

PROJECT REPORT

Of

BOUFFANT CAPS

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Bouffant Caps Manufacturing unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



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PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
- Pin: xxxxxxxx State: xxxxx
- Mobile xxxxxxxx
- 5 Product and By Product : **BOUFFANT CAPS**
- 6 Name of the project / business activ **BOUFFANT CAPS MANUFACTURING UNIT**
- 7 Cost of Project : Rs.14.05 Lakhs
- 8 Means of Finance
- Term Loan Rs.9.65 Lakhs
- Own Capital Rs.1.41 Lakhs
- Working Capital Rs.3 Lakhs
- 9 Debt Service Coverage Ratio : 2.49
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 55%
- 13 Employment : 11 Persons
- 14 Power Requirement : 7.00 KW
- 15 Major Raw materials : P.P.Spun Bond Non Woven Fabric, Inner Elastic
- 16 Estimated Annual Sales Turnov : 55.14 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	10.27
Miss Assets	0.25
Furniture & Fixtures	0.20
Working Capital	3.33
Total	14.05

MEANS OF FINANCE

Particulars	Amount
Own Contribution	1.41
Working Capital(Finance)	3.00
Term Loan	9.65
Total	14.05

**PROJECT REPORT
ON
BOUFFANT CAPS**



Bouffant caps differ from surgical caps and are usually preferred for hygiene and safety purposes to minimize contamination. Bouffant caps are designed to provide effective protection to hair from fluids and other contaminants. Standard bouffant caps are made up of non woven polypropylene material and available in one-layer breathable spunbond fabric, as well as three-layer SMS (spunbond/meltblown/spunbond) fabric. Foodservice outlets and cleanroom manufacturing facilities are the prominent end-users of bouffant caps, followed by the healthcare industry. The growing concern for hygiene at work is anticipated to boost the demand for disposable bouffant caps throughout the forecast period. Bouffant caps are attributed to be one of the prominent segments in the clean room consumables market. Bouffant cap colors are standardized by different authorities as per the area of application.

USES & MARKET POTENTIAL

Bouffant cap a loose cap, so called because of its puffy shape, typically secured round the head with an elastic, and frequently used in cleanrooms, food service, surgeries, shower and other settings to contain loose hair.

The demand for bouffant caps is attributed to boost in the next 10 years owing to their adoption in surgical applications instead of skull caps. In the United States, skull caps were used in surgery by male and female personnel to avoid contamination in the surgical rooms. Skull caps are non-elastic and cover only the upper part of the head.

The exposed hair can lead to severe infections to the patient. Approximately 300,000 surgical site infections (SSIs) occur each year, accounting for about one-third of hospital-acquired infections in the U.S. To overcome this problem, the Association of preoperative Registered Nurses (AORN) authoritatively recommended that bouffant caps be worn by all the team members involved in surgeries.

The growing number of foodservice outlets, industrial food processing units, and electronic assembly plants are the key drivers for increasing the demand for bouffant caps at different countries. People highly prefer a hygienic environment at foodservice outlets, which is expected to increase the usage of foodservice bouffant caps.

RAW MATERIAL REQUIREMENT

Required material

For 18" Bouffant cap

- | | |
|---|--------------------|
| 1.P.P.Spun Bond Non Woven Fabric (12 Gsm) | =130 Rs per Kg |
| 2.Inner elastic | =0.30 Rs per meter |

