

## **Project Profile**

Product:- : PPE Kit ( Doctor's Dress / Gown)

Product Code : HS Code:- 62 10 10

Quality Standard : ISO 16603 and ISO 22612:2005 are being followed for PPE kit, normally.

Production Capacity : Qty. - 1,50,000 No. ( at 75% capacity utilization)  
Value Rs. 375 Lakhs.

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## **INTRODUCTION**

The Protective equipment consists of garments placed to protect the health care workers or any other persons to get infected.

These usually consist of standard precautions: gloves, mask, gown. If it is blood or airborne high infections, will include: Face protection, goggles and mask or faceshield, gloves, gown or coverall, head cover, rubber boots

Wearing of suitable dresses in hospitals by the Doctor and supporting staffs has been accorded a very high priority by the hospital administration in order to identify the different personnel's 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 and treatment of Corona Virus treatment which can be worn and thrown after each treatment

## **PRODUCTS AND ITS USE**

The doctor's Dress / Gown is one of the clothing of Personal Protective Equipment (PPE), is important in preventing transmission of the virus etc..

PPE kit are used in operation theatres and every area of health care that requires patient inspection. Rise in awareness regarding airborne infections has led to an increase in usage of PPE kit in not only large health care facilities but also smaller ones across the world. The usage of PPE kit has increased among the general public owing to the rise in outbreaks of airborne diseases in recent times. The inevitable use of PPE kit and lower threat of their substitutes are expected to propel the global PPE kitmarket during the forecast period.

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 colors etc.

## **MARKET:-**

The unprecedented spread of corona virus worldwide, is driving the demand for PPE kit. PPE kit covers are extensively used in the healthcare sector. The proliferating OPD sessions and surgeries on a daily basis across the globe are anticipated to drive product demand within the healthcare sector. The function of PPE Kit is to reduce or eliminate the chances of being affected by potential environmental contaminants. PPE kit covers are typically made from non-woven fabric.

Healthcare dress / gown 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 dress / gown units. Among various hospital garments, Non woven disposable garments has distinct demand in domestic and international market due to its various advantages.

## **BASIS AND PRESUMPTION**

- The project is to manufacture PPE Kit ( Doctor's dress / gown ).
- These dresses are made from non-woven textile fabrics of suitable quality.
- This project is based on single shift basis of 8 hours and 300 working days in a year.
- Costs of machinery, equipment, raw material indicated in this report refer to a particular make and approximately to those prevailing at the time of preparation of this profile and it is presumed that these rates are likely to vary from supplier to supplier and place to place.
- Cost of installation and electrification of plant and machinery is taken @ 10% of its cost.
- The interest rate is taken @ 12%.
- This project profile is intended for basic information about the product and to manufacture the same.

- This project profile needs to be revised / upgraded as per the location, time and scale of production, etc.

## **IMPLEMENTATION SCHEDULE**

Time period required for executing the project from preparation of project report to starting the trial run production will be 7 months period approximately. Considering that some of the activities may be overlapping, the project implementation will take a total period of five months approximately for starting the actual production.

## **TECHNICAL ASPECTS**

### **1) PROCESS OF MANUFACTURING**

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 gown. Whole garment is made by skilled tailors. Finally, Velcro 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.

### **2) QUALITY SPECIFICATION**

Normally ISO 16603 and ISO 22612:2005 are being followed for PPE kit

### **3) PRODUCTION CAPACITY PER ANNUM**

- i) Quantity 150,000 nos. ( by utilizing 75 % installed capacity)
- ii) Value 345 lakhs

### **4) APPROXIMATE POWER REQUIREMENT**

10 H.P.

## 5) POLLUTION CONTROL

The stitching is the main process of manufacturing do not generate pollution.

## 6) ENERGY CONSERVATION

Power requirement is very low, even then energy can be saved by use of LED lighting and proper ventilation for general lighting.

## Financial Aspects;-

### Fixed capital:-

| No.      | Particulars                                   |     |             | Amount in Rs.      |
|----------|---|-----|-------------|--------------------|
| <b>1</b> | <b>Land and Building (Rented) (Per Month)</b> |     |             | <b>50,000/-</b>    |
| <b>2</b> | <b>Machine And Equipment</b>                  |     |             |                    |
|          | Name of the Machine                           | Qty | Rate        | Value in Rs.       |
|          | A CNC Fabric cutter machine                   | 5   | 10,00,000/- | 50,00,000/-        |
|          | B Sewing Machine                              | 20  | 1,25,000/-  | 25,00,000/-        |
|          | C Overlocker machine                          | 5   | 1,90,000/-  | 9,50,000/-         |
|          | D Computer                                    | 5   | 1,00,000/-  | 5,00,000/-         |
|          | E Iron  | 5   | 4,000/-     | 20,000/-           |
|          | F Miscellaneous items                         | LS  |             | 50,000/-           |
|          | <b>Total Amount</b>                           |     |             | <b>90,20,000/-</b> |

