

MSME DEVELOPMENT INSTITUTE, KOLKATA

PRODUCT : PPE Kit (Coverall)

PRODUCT CODE :

QUALITY STANDARD : As per Customer Specification

MONTH & YEAR : June, 2020

PREPARED BY : **MSME DEVELOPMENT INSTITUTE**
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A. INTRODUCTION:

PPE Kit (Coverall) is designed to protect torso of healthcare providers from exposure to virus. Although coveralls typically provide 360-degree protection because they are designed to cover the whole body, including back and lower legs and sometimes head and feet as well, the design of medical/isolation gowns do not provide continuous whole-body protection (e.g., possible openings in the back, coverage to the mid-calf only). Coveralls/gowns have stringent standards that extend from preventing exposure to biologically contaminated solid particles to protecting from chemical hazards.

B. MARKETING & SCOPE:

By using appropriate protective clothing, it is possible to create a barrier to eliminate or reduce contact and droplet exposure, both known to transmit COVID-19, thus protecting healthcare workers working in close proximity (within 1 meter) of suspect/confirmed COVID-19 cases or their secretions.

In the present Global Pandemic COVID 19 situation, wearing of Coverall is essential by healthcare workers. Hence demand of Coverall is very much high in Domestic as well as International market.

C. SPECIFICATIONS OF PRODUCTS:

The basic raw materials used for Coverall is PU coated woven/Non Woven fabric. The product should be 100% protective from Airborne, Droplet. The resistant properties of the product can be checked from any NABL accredited Laboratory.

D. BASIS AND PRESUMPTIONS:

1. The Project Profile has been prepared on the basis of single shift of 8 hours each day, 25 days in a month and at 75% efficiency.
2. It is presumed that in the 1st year, the capacity utilization will be 60% followed by 75% in the next year and 80% in the subsequent years.
3. The rates quoted in respect of salaries and wages for skilled workers and others are the minimum rates in the State/neighboring States.
4. Interest rate for fixed and working capital has been taken @ 12% of an average, whether financed by the Banks or by Financial Corporations.

5. Margin money required is minimum 30% of the Projected invested.
6. Pay Back Period of the Project: After the initial gestation period of one and a half year, it will require 3 years to pay back the loans.
7. The rental value of the work shed of Area 100 Sq meter and other built up/covered area has been taken at the rate of Rs. 70/- per square meter.
8. The rates quoted in respect of machines, equipments and raw materials are those prevailing at the time of preparation of this Project Profile and are likely to vary from supplier to supplier and place to place. When a tailor-made Project Profile is prepared, necessary changes are to be made.

E. IMPLEMENTATION SCHEDULE:

| | | |
|----|---|------------------|
| 1. | Preparation of Project Report: - a) Calling quotations. b) Preparation. | 1 Week 1 Week |
| 2. | Financial arrangements. | 1 Month. |
| 3. | Purchase and Procurement of Machinery. | 2 week. |
| 4. | Installation of machines & Electrification | 1 Week. |
| 5. | Recruitment of Staff & Labor | 3 days . |

F. TECHNICAL ASPECT:

PROCESS OF MANUFACTURE:

1. Procurement of Woven & Non Woven Cloth :

The basic raw material of the product is Polyurethane (PU) Coated woven /non Woven fabric. These fabrics need to be purchase from market as per requirement of quality.

2. Cutting & Stitching:

After inspection the fabric is placed on the cutting table in the form of layer and marked by marker as per different sizes required for manufacturing Coverall. Cutting of layer have been carried out by electric straight knife cutting machine. Then stitch the piece and make the Coverall as per requirement by the help of sewing machine.

3. Seam Sealing , Checking and Packing:

Seam of the product has been sealed by seam sealing machine. After seam sealing the product has been thoroughly checked for identifying any kind of defects.

After checking & minor correction if any, the product has been packed as per requirement of customer requirement. Finally the products have been delivered to customers as per their requirements.