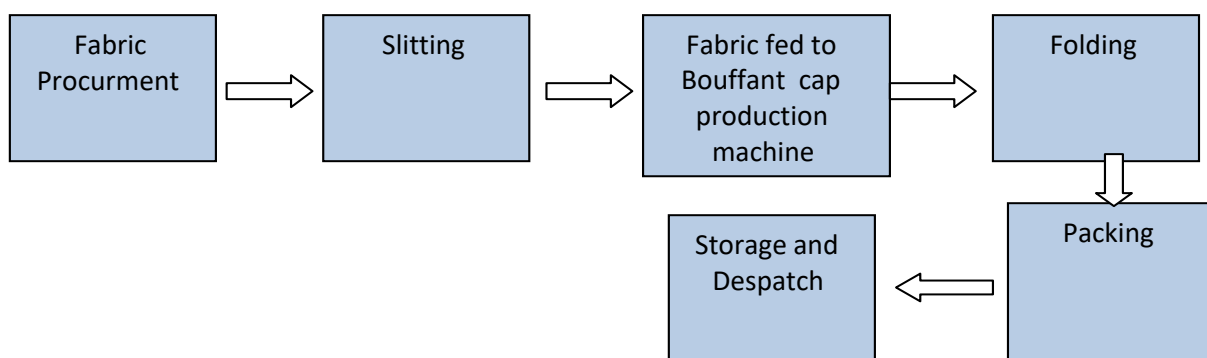
One Pc Bouffant Cap Weight

Non woven fabric	1.73 Grams
Elastic	<u>0.57</u> Gram (20cm)
Total weight	2.30 Gram

MANUFACTURING PROCESS

Non-woven bouffant cap production machine is fully automatic equipment, uses ultrasonic bonding technique to replace the traditional manual sewing with mechatronics automatic control. The machine can produce a variety of sizes of the cap, such as 18-inch /19-inch/21- inch/24-inch.

Bouffant cap is made of P.P.Spun Bond Non Woven Fabric 12Gsm material used polypropylene 12-16 grams /sq. meters gsm in density These are intended to repel the water , blood and body fluids, hairs . . On the machine the role of required size of are loaded And this passes through the machine where stitch the bouffant cap and sealed and fixed the elastic by a machine then cut in to required sizes. Then packed and sterile and the product is ready to market.



PROJECT COMPONENTS

Land /Civil Work

Sl. Description No.	Area	Amount (Rs.)
i) Land	1,500 sq.ft.	Rented Rs20,000/-PM
ii) Built-up area for office stores and shed etc.	1,000 sq.ft.	

We have not considered the cost of Land purchase & building civil work in the project. It is assumed that land & building will be on rent and approximate rent of the same will be Rs 20,000 per month

Plant and Machinery

Rs in lac

Sr No	Particulars	Quantity	Rate	Total Value
1	Bouffant Cap machine cap 60 to 120 mask/min Single phase 3KW	1	8.50	8.50
2	Stabiliser		0.10	0.10
3	Packing/Sealing Machine		0.10	0.10
	Cost of Plant & Machinery			8.70
	GST			1.57
	Total Cost			10.27

Power Requirement

Power requirement for the unit will be: 7 KW (approx.)

Manpower Requirement

The unit shall require 1 skilled and 3 unskilled persons, 2 helper and 2 Supervisor and accountant.

Utilities

1	Electricity PA (7KW *10*12*7*25)	1,47,000
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FINANCIAL ASPECTS

PROJECTED BALANCE SHEET

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
Opening Balance		2.12	3.53	5.01	6.77
Add:- Own Capital	1.41				
Add:- Retained Profit	1.62	3.56	4.18	5.76	6.88
Less:- Drawings	0.90	2.15	2.70	4.00	5.20
Closing Balance	2.12	3.53	5.01	6.77	8.45
Term Loan	8.58	6.43	4.29	2.14	-
Working Capital Limit	3.00	3.00	3.00	3.00	3.00
Sundry Creditors	2.37	2.64	2.93	3.33	3.76
Provisions & Other Liabilities	0.10	0.20	0.24	0.29	0.35
TOTAL :	16.16	15.80	15.47	15.53	15.55
<u>Assets</u>					
Fixed Assets (Gross)	10.72	10.72	10.72	10.72	10.72
Gross Depreciation	1.60	2.96	4.11	5.10	5.93
Net Fixed Assets	9.12	7.76	6.61	5.62	4.79
Current Assets					
Sundry Debtors	2.94	3.41	3.81	4.23	4.76
Stock in Hand	3.27	3.66	4.06	4.57	5.15
Cash and Bank	0.83	0.97	0.98	1.11	0.86
TOTAL :	16.16	15.80	15.47	15.53	15.55

