

Surgical Dresses (Doctor's Dress)

PRODUCT CODE	: 264104005
QUALITY AND STANDARDS	: N.A.
PRODUCTION CAPACITY	: Qty. : 6.00 Lakh Pcs. (per annum) Value : Rs. 68.00 Lakhs
MONTH AND YEAR OF PREPARATION	: May, 2003
PREPARED BY	: Small Industries Service Institute 65/1, GST Road, Guindy, Chennai- 600032

INTRODUCTION

Wearing of suitable dresses in hospitals and health clubs by the Doctor and supporting staffs has been accorded a very high priority by the hospital administration in order to identify the different personnels and also to keep some decorum. The great difficulty in washing and wearing the dresses one after another surgical operations by the Hospital Administrations, coupled with chances of transferring the germs from one to another has lead to usage of disposable garments.

Surgical dresses can be made from white bleached, deep dyed cotton twill fabric and non-woven fabric of suitable quality. These are worn over the normal dresses during performing work. There is exclusive dress meant for surgical operation which can be worn and thrown after each operation. These dresses are made from non-woven textile fabrics of suitable quality. Advantages of using non-woven fabrics for the manufacture of surgical dresses are light in weight, cheaper and available in many colours etc.

MARKET POTENTIAL

Healthcare textiles have well established market in the developed countries where the people are conscious of the risks posed to the healthcare workers, especially from blood borne diseases. Massive growth in population in developing countries and rising standard of living has helped in creating a vast potential for healthcare textiles units. Among various hospital garments, Non woven disposable garments has distinct demand in domestic and international market due to its various advantages.

BASIS AND PRESUMPTIONS

Rental value of the building is taken as Rs. 20 per square meter. This project is based on single shift basis and 300 working days in a year. Cost of machinery and equipment indicated refers to particular make and approximate to those prevailing at the time preparation of this project. Cost of installation and electrification is taken @ 10% of cost of machinery and

equipment. Non refundable deposits, project report cost, trial production, security deposits with electricity board are classified under pre-operative expenses.

Depreciation has been considered as 10% on plant and machinery and 20% on office furniture and fixture. Interest on capital investment has been taken @18% per annum.

IMPLEMENTATION SCHEDULE

Sl.No.	Activity	Period
1.	Selection of site/working shed	1 month
2.	Preparation of feasibility report	1 month
3.	Registration with Commissioner of Industries/DIC	1 month
4.	Arrangement of finance (Term loan and working capital)	3 months
5.	Procurement of machinery and equipment	1 month
6.	Plant erection and electrification	2 weeks
7.	Arrangement of raw material including packaging material	1 month
8.	Miscellaneous works like power/water connection etc.	2 months

TECHNICAL ASPECTS

Process of Manufacture

Raw materials like non woven fabric, rib cloth, velcro are checked for their quality. After checking, fabric is kept in layers on cutting table and cutting patterns are marked by chalk. Cutting of different panels is carried out by cutting machine. Cuffs made of rib cloth are attached at sleeves in order to

provide elasticity at cuff portion of operation and nurses gown. Whole garment is made by skilled tailors. Finally, velcros are attached at requisite places. Individual pieces of garments and made ups are checked for its exact measurement, trimmed, ironed and packed as single pieces of gowns. For surgeon hood, face masks caps, a set of 12 pieces are packed in printed polythene bags for proper identification.

For manufacture of caps and face masks, fabric pieces are cut in desired shape as per the sizes and made into surgeon hood, caps and masks by stitching. Two side portions of face masks are stitched with plastic stifner card of required size. Four and two pieces of cord made out of unutilised pieces of non woven (cutting refuse) fabric is also attached at the respective side portions of the surgeon hood and face masks for the purpose of tying on the face.

Quality Control and Standards

No specification for this product is available. However, entrepreneurs are required to ensure good quality of raw material to be purchased, maintenance of machines etc.

Production Capacity (per annum)

Sl. No.	Particular of Dresses	Qty.	Value (Rs.)
1.	Operation Gown	75000	2850000
2.	Nurses Gown	75000	2700000
3.	Surgeon Hood	150000	600000
4.	Nurses cap	100000	100000
5.	Face Mask (3 layered)	100000	200000
6.	Face Mask (4 layered)	100000	100000
	Total	600000	6800000

Motive Power

Power requirement to run this industry will be 9 HP.

Pollution Control

This industry does not involve in generation of pollution.

Energy Conservation

Power requirement is very low, even then energy can be saved by proper house keeping.