4. Production Capacity:

| Sl no | Name of product | Production per year | Price /pcs | Total values |
|--------------|-------------------------|----------------------------|-------------------|---------------------|
| 1 | Non Woven Coverall | 43200 | 210 | 8640000.00 |
| 2 | Woven Coverall | 43200 | 510 | 22032000.00 |
| | Total values of Product | | | 30672000.00 |

5. **Motive Power Requirements:** 12 H.P.

6. Pollution Control Needs:

During sealing of seam some hazards fumes are generated. Hence the Pollution control Department may be intimated prior to starting of the business.

7. Energy Conservation:

As the power requirement is small, this can be conserved by proper housekeeping and maintenance.

G. FIXED CAPITAL:

1. Land & Building:

100 sq.mts building is considered rental with monthly rent of Rs.7,000/-p.m. @ Rs.70/- per sq. meter.

2. Machinery & Equipments:

| S.no. | Description | Indian / Imported | Qty | Rate (Rs) | Value (Rs.) |
|-------|---------------------------|-------------------|-----|-----------|-------------|
| 1. | Industrial Sewing Machine | Indian | 8 | 30000 | 240000.00 |
| 2. | Two needle Sewing Machine | Indian | 2 | 35000 | 70000.00 |

| | | | | | |
|--------------|---|---|------|--------|-------------------|
| 3. | Seam sealing machines 3000 W, Nozzle unit 22.0 mm, Sealing Speed 1-60ft/min | ” | 2 | 350000 | 700000.00 |
| 4. | Vertical Fabric Cutter | “ | 2 | 20000 | 40000.00 |
| 5. | Laboratory equipment such as weighing balance magnifying glass, micros scope and other testing equipment and chemicals. | | L.S. | - | 22000.00 |
| Total | | | | | 1072000.00 |

3. Other Fixed Expenses:

| | |
|---------------------------------|-----------------|
| Wooden/ Table for Cloth Cutting | 50000.00 |
| Stools & Tables / Almirah | 20000.00 |
| Other pre –operative expenses | 15000.00 |
| Total | 85000.00 |

4. TOTAL FIXED CAPITAL (Excluding Building Rent):

| | |
|--------------------------------|-------------------|
| Machinery & Equipments charges | 1072000.00 |
| Other Fixed Expenses | 85000.00 |
| Total | 1157000.00 |

H. WORKING CAPITAL:

i) Staff & Labor per Month

| S.No | Personal | No. | Salary Rs. | Total Rs. |
|--------------|------------------------|-----|------------|------------------|
| 1. | Marketing Manager | 1 | 25000 | 25000.00 |
| 2. | Supervisor (Technical) | 1 | 15000 | 15000.00 |
| 3. | Cutting Master | 1 | 12000 | 12000.00 |
| 4. | Accountant (Part time) | 1 | 6000 | 6000.00 |
| 5. | Watchman/Peon | 1 | 9000 | 9000.00 |
| 6. | Skilled worker | 12 | 10000 | 120000.00 |
| 7. | Semi- skilled Worker | 1 | 8500 | 8500.00 |
| 8. | Helper | 2 | 6000 | 12000.00 |
| Total | | | | 207500.00 |

ii) Raw Material (Including Packing) P.M.

| Sr No | Description | Cloth Qty in meter | Rate per meter Rs | Value Rs |
|--------------|--------------------------------------|--------------------|-------------------|-------------------|
| 1. | PU Coated Non Woven | 14400 | 35 | 504000.00 |
| 2. | PU Coated Woven | 14400 | 100 | 1440000.00 |
| 3. | Sewing thread, ZIP, auxiliaries etc. | L.S. | | 50000.00 |
| Total | | | | 1994000.00 |

iii) Utilities (P.M.)