PROJECTED CASH FLOW STATEMENT						(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>SOURCES OF FUND</u>						
Own Margin	1.41					
Net Profit	1.62	3.56	4.18	5.96	7.37	
Depriciation & Exp. W/off	1.60	1.36	1.16	0.98	0.84	
Increase in Cash Credit	3.00	-	-	-	-	
Increase In Term Loan	9.65	-	-	-	-	
Increase in Creditors	2.37	0.27	0.29	0.40	0.43	
Increase in Provisions & Other liabilities	0.10	0.10	0.04	0.05	0.06	
TOTAL :	19.73	5.29	5.67	7.39	8.70	
<u>APPLICATION OF FUND</u>						
Increase in Fixed Assets	10.72					
Increase in Stock	3.27	0.38	0.40	0.51	0.58	
Increase in Debtors	2.94	0.47	0.40	0.42	0.53	
Repayment of Term Loan	1.07	2.14	2.14	2.14	2.14	
Drawings	0.90	2.15	2.70	4.00	5.20	
Taxation	-	-	-	0.20	0.49	
TOTAL :	18.91	5.15	5.65	7.27	8.95	
Opening Cash & Bank Balance	-	0.83	0.97	0.98	1.11	
Add : Surplus	0.83	0.14	0.02	0.12	-0.25	
Closing Cash & Bank Balance	0.83	0.97	0.98	1.11	0.86	

PROJECTED PROFITABILITY STATEMENT

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	65%	70%	75%	80%	85%
<u>SALES</u>					
Gross Revenue					
Sale of Bouffant Cap	55.14	64.00	71.50	79.39	89.33
Total	55.14	64.00	71.50	79.39	89.33
<u>COST OF SALES</u>					
Raw Material Cost of Bouffant Cap	35.49	39.59	43.88	49.92	56.36
Electricity Expenses	1.47	1.62	1.78	1.96	2.15
Depreciation	1.60	1.36	1.16	0.98	0.84
Wages & labour	4.08	4.69	5.40	6.21	7.14
Repair & maintenance	0.66	1.15	1.29	1.27	1.34
Consumables	0.61	0.70	1.14	0.87	0.98
Packaging Cost	1.10	1.28	1.43	0.95	1.07
Cost of Production	45.01	50.39	56.07	62.16	69.87
Add: Opening Stock	-	1.50	1.68	1.87	2.07
Less: Closing Stock	1.50	1.68	1.87	2.07	2.33
Cost of Sales	43.51	50.21	55.88	61.96	69.62
GROSS PROFIT	11.63	13.79	15.63	17.44	19.71
Salary to Staff	4.68	5.15	6.18	6.80	7.47
Interest on Term Loan	0.95	0.84	0.60	0.36	0.13
Interest on working Capital	0.33	0.33	0.33	0.33	0.33
Rent	2.40	2.64	2.90	3.19	3.51
Selling & Administration Expenses	1.65	1.28	1.43	0.79	0.89
TOTAL	10.01	10.23	11.44	11.48	12.34
NET PROFIT	1.62	3.56	4.18	5.96	7.37
Taxation				0.20	0.49
PROFIT (After Tax)	1.62	3.56	4.18	5.76	6.88

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	3.21	4.92	5.34	6.74	7.72
Interest on Term Loan	0.95	0.84	0.60	0.36	0.13
Total	4.16	5.75	5.94	7.11	7.84
<u>REPAYMENT</u>					
Instalment of Term Loan	1.07	2.14	2.14	2.14	2.14
Interest on Term Loan	0.95	0.84	0.60	0.36	0.13
Total	2.02	2.98	2.74	2.51	2.27
DEBT SERVICE COVERAGE RATIO	2.06	1.93	2.17	2.83	3.45
AVERAGE D.S.C.R.	2.49				

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL						(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
Finished Goods						
(10 Days)	1.50	1.68	1.87	2.07	2.33	
Raw Material						
(15 Days)	1.77	1.98	2.19	2.50	2.82	
Closing Stock	3.27	3.66	4.06	4.57	5.15	

COMPUTATION OF WORKING CAPITAL REQUIREMENT						
TRADITIONAL METHOD						(in Lacs)
Particulars	Amount	Own Margin		Bank Finance		
Finished Goods & Raw Material	3.27					
Less : Creditors	2.37					
Paid stock	0.91	10%	0.09	90%	0.82	
Sundry Debtors	2.94	10%	0.29	90%	2.65	
	3.85		0.38		3.46	
MPBF						3.46
WORKING CAPITAL LIMIT DEMAND (from Bank)						3.00

