitions are used in Operation Theaters. Examination coats, Caps, Masks, Curtains, Partitions, Bed sheets and Bed covers are used everywhere in Hospitals.

3. DESIRED QUALIFICATIONS FOR PROMOTER:

Graduate in any discipline.

4. INDUSTRY OUTLOOK & TRENDS:

Healthcare industry has seen a major upside in last decade. Several large private hospitals have been set by corporates who are redefining rules of the game. Growing awareness about infectious disease and high standard of hygiene has led to multifold demand in healthcare textile products. As India follows the western world in healthcare spending, the demand for these products is bound to surge.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

Advancement in medical sciences has led to growing awareness of hygiene in the hospitals. Medical procedures also require high degree of sanitization and precautionary measures to prevent infection / spread of communicable diseases. Therefore more and more hospitals are resorting to modern textile products to ensure high level of medical services to its patients and protection to its staff.

6. RAW MATERIAL REQUIREMENTS:

Cotton fabric is the key raw material for hospital textile products. Although some products like Masks, Caps, and Bed Sheets are now getting replaced with non-woven technical textiles, the trend is slower and has its own disadvantage. Therefore, cotton fabric shall continue to be most preferred fabric in healthcare industry. Cotton fabricmade from low & medium count of cotton yarn is easily available in grey and dyed forms throughout India.

7. MANUFACTURING PROCESS:

The fabric purchased in roll form is spread in layers on the cutting table. Patterns of various parts of the products made out of card board or plywood or metal are laid on the fabric in such a way that wastage of fabric is minimized. Several layers of fabric are then cut through vertical motorized blade. Products are stitched in assembly line manner wherein each machine operator completes only a part of the product. The stitching starts on the 1st machine and gets completed at the last stage where the product is inspected for quality defects if any. Some articles are sent for further work like embroidery, special patch-work, Logo etc. Products are finally cleaned of loose yarn or dirt and packed in plastic bags as per customer requirements.

8. MANPOWER REQUIREMENT:

The enterprise shall need36 employees as detailed below:

Sr.No.	Designation of Employees	Monthly	Number of	Annual cost
		Salary ₹	employees required	₹ in lacs
1	Machine Operators	12,000	21	30.24
2	Helpers	8,000	11	10.56

3	Production supervisor	25,000	1	3.00
4	Accounts Executive	15,000	1	1.80
5	Stores Assistant	12,000	1	1.44
6	Office Boy	8,000	1	0.96
	Total		36	48.00

9. IMPLEMENTATION SCHEDULE:

The project can be implemented in 3 months as shown below:

Sr. No.	Activity	Time Required
31.140.	Activity	(in months)
1	Acquisition of premises	1
2	Construction (if applicable)	-
3	Procurement & installation of Plant & Machinery	2
4	Arrangement of Finance	2
5	Recruitment of required manpower	2
	Total time required (some activities shall run concurrently)	3

10. COST OF PROJECT:

Detailed cost of project is shown below:

Sr. No.	Particulars	₹in Lacs
1	Land	-
2	Building	-
3	Plant & Machinery	13.80
4	Furniture, Electrical Installations	5.50
5	Other Assets including Preliminary / Pre-operative expenses	1.50
6	Margin for Working Capital	6.23
	Total	27.03

11. MEANS OF FINANCE:

Bank term loans are assumed @ 60% of fixed assets. The proposed funding pattern is as under:

Sr. No.	Particulars	₹in Lacs
1	Promoter's contribution	14.55
2	Bank Finance	12.48
	Total	27.03

12. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹ 10.93lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	16.77	40%	6.71	10.06
2	Receivables	2.80	40%	1.12	1.68
3	Overheads	3.10	100%	3.10	-
4	Creditors	-11.74	40%	-4.70	-7.04
	Total	10.93		6.23	4.70