Electricity, water requirement = Rs 12000/-

iv) Other Contingent Expenses (P.M.) **Rs.**

| | | |
|------------------|----------------------|-----------------|
| a. | Rent. | 7000.00 |
| b. | Postage & Stationery | 500.00 |
| c. | Consumable Stores | 3000.00 |
| d. | Repair & Maintenance | 5000.00 |
| e. | Insurance | 2500.00 |
| f. | Misc. expenses | 5000.00 |
| Total Rs. | | 23000.00 |

v) Total Recurring Expenditure (P.M.)

| | |
|-------------------------------|-------------------|
| | Rs. |
| a. Staff & Labour. | 207500.00 |
| b. Raw Material. | 1994000.00 |
| c. Utilities. | 12000.00 |
| d. Other contingent expenses. | 23000.00 |
| Total Rs. 2236500.00 | |

vi) Total Working Capital (on 3 months basis)

Rs. 2236500 x 3 = **Rs 6709500.00**

I. TOTAL CAPITAL INVESTMENT.

| | | |
|----|------------------|-------------------|
| a. | Fixed Capital | 1157000.00 |
| b. | Working Capital | <u>6709500.00</u> |
| | Total Rs. | 7866500.00 |

J. MACHINERY UTILIZATION:

75% Machinery utilization is considered for achieving the projected target.

K. FINANCIAL ANALYSIS.

1. Cost of Production (per year):

| | | |
|---|--|--------------------|
| 1 | Total recurring expenditure per year | 26838000.00 |
| 2 | Depreciation on machinery & equipments @ 10 % p.a. | 107200.00 |
| 3 | Depreciation on office furniture @ 20 % p.a. | 17000.00 |
| 4 | Interest on total investment @ 12% p.a. | <u>943980.00</u> |
| | Total Rs. | 27906180.00 |

Say Rs 27906000.00

2. Turn Over (Per Year):

| Sl no | Name of product | Production per year | Price /pcs | Total values |
|--------------|-------------------------|----------------------------|-------------------|---------------------|
| 1 | PU Coated Non Woven | 43200 | 210 | 8640000.00 |
| 2 | PU Coated Woven | 43200 | 510 | 22032000.00 |
| | Total values of Product | | | 30672000.00 |

4. Net Profit (Per Year):

Rs 30240000- Rs 27906000 = **Rs. 2766000/-**

5. **Net Profit Ratio:** $\frac{\text{Net Profit} \times 100}{\text{Turnover per annum}} = \frac{2766000 \times 100}{30672000} = 9.01\%$

6. **Net Rate of Return:** $\frac{\text{Net Profit} \times 100}{\text{Total Investment}} = \frac{2766000 \times 100}{7866500} = 35.16\%$

7. **Break Even Point:**

I. **Fixed Cost:**

| | |
|---|-----------------------------|
| a. Depreciation on machinery & equipment | 107200.00 |
| b. Depreciation on furniture. | 17000.00 |
| c. Rent | 84000.00 |
| d. Interest on total investment | 943980.00 |
| e. 40% of salary & wages | 996000.00 |
| f. 40% of other expenses except rent. & Insurance | 64800.00 |
| g. Insurance | <u>30000.00</u> |
| | Total Rs. 2242980.00 |

II. **PROFIT:** **Rs. 2918760/-**

BEP: $\frac{\text{Fixed cost} \times 100}{\text{Fixed cost} + \text{Profit}}$

= $\frac{1757044 \times 100}{1757044 + 2310840}$

= **44.78 %**

L. NAMES AND ADDRESSES OF SUPPLIERS:

1. M/s Juki India Pvt Ltd
Address: Ab 1, Prafulla Kanan, Kolkata -1
2. M/s Hari Chand Anand & Co.
Address: P360 Keyatala Road, Kolkata-700029
3. Macpower CNC Machines Ltd
Plot no 2234, Near Kranti Gate, GIDC, Metoda 360021, Rajkot,
Gujarat, India

M. Address of Raw Material (Knitted)Suppliers:

1. Entremonde Polycoaters Ltd
Plot No 29, Street No 13, C Road, M I D C, Satpur, Nashik,
Maharashtra 422007
2. Kusumgar Corporates Pvt. Ltd.
RO No-101/102, Manjushree, VM Road, JVPD, Vile Parle West, Mumbai,
Maharashtra, 400056, India