FINANCIAL ASPECTS

A. Fixed Capital

(i) Land and Building

Covered area	200 sq. mt.
Uncovered area	50 sq.mt.
Rent/month @ Rs. 20/sq.mt.	Rs. 5000

(ii) Machinery and Equipments

Sl. No.	Description	No.	Rate (Rs.)	Amount (Rs.)
1.	Fabric cutting machine	1	6,50,00	6,50,00
2.	Singer model SNLS machine	8	6,000	48,000
3.	Electric Iron	4	1500	6,000
4.	Personal Computer	1	60,000	60,000
5.	Miscellaneous items	LS	15,000	15,000
	Total			194000

(iii) Other Fixed Assets (Rs.)

1.	Erection and installation	7400
2.	Office furniture	20000
3.	Pre-operative expenses	10000
	Total	37400
	Total Fixed Capital	231400

B. Working Capital (per month)

(i) Staff and labour wages

Sl. No.	Designation	Nos.	Salary (Rs.)	Amount (Rs.)
1.	Manager	1	6000	6000

2.	Cutting Master	1	4000	4000
3.	Skilled workers	8	3000	24000
4.	Semi-skilled workers	6	2300	13800
5.	Clerk/Typist	1	2500	2500
6.	Helpers	3	2300	6900
7.	Peons	1	2300	2300
	Total			59500
	Perquisites @ 15%			8925
	G. Total			68425

(ii) Raw Material

Sl. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1.	Non-woven fabric (30 GSM)	Mts	4500	12	54000
2.	Non-woven fabric (60 GSM)	Mts	20000	18	360000
3.	Rib knitted cloth	Kgs	25	145	3625
4.	Velcro	Roll Set	2	220	440
5.	Plastic Film	LS			2000
6.	Polyester sewing thread	LS			4000
7.	Packing material	LS			3500
	Total				427565

(iii) Utilities (Rs.)

Electricity Bill	4300
Total	4300

(iv) Other Contingent Expenses (per month) (Rs.)

(a) Rent	5,000
(b) Postage/Stationery	500
(c) Repairs and maintenance	617
(d) Transport/travelling charges	1,000
(e) Insurance	200
(f) Miscellaneous	1,000
Total	8317

(v) Total Recurring Expenditure (per month)
Rs. 508607

(vi) Total Working Capital (for 3 months)
Rs. 1525821

C. Total Capital Investment

	(Rs. in Lakhs)
(i) Machinery and Equipments	194000
(ii) Working Capital (for 3 months)	1525821
Total	17,19,821

MACHINERY UTILISATION

Capacity utilisation is considered as 75% of installed capacity.

FINANCIAL ANALYSIS

(1) Cost of Production (per year)	(Rs.)
Recurring expenses	6103284
Depreciation on machinery @ 10%	19400
Depreciation on office furniture @ 20%	4000
Interest on total investment @ 14%	246000
Total	6372684

(2) Turnover (per year)

Sl. No.	Product	Qty. (pcs.)	Rate/ pcs.	Amount (Rs.)
1.	Doctor's Gown	75000	38	2850000
2.	Nurse's Gown	75000	36	270000
3.	Surgeon Hood	150000	4	600000
4.	Nurses cap	100000	3	300000
5.	Face Mask (4 layered)	100000	2	200000
6.	Face Mask (3 layered)	100000	1.5	150000
	Total			6800000

(3) Net Profit (per year) Rs. 427313

(4) Net Profit Ratio (Net profit/ Turnover per year) 6.28%

(5) Rate of Return on Investment (Net Profit/Total Capital Investment) 24.84%

(6) Break-even Point

Fixed Cost	(Rs.)
Depreciation	19400
Rent	60000
Interest on capital investment	246000
40% of wages of staff and labour	328440
40% of other expenses	35600
Insurance	2400
Total	691840

$$\begin{aligned} \text{B.E.P.} &= \frac{\text{FC} \times 100}{\text{FC} + \text{Profit}} \\ &= 61.81\% \end{aligned}$$

Addresses of Machinery Suppliers

1. M/s. Technik India (Apparel) Private Limited
74-E, First Floor,
Southern Wing,
Mount Road,
Guindy,
Chennai-600 032
2. M/s. Industrial Sewing Systems
19, First Floor,
Jawaharlal Nehru Salai,
Ambal Nagar,
Ekkaduthangal,
Chennai-600 097
3. M/s. Apparel and Leather Technics Limited
Kaikondanahalli,
Sarjapur Road,
Near Bellandur Gate,
Carmelram Post,
Bangalore-560 035
4. M/s. Apparels and Leather Technics Limited
B-283, Okhla Industrial Area,
Phase-I,
New Delhi-110 020

Raw Material Suppliers

1. M/s. Paree Trading Company
No. 33, Kasi Chetty Street,
Chennai-600 079
2. M/s. Thahar Brothers
No. 73, Devaraja Mudali Street,
Chennai-600 003.