# Surgical Dresses (Doctor's Dress)

PRODUCT CODE: 264104005

QUALITY AND STANDARDS: N.A.

PRODUCTION CAPACITY: Qty.:480000 Pcs. (per annum)

Value:Rs. 197.2 Lakhs

MONTH AND YEAR: May, 2020 OF UPDATE

UPDATED BY: MSME-DEVELOPMENT INSTITUTE MRD ROAD, BAMUNIMAIDAN, GUWAHATI- 781021

# 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 personnel 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.

# Specification

New High-Volume Manufacturers of COVID-19 Personal Protective Equipment (PPE) and Medical Device PPE

Essential technical requirements for Gowns, gloves, masks, respirators, eye protection and coveralls where no CE mark has been obtained or where an alternative use is proposed of an existing CE marked product (Table 1 and 2: page 6 within this document).

Notes:

Specifications already published for other types of PPE remain valid until further revisions take place. This includes for Aprons, clinical waste bags, cleaning tablets, as examples.

This is a fast-moving situation and this guidance will be continually updated.

This Guidance applies only to potential manufacturing for direct Government procurement or donations for frontline health and care purposes.

# 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. 40 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 andequipment. Nonrefundable deposits, project report cost, trial production, securitydeposits 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 @12% per annum.

### IMPLEMENTATION SCHEDULE

SI.no. Activity Period	
<ol> <li>Selection of site/workingshed 1 month</li> <li>Preparation of feasibility report</li> <li>Registration with Commissioner of Industries/DIC</li> </ol>	1/2 month 1 Week
4. Arrangement of finance 2 months	
(Term loan and working capital)	4 (1
5. Procurement of machinery and equipment	1 month
<ol> <li>Plant erection and electrification</li> <li>Arrangement of raw material including packaging material</li> </ol>	2 weeks 1 month
8. Miscellaneous works like power/water connecti	on etc. 2 weeks

# **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, Velcrois 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 Polythenebags for proper identification. For manufacture of caps and facemasks, 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 stiffenercard of required size. Four and two pieces of cord made out of unutilized 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 60000 8400000
- 2. Nurses Gown 60000 6600000
- 3. Surgeon Hood 120000 1920000
- 4. Nurses cap 80000 800000
- 5. Face Mask (3 layered) 80000 1120000
- 6. Face Mask (4 layered) 80000 880000
- Total 480000 19720000

### **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. 40/sq.mt.Rs. 10000

(ii) Machinery and Equipments SI. No.Description QTY.Rate(Rs.) Amount(Rs.)

1. Fabric cutting machine 1 350,00.0350,00.0 2. Singer model SNLS machine 8 7500.060000.0 3. Automatic Steam Irioning175000.0 75000.0 4. Personal Computer 1 60000.0 60000.0 5. Miscellaneous items LS 25000.025000.0 Total 255000.0 (iii) Other Fixed Assets (Rs.) 1. Erection and installation 20000.0 2. Office furniture 40000.0 3. Pre-operative expenses 25000.0 Total 85000.0

Total Fixed Capital340000.0

Β.	Working	Capital	(per month)	
			<b>N</b> /	

(i) Staff and labour wages

Sl. No.Designation Nos.Salary(Rs.) Amount(Rs.)

- 1. Manager 1 18000.0 18000.0 20000.0
- 2. Cutting Master 1 20000.0
- 3. Skilled workers 815000.0
- 4. Semi-skilled workers 6 10000.0 60000.0
- 5. Clerk/Typist 1 8000.08000.0
- 6. Helpers 3 7500.022500.0
- 7. Peons 1 7500.07500.0 Total 256000.0
- 8. Perquisites @ 15%38400.0 G. Total 294400.0

### (ii) Raw Material

Sl. No.DescriptionUnit Qty.Rate (Rs.) Amount (Rs.)

<ol> <li>Non-woven fabric (30 GSM)</li> <li>Non-woven fabric (60 GSM)</li> <li>Rib knitted clothKgs35 280/-9800.0</li> </ol>	Kgs 2500 90/-225000.0 Kgs8000105/- 840000.0	
4. Velcro Roll Set 2540/-1080.05. Plastic Film LS6. Polyester sewing thread	5000.0 LS	5000.0
7. Packing material LS Total 1095880.0	10000.0	
(iii) Utilities (Rs.) 1. Electricity Bill 8000.0		2000.0
2. Utilities Total 10000.0		2000.0
(iv) Other Contingent Expenses (a) Rent 10000.0	(per month) (Rs.)	
(b) Postage/Stationery 2000.0		
<ul><li>(c) Repairs and maintenance 2000.0</li><li>(d) Transport/travelling charges 15000.0</li></ul>	)	
(e) Insurance 2000.0 (f) Miscellaneous5000.0		
Total 36000.0		

120000.0

(v) Total Recurring Expenditure (per month)Rs. 1436280.0

(vi) Total Working Capital (for 2 months)Rs. 2872560.0

C. Total Capital Investment<sub>(Rs.)</sub> (i) Machinery and Equipment340000.0 (ii) Working Capital (for 2 months) 2872560.0 Total 3212560.0

Say Rs.3213000.0

# MACHINERY UTILISATION

Capacity utilization is considered as75% of installed capacity.

# FINANCIAL ANALYSIS

(1) Cost of Production (per year) (Rs.)

- a. Recurring expenses 17235360.0
- b. Depreciation on machinery @ 10% 25500.0
- c. Depreciation on office furniture @ 20%8000.0
- d. Interest on Bank Loan @ 12% 289170.0 Total 17558030.0
- (2) Turnover (per year)
- Sl. NoProduct Qty. (pcs.) Rate/(pcs.) Amount (Rs.)
- 1. Doctor's Gown 60000 1408400000.0
- 2. Nurse's Gown 60000 1106600000.0
- 3. Surgeon Hood 120000 161920000.0
- 4. Nurses cap 80000 10800000.0
- 5. Face Mask (4 layered) 80000 141120000.0
- 6. Face Mask(3 layered) 80000 11880000.0 Total 19720000.0
- (3) Net Profit (per year) Rs. 2161970.0
- (4) Net Profit Ratio (Net profit/ Turnover per year) 10.96%
- (5) Rate of Return on Investment 67.28% (Net Profit/Total Capital Investment)

# (6) Break-even Point

Fixed Cost (Rs.)

- a. Depreciation 33500.0
- b. Rent120000.0
- c. Interest on Bank Loan 289170.0
- d. 40% of wages of staff and labour1413120.0
- e. 40% of other expenses163200.0

#### f. Insurance 24000.0 Total 2042990.0 B.E.P. FC × 100 = ------

FC + Profit = 48.58%

#### Addresses of Machinery Suppliers 1. SagarUdyog SS Rd, Lakhtokia, Fancy Bazaar, Guwahati, Assam 781001 Phone: 088110 40453

#### 2.Trade King

Lakhtokia Danish Rd, Lakhtokia, Fancy Bazaar, Guwahati, Assam 781001

Phone: 098642 65074

### 3. Sanganeria Agencies

House No. 38, SRCB Rd, Opposite YES Bank, Fancy Bazaar, Guwahati, Assam 781001 Phone: 098640 66303

#### 4.USHA Company Store

GS Rd, Christian Basti, Guwahati, Assam 781005 Phone: 098640 73652

### **Raw Material Suppliers**

#### NRSB NON WOVEN FABRICS LLP

85 maamoniroisum path, near, Gandhi Basti, Chandmari, Guwahati, Assam 781003