REPAYMENT SCHEDULE OF TERM LOAN							
						Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance	-					
	1st month		9.65	9.65	-	-	9.65
	2nd month	9.65	-	9.65	0.09	-	9.65
	3rd month	9.65	-	9.65	0.09	-	9.65
	4th month	9.65	-	9.65	0.09	-	9.65
	5th month	9.65	-	9.65	0.09	-	9.65
	6th month	9.65	-	9.65	0.09	-	9.65
	7th month	9.65	-	9.65	0.09	0.18	9.47
	8th month	9.47	-	9.47	0.09	0.18	9.29
	9th month	9.29	-	9.29	0.09	0.18	9.11
	10th month	9.11	-	9.11	0.08	0.18	8.93
	11th month	8.93	-	8.93	0.08	0.18	8.75
	12th month	8.75	-	8.75	0.08	0.18	8.58
					0.95	1.07	
2nd	Opening Balance						
	1st month	8.58	-	8.58	0.08	0.18	8.40
	2nd month	8.40	-	8.40	0.08	0.18	8.22
	3rd month	8.22	-	8.22	0.08	0.18	8.04
	4th month	8.04	-	8.04	0.07	0.18	7.86
	5th month	7.86	-	7.86	0.07	0.18	7.68
	6th month	7.68	-	7.68	0.07	0.18	7.50
	7th month	7.50	-	7.50	0.07	0.18	7.33
	8th month	7.33	-	7.33	0.07	0.18	7.15
	9th month	7.15	-	7.15	0.07	0.18	6.97
	10th month	6.97	-	6.97	0.06	0.18	6.79
	11th month	6.79	-	6.79	0.06	0.18	6.61
	12th month	6.61	-	6.61	0.06	0.18	6.43
					0.84	2.14	
3rd	Opening Balance						
	1st month	6.43	-	6.43	0.06	0.18	6.25
	2nd month	6.25	-	6.25	0.06	0.18	6.07
	3rd month	6.07	-	6.07	0.06	0.18	5.90
	4th month	5.90	-	5.90	0.05	0.18	5.72
	5th month	5.72	-	5.72	0.05	0.18	5.54
	6th month	5.54	-	5.54	0.05	0.18	5.36
	7th month	5.36	-	5.36	0.05	0.18	5.18
	8th month	5.18	-	5.18	0.05	0.18	5.00
	9th month	5.00	-	5.00	0.05	0.18	4.82
	10th month	4.82	-	4.82	0.04	0.18	4.65
	11th month	4.65	-	4.65	0.04	0.18	4.47
	12th month	4.47	-	4.47	0.04	0.18	4.29

				0.60	2.14	
4th	Opening Balance					
	1st month	4.29	-	4.29	0.04	4.11
	2nd month	4.11	-	4.11	0.04	3.93
	3rd month	3.93	-	3.93	0.04	3.75
	4th month	3.75	-	3.75	0.03	3.57
	5th month	3.57	-	3.57	0.03	3.39
	6th month	3.39	-	3.39	0.03	3.22
	7th month	3.22	-	3.22	0.03	3.04
	8th month	3.04	-	3.04	0.03	2.86
	9th month	2.86	-	2.86	0.03	2.68
	10th month	2.68	-	2.68	0.02	2.50
	11th month	2.50	-	2.50	0.02	2.32
	12th month	2.32	-	2.32	0.02	2.14
				0.36	2.14	
5th	Opening Balance					
	1st month	2.14	-	2.14	0.02	1.97
	2nd month	1.97	-	1.97	0.02	1.79
	3rd month	1.79	-	1.79	0.02	1.61
	4th month	1.61	-	1.61	0.01	1.43
	5th month	1.43	-	1.43	0.01	1.25
	6th month	1.25	-	1.25	0.01	1.07
	7th month	1.07	-	1.07	0.01	0.89
	8th month	0.89	-	0.89	0.01	0.71
	9th month	0.71	-	0.71	0.01	0.54
	10th month	0.54	-	0.54	0.00	0.36
	11th month	0.36	-	0.36	0.00	0.18
	12th month	0.18	-	0.18	0.00	-
				0.13	2.14	
	DOOR TO DOOR	60	MONTHS			
	MORATORIUM PERIOD	6	MONTHS			
	REPAYMENT PERIOD	54	MONTHS			

Assumptions:

1. Production Capacity of a Bouffant Caps Manufacturing unit is taken at 650 Packets per day. First year, Capacity has been taken @ 65%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 10 - 15 days.
4. Credit period to Sundry Debtors has been given for 15 days.
5. Credit period by the Sundry Creditors has been provided for 15 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 7 KW.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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