13. LIST OF MACHINERY REQUIRED:

Sr. No.	Particulars	ИОМ	Ottv	Rate ()	Value
Sr. NO.	Particulars		Qtty		(₹in Lacs)
	Plan & Machinery / equipments				
a)	Main Machinery				
i.	Single Needle Machine	Nos	10.00	60,000	6.00
ii.	Double Needle Machine	Nos	5.00	75,000	3.75
iii.	Buttoning Machine	Nos	1.00	75,000	0.75
iv.	Overlock Machine	Nos	2.00	40,000	0.80
V	Cutting Table & machine	Nos	2.00	1,00,000	2.00
Sr. No.	Particulars	UOM	Ottv	Doto (*	Value
31. NO.	Particulars	UOIVI	Qtty	Rate ()	(₹in Lacs)
vi.	Embroidery machine	Nos	1.00	50,000	0.50
	sub-total Plant & Machinery				13.80
	Furniture / Electrical				

	installations				
a)	Inspection tables	Nos	2.00	50,000	1.00
b)	Office & Store furniture	LS	1.00	1,50,000	1.50
c)	Desktop computer & printer	Nos	2.00	50,000	1.00
d)	Storage system	LS	1.00	2,00,000	2.00
	sub total				5.50
	Other Assets				
a)	Rent Deposits		2.00	75,000	1.50
	sub-total Other Assets				1.50
	Total				20.80

Single Needle and Double Needle stitching machines are available from following suppliers. They have offices across several cities in India. There may also be other local machinery manufacturers offering alternate machines of various makes and models.

- IIGM Private Limited Springdale No. 51, Residency Road, 3rd cross, Bangalore 560025 www.iigm.in
- Juki India Private Ltd 1090/I, Ground Floor, 18th Cross, Sector III, HSR Layout, Bangalore 560102 www.jukiindia.com
- Brother International (India) Pvt Ltd Unit No.408, 215, Atrium B-Wing, 4th floor, Opp. Sangam Cinema, Andheri Kurla Road, Andheri (East),

14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹ in Lacs	176.72	206.17	235.62	265.07	294.53
3	Raw Materials & Other direct inputs	₹ in Lacs	155.95	181.95	207.94	233.93	259.92
4	Gross Margin	₹ in Lacs	20.76	24.22	27.68	31.14	34.60
5	Overheads except interest	₹ in Lacs	18.58	18.58	18.58	18.58	18.58
6	Interest	₹ in Lacs	1.98	1.98	1.98	1.98	1.98
7	Depreciation	₹ in Lacs	1.53	1.53	1.53	1.53	1.53
8	Net Profit before tax	₹ in Lacs	-1.33	2.13	5.59	9.05	12.51

The above calculations are based on assumed unit sales price varying from \ref{thm} 15 to \ref{thm} 450 for various products. The key raw material is assumed at a cost range of \ref{thm} 60 to \ref{thm} 80 per meter. Electricity tariff is assumed at \ref{thm} 8 per KwH.

15. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 59.42% of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value
1	Sales Realization	₹. In Lacs	294.53
2	Variable costs	₹. In Lacs	259.92
3	Fixed costs incl. interest	₹. In Lacs	20.56
4	$BEP = FC/SR-VC \times 100 =$	% of sales	59.42%

16. STATUTORY / GOVERNMENT APPROVALS:

The project does not require any specific government approval. Registration with MSME is optional. An Entrepreneur may be required to obtain Shops & Establishment Registration and Professional Tax registration by local Municipal authorities. Registration under Factories Act, Provident Fund Act and ESI provisions would be required depending upon the number of employees, the location, the level of mechanization and the age of the enterprise. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

17. BACKWARD OR FORWARD INTEGRATION:

As the machines used in the project are versatile, the Entrepreneur can also consider manufacture of home furnishing articles like bed sheets, pillow covers, wall hangings etc. depending on opportunities in the market he / she is familiar with.

18. TRAINING CENTERS/COURSES

Udyamimitraportal (link: www.udyamimitra.in) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.