

**PROJECT PROFILE**  
**ON**  
**SURGICAL AND MEDICAL FACE MASK**

<b>NAME OF THE PRODUCT</b>	<b>SURGICAL AND MEDICAL FACE MASK</b>
<b>QUALITY &amp; STANDARD</b>	<b>BIS IS 16289: 2014 MEDICAL TEXTILES SURGICAL FACE MASKS SPECIFICATION</b>
<b>PRODUCTION CAPACITY</b>	<b>The production capacity of the unit at 75% capacity utilisation.</b>
<b>MONTH &amp; YEAR OF PREPARATION</b>	<b>JUNE, 2020</b>
<b>PREPARED BY</b>	<b>MSME - Development Institute, Ministry of Micro, Small &amp; Medium Enterprises, Government of India Narasapur X Roads, Balanagar, Hyderabad-500037. Tele. 040-23078131/132/133 email: dcdi-hyd@dcmsme.gov.in Website: msmehyd.ap.nic.in</b>

# **PROJECT PROFILE ON DISPOSABLE SURGICAL AND MEDICAL FACE MASK**

## **INTRODUCTION:**

Surgical face masks are worn by health care professionals during surgery or while tending to patients in order to avoid contact with bacteria shed in the form of liquid droplets and aerosols from the mouth and nose or infectious blood and body fluids. Surgical face masks are used as a protective barrier to prevent cross-contamination among patients and surgeons. They are made mostly from non-woven fabric and are available in the two-layer and three-layer form. Surgical face masks 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 surgical face masks in not only large health care facilities but also smaller ones across the world. The usage of surgical face masks has increased among the general public owing to the rise in outbreaks of airborne diseases in recent times. The inevitable use of surgical face masks and lower threat of their substitutes are expected to propel the global surgical face masks market during the forecast period.

## **MARKET POTENTIAL:**

Increase in aging population, prevalence of hospital acquired infections (HAIs), and rise in demand of improved healthcare facilities in the developing economies drive the market. The global disposable medical masks market is segmented based on type, end user, and region. On the basis of type, the market is bifurcated into facemasks and respirators. Based on application, it is categorized into hospitals & clinics, industrial, individual and others. The global surgical face mask market can be segmented based on distribution channel, end-user, and region. Healthcare professionals or the general public are the end users of surgical face masks. Surgical face masks are widely available through all distribution channels, and owing to the rise in number of outbreaks, the usage of surgical masks is expected to increase considerably in the near future. In terms of distribution channel, the global surgical face mask market can be segregated into independent pharmacies, online sales, hospital pharmacies, retail stores, and others.

## **BASIS AND PRESUMPTIONS:**

The unit will work for 8 hours shift on working days for 300 working days in a year. The capacity utilization of the machine is assumed as 75% for the 1<sup>st</sup> year.

## **IMPLEMENTATION SCHEDULE:**

The project can be implemented in 6 months after sanction of loan

## TECHNICAL ASPECTS:

### 1. Process of Manufacturing:

One set mask machine is connected to three mask ear belt welding machines. After the mask body is made, the conveyor belt is sent to the ear belt welding machine for ear belt welding. It can complete an ear mask and only one operator can operate the whole production line. The production line realizes the full automatic production of plane mask, mainly including coil feeding, folding, pressing, nose rib feeding, mask shaping, mask cutting, ear feeding and welding, finished product cutting and other processes. The mask is comfortable to wear, no pressure, good filtering effect, can be used in health care, electronics and other industries.

### 2. Quality Specification:

BIS IS 16289: 2014 MEDICAL TEXTILES SURGICAL FACE MASKS SPECIFICATION

### 3. Production Capacity per Annum:

Quantity: 64,80,000 nos of 3 ply disposable mask

Value: Rs. 6,48,00,000.00 of net sales

### 4. Power Requirement: 3 phase

Mask Making Machine: 10 KW

Ear loop welding machine: 2.7 KW

## TOTAL CAPITAL INVESTMENT:

S. No	Description	Value (Rs in lakhs)
1	Fixed capital	9,618,000.00
2	Working capital for 3 months	10,660,132.50
3	Pre-operative expenses	100,000.00
	<b>Total Cost</b>	<b>20,378,132.50</b>

## MEANS OF FINANCE:

1. Promoter's Contribution (25% of Total Investment): Rs. 2,665,033.13
2. Bank Loan (Total Investment- Promoter's Contribution): Rs. 17,713,099.38

## FINANCIAL ASPECTS:

### I. FIXED CAPITAL:

- i. **Land & Buildings:** Covered Area of 300 sq.m on rent of Rs. 25,000 per month

ii. Machinery & Equipment:

S. No	Machine Description	Quantity	Rate/Unit	Total Cost
1	Automatic 3 layer non woven body making machine	1	2,419,000.00	2,419,000.00
2	Automatic Face mask ear loop welding machine	3	2,183,000.00	6,549,000.00
3	Electrification, Control Panels and Cabling, Transformer, etc.	1	500,000.00	500,000.00
4	Office Equipment	1	100,000.00	100,000.00
5	Furniture and Fittings	1	50,000.00	50,000.00
	<b>Total</b>			<b>9,618,000.00</b>

II. WORKING CAPITAL:

i. Staff & Labour per month:

S.No	Designation	Rs/ month
1	Factory Manager(Engineer)-1 No	25,000.00
2	Supervisor-1 No	16,325.00
3	Skilled Worker-2 Nos	32,650.00
4	Unskilled Worker-2 Nos	29,650.00
5	Accountant-1 No	17,750.00
6	Security-1 No	17,750.00
	Total	139,125.00
	Perquisite (%)	13,912.50
	<b>Total</b>	<b>153,037.50</b>

ii. Raw Material per month:

S.No	Description	Quantity	Rate/Unit	Rs/month
1	Non woven PP fabric	5500 kg	140	7,70,000.00
2	Melt blown Non woven fabric	2750 kg	180	4,95,000.00
3	Ear loop for masks	270000 m	2	540,000.00
4	Nose clips for masks	540000	2	10,80,000.00
5	Packaging material			3,00,000.00
	<b>Total</b>			<b>31,85,000.00</b>

iii. **Utilities per month:**

S.No	Description	Quantity	Rate/Unit	Rs/month
1	Power	144.8 KWH	7	25,340.00
2	Water			5000.00
	<b>Total</b>			<b>30,340.00</b>

iv. **Other Expenses per month:**

S.No	Description	Rs/month
1	Transport	20,000.00
2	Office administration & Miscellaneous expense	20,000.00
3	Insurance and Taxes	20,000.00
4	Repair and Maintenance	100,000.00
	<b>Total</b>	<b>1,60,000.00</b>

v. **Total Working Capital per month:**

S.No	Description	Rs/month
1	Rent	25,000.00
2	Staff & Labour	1,53,037.50
3	Raw Materials	31,85,000.00
4	Utilities	30,340.00
5	Other Expenses	1,60,000.00
	<b>Total</b>	<b>35,53,377.50</b>

**COST OF PRODUCTION PER ANNUM:**

S. No	Description		Rs/year
1	Total Recurring expenditure		42,640,530.00
2	Depreciation on furniture	10%	5,000.00
3	Depreciation on plant & machinery	15%	14,20,200.00
4	Interest on capital investment	14%	28,52,938.55
	<b>Total cost of production</b>		<b>4,69,18,668.55</b>

**TURNOVER PER YEAR:**

S.No	Item	Quantity	Rate/unit	Total Sales
1	Surgical Mask	6480000	10.00	6,48,00,000.00

## FIXED COST PER YEAR:

S.No	Description		Rs/year
1	Depreciation on furniture	10 %	5,000.00
2	Depreciation on plant & machinery	15 %	14,20,200.00
3	Interest on capital investment	14 %	28,52,938.55
4	Salary & Wages	40%	734,580.00
5	Other Expenses	40%	913,632.00
6	Rent per annum		300,000.00
	<b>Total</b>		<b>6,226,350.55</b>

## PROFIT ANALYSIS:

- 1) Net profit:  
(Sales-Total cost of production) : 6,48,00,000.00-4,69,18,668.55= 17,881,331.45
- 2) % Profit on Sale:  
(Profit /Sale) X 100: (17,881,331.45/6,48,00,000.00)X 100 = 27.59%
- 3) % Return on Investment :  
(Profit/Investment) X 100 : (17,881,331.45/ 20,378,132.50) X 100 = 87.75%
- 4) Break-Even Analysis:  
 $FC/(FC + Profit) \times 100 = 6,226,350.55 / (6,226,350.55 + 17,881,331.45) \times 100 = 25.83\%$

## MACHINERY SUPPLIERS:

- 1) M/s Sujeeth Industries, Ananthagiri Road, Kodad-508206, Suryapet, Telangana, Mobile: 8886753456, email: sujeethindustries@gmail.com
- 2) SK Machines, No:166, Savitri Nagar, Vinayapuram, Saravanampatty,Coimbatore - 641035, Tamil Nadu, India, Mobile: +919042591545 / +919943181049, Website:www. skmachines.net
- 3) Sky Engineering Company , (Importer Of Paper Cup ,Noodles, Non Woven Bag Making Machines); # 2-1-60/5,LaxmaReddycolony,Near Uppal Metro Station, Hyderabad-500039,Ph:9553318899,7799632717, www.skyengineeringcompany.com