Electrification and in stallion charges

@ 10 % of the cost of machinery

Rs. 9,02,000/-

Cost of office equipment

Rs. 78,000/-

**Total cost of Machines and Equipments. 1,00,00,000/-**

### Working capital requirement

#### i) Personnel (Wages per Month)

| No | Designation  | No | Salary/Month | Total Salary in Rs. |
|----|--------------|----|--------------|---------------------|
| 1  | Manager      | 1  | 60,000/-     | 60,000/-            |
| 2  | Supervisor   | 2  | 30,000/-     | 60,000/-            |
| 3  | Skill Labour | 8  | 25,000/-     | 2,00,000/-          |
| 4  | Labour       | 10 | 20,000/-     | 2,00,000/-          |

|   |      |   |          |            |
|---|------|---|----------|------------|
| 5 | Peon | 1 | 15,000/- | 15,000/-   |
|   |      |   | Total    | 5,35,000/- |

Perquisite @ 15% of total salary

80,250/-

Total Rs.6,15,250/-

**say Rs. 6,15,000/-**

**ii) Raw materials Per Month**

| S.N          | Description                                   | Unit | Qty.   | Rate | Value In Rs.       |
|--------------|---|------|--------|------|--------------------|
| 1            | Non Woven Fabric                              | Mtr  | 62,500 | 20   | 12,50,000/-        |
| 2            | Rib cloth, Velcro & other miscellaneous Items | LS   |        |      | 2,50,000/-         |
| <b>Total</b> |   |      |        |      | <b>15,00,000/-</b> |

**iii) Utilities per Month**

Power Charges Avg. 5000 units  
@ 6.25/ Unit

Total Rs. 31,250/-

**Say, Rs. 31,000/-**

**iv) Other Contingency expenses per month**

|                        |                 |
|------------------------|-----------------|
| Postage                | 3,000/-         |
| Repair and Maintenance | 7,000/-         |
| Transportation         | 10,000/-        |
| Insurance              | 3,000/-         |
| Misc.                  | <u>7,000/-</u>  |
|                        | <b>30,000/-</b> |

**v) Total recurring expenditure**

|                            |                    |
|----------------------------|--------------------|
| Personnel                  | 6,15,000/-         |
| Raw materials              | 15,00,000/-        |
| Utilities                  | 31,000/-           |
| Other Contingency Expenses | <u>30,000/-</u>    |
|                            | <b>21,76,000/-</b> |

vi) Working capital for 3 Month 65,28,000/-

vii) Total capital investment

i) Fixed Capital 1,00,00,000/-  
ii) Working capital for 3 Month 65,28,000/-  
**1,65,28,000/-**

**Machinery Utilization**

Capacity utilization is considered as 75% of installed capacity

**3) Financial analysis**

**a) Cost of Production (per Year) Rs**

Total recurring cost 2,61,12,000/-  
Depreciation on Machinery and equipment @10% 9,92,200/-  
Depreciation on Office furniture @ 20% 15,600/-  
Interest on total investment@12% 19,83,360/-  
**Rs.2,91,03,160/-**  
**Say Rs.2,91,00,000/-**

**b) Turn over (Per Year)**

| Item                 | Qty      | Rate   | Value In Rs.  |
|----------------------|----------|--------|---------------|
| PPE Kit (Dress/gown) | 1,50,000 | 230 /- | 3,45,00,000/- |

**c) Net Profit per Year**

Rs. 3,45,00,000/- - 2,91,00,000/- = 54,00,000/-

**d) Net profit ration**

$\frac{54,00,000/-}{3,45,00,000/-} \times 100 = 15.65\%$

**e) Rate of Return**

$$\frac{54,00,000/- \times 100}{1,65,28,000/-} = 32.67\%$$

**f) Break Even point**

| <b>Fixed Cost</b>       | <b>Rs.</b>        |
|-------------------------|-------------------|
| a) Total Depreciation   | 10,07,800/-       |
| b) Total Interest       | 19,83,360/-       |
| c) Salary @ 40%         | 29,52,000/-       |
| d) Other Expenses @ 40% | 1,44,000/-        |
| e) Utility @ 40%        | <u>1,48,800/-</u> |
|                         | 62,35,960/-       |

$$\begin{aligned} \text{B.E.P.} &= \frac{\text{Fixed cost} \times 100}{\text{Fixed cost} + \text{Profit}} \\ &= \frac{62,35,960 \times 100}{62,35,960 + 54,00,000/-} \\ &= \frac{66,68,76,000}{128,95,960} \\ &= 53.59\% \end{aligned}$$



## **Machine & equipment Supplier**

- 1) iSoni& Sons**  
G/F 1 SaroverAvenuUnderSbi Bank,  
Narol Cross Road Narol Cross, Road,  
Narolgam, Ahmedabad, Gujarat 382405
  
- 2) KP Tech Machine (India) Pvt.Ltd.**  
K-209,Vishala Land Mark, Above Marigold Restaurant,  
Opp-Kathwada GIDC, Sardar Patel Ring Road,  
Nikol, Ahmedabad, Gujarat 382350.
  
- 3) Jyot Sewing Machine Co.**  
2 & 3, New Grain Market, Near Gayatri Dairy,  
Madras Mandir Road, Khokhra, Ahmedabad-380 008.

## **Raw Material Supplier**

- 1) ALP Non Woven Pvt. Ltd.**  
Plot No: 82/67 GIDC Modasa,  
Ganeshpur Shamalaji Road,  
Modasa -383315  
Gujarat
  
- 2) Shri Shri Nonwoven**  
43, Umiya Industries, Bhestan,  
Surat-395023, Gujarat, India
  
- 3) Pitru Industries**  
Area, Plot No. 7, Gondal, Jamwadi GIDC,  
Gondal-360311  
Dist. Rajkot, Gujarat, India

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