PROJECT PROFILE ON MEDICAL MASK

Sl No	Description	
1	Product	Manufacture of Medical Mask
2	Quality Standards	BIS IS 16289 : 2014
3	Production Capacity /Value per annum	68 Lakhs Nos of 3Play mask Value of Rs. 272/ Lakhs
4	Month & Year	June 2020
5	Prepared by	**MSME DEVELOPMENT INSTITUTE** **GOVT. OF INDIA, MINISTRY OF MSME,** **65/1, G S T ROAD, GUINDY** **CHENNAI -600032, TAMILNADU** **Website: www.msmedi-chennai.gov.in** **Email: dcdi-chennai@dcmsme.gov.in**

1.Introduction

A surgical mask, also known as a face mask, is intended to be worn by health professionals during healthcare procedures. It is designed to prevent infections in patients and treating personnel by catching bacteria shed in liquid droplets and aerosols from the wearer's mouth and nose. They are not designed to protect the wearer from breathing in airborne bacteria or viruses whose particles are smaller. With respect to some infections like influenza they appear as effective as respirators, such as N95 or FFP masks though the latter provide better protection in laboratory experiments due to their material, shape and tight seal.

Surgical masks vary by quality and levels of protection. Despite their name, not all surgical masks are appropriate to be used during surgery. Surgical masks may be labeled as surgical, isolation, dental or medical procedure masks.

Surgical masks are made of a nonwoven fabric created using a melt blowing process. They came into use in the 1960s and largely replaced cloth facemasks in developed countries. The use of surgical masks during the COVID-19 pandemic has been a subject of debate, as shortages of surgical masks three is good scope to in the line of activities

1.1. **Nonwovens for Mask**

Nonwovens are known for delivering superior performance in specialized tasks because they can be designed the way an

application needs them to be. The properties which make nonwovens the best choice for medical products not only manufacture of mask and other medical applications also :

- Excellent barrier properties
- Superior efficiency
- Better performance (comfort, thickness and weight, water vapor transmission, air permeability etc.)
- Increased protection for user (better physical properties like tensile, tear resistance, abrasion resistance etc.)
- Less potential for cross contamination

These products are effectively employed in use in ambulances, consultation couches, ICUs, laboratory, operating rooms, wards etc.

2.Market demand

Due to Corona crisis across the world the demand of mask and other health care product requirements are increasing every day. And at present situation India needs at least 20 crores of Mask and 2 Crore of PPP kit (Consist of Apron ,Gown hand gloves and shove covers) per day but manufacture in the line of activities are very limited. And in Tamildadu only few suppliers are manufacture of this kind of products and in order to meet the present market situation there is great scope in the proposed activities

3. Manufacturing Methods

Melt blown Non woven Fabric are obtained from the manufacture and cut into required sizes and get finished products by using automatic ultrasonic sealing machine.

3.1 Flow chart for the Manufacture of Mask

Non woven fabric Procurement

Ultrasonic sealing 2-3 Play by automatic making machine

Handle attachments by Ultrosonic Automatic Machine/
Or
Sewing machine

Storage

Testing and Packing

4. Electrical HP Details:

Sl No	Name of the Machine	No: of m/s	H.P Connected
1	Automatic Mask making machine with air loop attachments.	Full set	15
Total H.P Connected			**15**

5. Production capacity and value per annum

Sl No	Description	No of PCS	Value Rs.	Total Value Rs
1	3-Play Mask	68,00,000	4.00 per pc	2,72,00,000
				2,72,00,000

6. Energy Conservation:

General precautions for saving electricity are followed by the unit by providing energy meter. These products are low energy consumption, thus considerable energy could be saved during manufacturing activities

7 .Basis and presumption of the project:

i. The process of manufacture is on the basis of single shift eight hours per shift with three hundred working days in a year.

ii. To achieve full plant capacity it requires one month trial production

iii. Labor and wages mentioned in profile are as per prevailing local rates.

iv. Working capital requirements taken only one and half month
recurring expenditure, however it may be taken up to 3 month recurring expenditure

v. Interest rate at 12.00% considered in the project, however the rate of interest may be varying while

implement of the project

vi. The Promoter contribution will be 10% of the total project cost in the PMGEP Schemes. (5 % for Special Category SC/ST,BC, Minority, Ex- Service man, all women)

8. Financial aspects

8.1 Land & Building

	Description	**Rs**
A	Land	Own
B	Building 3,000 Sq.ftt	29,00,000
	Total	**29,00,000**

8.2. Machinery and equipments

S.No	***Description***	***Nos***	***Value (Rs)***
1	Fully automatic mask blank making machine	1	27,00,000
2	Fully automatic mask Air loop welding machine	1	25,50,000
3	Manual ultrasonic sealing machine	1	250,000
4	Manual ultrasonic Air loop welding machine	1	2,30,000
5	Air compressor	1	95,000
	Total		58,25,000
	GST IN 18%		10,48,500
	Total (Sixty Eight lakhs seventy three thousand and five hundred only)		**68,73,500**

***8.3 .Total plant & machineries : Rs.* 68,73,500/-**

9. Recurring Expenditure per Month:

9.1 Raw Material

S.No	Description	Qty (MT)	Rate Per MT	Amount
1	Medical Grade Non woven fabric 12 -15 GSM	10 MT	1,60,000	16,00,000
2	Air loop elastic	350 kg	75.00	26,250
	Total including 18% GST IN			**16,26,250**

9.2 Salaries & Wages

S.No	Designation	No	Salary	Amount
1	Production Manager	1	25,000	25,000
2	Skilled operator	2	15,000	30,000
3	Un Skilled Workers	3	10,000	30,000
4	Marketing assistant	1	20,000	20,000
5	Office assistant	1	10,000	10,000
	Total	**11**		**1,15,000**

Note: Contract workers may be engaged when ever required

9.3 Utilities Per Month:

S.N	Description	Amount
1	Electrical power 15 HP, 1679 Units @ Rs. 7.00/- (60 % utilization]	11,753
2	Water etc	1,000
	Total	**12,753**

9.4 Other Expenses per Month:

S.N	Description	Amount
1	Insurance	1,000
2	Marketing and advertisement	2,000
3	Transportation Charges.	20,000
4	Telephone charges	1,500
5	Miscellaneous expenses	1,500
6	Repairs and maintenance	1,000
7	Packing materials	20,000
	Total	**47,000**

9.5. Recurring expenditure per month

a + b + c + d = **Rs: 18,01,003 /-**

9.6. Recurring expenditure per annum: Rs. 2,16,12,036/-

10. Working capital assessment

One and half month recurring expenditure Rs: 27,01,505

11.1 Total Project cost

	Description	Rs
A	Land and Building	Own / Lease
B	Building 3,000 Sq.ftt	29,00,000
C	Plant & Machinery	68,73,500
D	Working capital Requirements	27,01,500
	Total	**1,24,75,000**

11.2. Means of Finance

	Description	Rs
A	Total Project Cost	1,24,75,000
B	Promoter contribution **10 % (-)**	12,47,500
	Total	**1,12,27,500**

11.3. Cost of Production Per annum: **Rs.**

S.No	Description	Amount
1	Total recurring cost per annum	2,16,12,036
2	Interest on investment @12.00 %	14,97,000
3	Total Depreciation on Machinery @10%	6,87,350
4	Total Depreciation on Building @ 3%	87,000
	Total	**2,38,83,386**

11.4. Turnover per Annum:

Sl No	Description	No of PCS	Value	Total Value
1	3-Play Mask	68,00,000	Rs. 4.10/ per pc	2,78,80,000
			Total	**2,78,80,000**

11.5. Profit Per annum :

Turnover - Cost of Production

2,78,80,000 - 2,38,83,386 : 36,24,469

Profit per annum **= Rs. 39,96,614/**

11.6. % of profit on sales = Profit per annum X 100
Turnover

= 39,96,614 X 100
2,78,800,000 **= 14.33 %**

11.7. Rate of Return = Profit Per annum X 100
Total investment

39,96,614 X 100
1,24,75,000 **= 32.03%**

11.8. Break Even Analysis

A. Fixed Expenditure per annum : Rs

a	Total Deprecation	774,350
b	Interest on Investment	14,97,000
c	Insurance	12,000
d	40%of Salary	5,52,000
e	40% of other Expenditure and Utilities excluding Insurance	2,82,014
	Total	31,17,364

B. Profit per annum = 39,96,614

C. Breakeven Point:

Fixed Exp /annum X 100

Fixed Exp /annum + Profit /per annum

= 31,17,364 X100
71,13,978

= **43.82 .%**

12. Raw materials Suppliers

Sl No	Name and Address
1	M/s. Adimangala Fabric 8C/6,New Ramnad Road,,Madurai, Navarathinapuram, Madurai-625009, Tamil Nadu, India
2	M/s. Texbond Nonwovens T2 & T4, K.G Plaza, 41-44 General Patters Road, Chennai – 600002, Tamilnadu,
3	M/s. Sinecera No:111A,2 nd Floor, Mount View Building, Mound Road, Guindy, Chennai-600032
4	M/s. Jayashree Spun bond NO 42 Old Kuyavar Palayam Road, Munichalai Road, Madurai - 625009, Near Indian Oil Petrol Bunk (Map)

13 .Plant and Machinery Suppliers

Sl No	Name and Address
1	M/s. KP Tech Machine (India) Private Limited K-209, 2nd Floor, Vishala Land Mark, S. P. Ring Road, Nikol, Ahmedabad - 382350 , Gujarat
2	M/s. Upliftoo Green Caaar Products No: 212/3, Tharaipakkam Road, Next to Murugan tample , Gerugambakkam, Chennai 600122
3	M/s. Sheetal Enterprises, LL 2, Avani Plaza, Nr. Satellite tower, Satellite, OPP H P Petrol Pump , Premchandnagar Road,, Ahmedabad, Gujarat 380015