

PROJECT REPORT

Of

SURGICAL ADHESIVE PLASTER

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Surgical Adhesive Plaster**.

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 : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
Pin: xxxxxxxx State: xxxxxxxxxx
Mobile xxxxxxxx
- 5 Product and By Product : **Surgical Adhesive Plasters**
- 6 Name of the project / business activity proposed : **Surgical Adhesive Plasters Manufacturing Unit**
- 7 Cost of Project : Rs.44 Lakhs
- 8 Means of Finance
Term Loan Rs.33 Lakhs
Own Capital Rs.4.4 Lakhs
Working Capital Rs.6.6 Lakhs
- 9 Debt Service Coverage Ratio : 2.08
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 38%
- 13 Employment : 13 Persons
- 14 Power Requirement : 40 HP
- 15 Major Raw materials : Bleached Cotton Thread,Zinc Oxide Based Adhesive
- 16 Estimated Annual Sales Turnover (Max Utilized Capacity) : 130.93 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 2000 Sq ft	Own/Rented
Plant & Machinery	35.40
Furniture & Fixtures	1.27
Working Capital	7.33
Total	44.00

MEANS OF FINANCE

Particulars	Amount
Own Contribution	4.40
Term Loan	33.00
Working Capital	6.60
Total	44.00

SURGICAL ADHESIVE PLASTER



INTRODUCTION

The plaster are a class of medical treatment tool that are used to support muscle, fascia, ligament, tendons and bones in case of any injury to them; so as to allow them to rest by taking away a portion of their load, thus allowing them to heal or to cover a small portion in case of small wound that don't require full bandage dressing.

Medical Plaster are of various types ranging from adhesive plaster band to plaster cast depending on connective tissue in question and extent of injury; this research work extensively focuses on Adhesive Plasters, whose construction is similar to that of surgical tape but have cotton gauze of finer mesh as base tape material; strength of fabric to be manufactured depends on the type of medical plaster produced.

RAW MATERIAL

- ✚ Bleached Cotton Thread



- ✚ Zinc Oxide based Adhesive
- ✚ Packaging Material

MACHINE REQUIRED

The manufacturing of Medical Adhesive Plaster requires weaving, roll cutting, roll unwinding, tensioning, coating, drying, roll winding and packaging processes, which are performed in Air Jet Loom and various individual sections of Adhesive Tape Making Machine; thus, the machine required are,

1) Air Jet Loom for Cotton Gauze



Loom is a fabric manufacturing machine which is used to weave a fabric, the air jet loom utilizes air jets to insert the weft to form the woven fabric.

2) Adhesive Tape Making Machine



The machine has a roll unwinding station, tape alignment and tensioning station, coating station, drying station, roll winding station and tape slitting station; these stations are in general required for any adhesive tape manufacturing.

3) Gauze Bandage Packaging Machine



This machine simply packs the adhesive plaster within a plastic packaging.

INDUSTRY OUTLOOK / TREND

The segment of absorbent and packing gauze surgical dressings is expected to grow worldwide owing to factors such as increasing incidences of road accidents and sports related injuries. Globally raising aging population and the growing prevalence of chronic diseases. In addition, the swift healing times brought about by the usage of wound dressings make them useful during emergency care. The rising incidence of wound infections raises the sale of wound dressings, thus having a positive impact on the market.

MANUFACTURING PROCESS

The threads of bleached cotton are placed in air jet loom and appropriate settings are made, followed by which it weaves the cotton threads into a cotton plaster fabric; which is also rolled by the machine into large cotton plaster roll.

The large cotton plaster roll is then feed to tape roll unwinding section of adhesive tape making machine which simply unrolls the cotton plaster from its roll and feeds it to alignment and tensioning roller section via a set of feed rollers.

Alignment and tensioning section of machine ensures that the plaster sheet is aligned properly so as to avert improper coating of adhesive on plaster, thus the plaster is feed to coating section which applies coating of Zinc Oxide based adhesive onto the plaster uniformly along its width.

The plaster is then passed through a drying section, which may use an air drier or air heater, so as to properly dry the applied adhesive, followed by which adhesive plaster is obtained and is feed to tape roll winding section of machine which simply rolls the adhesive plaster back to form a large roll.

This roll is then feed to tape slitting section of machine which utilizes an appropriate cutter to simply cut the giant roll into number of adhesive plaster as per the length requirements.

Note: An extra section is present in some machines in which a smooth non-stick paper is applied to adhesive side of tape prior to tape roll winding section, so as to prevent stickiness due to adhesive on adhesive free side of tape.

These cut Medical Adhesive Plaster Rolls are then, either feed to gauze bandage packaging machine which simply seals these bandages within a packaging or packed manually into appropriate packaging, followed by which they are packed in cartons and sent for sale.

MARKET DEMAND

The demand for surgical adhesive tape is mainly influenced by population growth, economic growth and expansion of the health sector.

The health sector has been given due attention by the government. Due to the favorable environment created for private investment a number of health facilities including hospitals and clinics are being established throughout the country.

Medical and health facilities registered an annual average growth of 12.00% approx. over the past four years.

Considering the rapid economic growth and the expansion of health facilities in the urban and rural areas, the demand for adhesive dressings for medical purposes is assumed to grow by 12.00% per annum.

UTILITIES

Raw Material

The required material can be obtained from local Market. Auxiliary materials include labels, packing material and other inputs.

Power

40 HP connection load shall be required from the Electricity Board and necessary arrangements for DG Set shall also be required to made available to meet out the inconsistencies arises in case of power failure.

IMPLEMENTATION SCHEDULE

Sr. No.	Particulars	Time Period
1	The Time requirement for preparation of Project report	Two months
2	Time requirement for selection of Site	One month
3	Time required for registration as Small-Scale Unit	One Week
4	Time required for acquiring the loan Machinery procurement, erection and commissioning	Three Months
5	Recruitment of labourer etc.	One month
6	Trial runs	Three Months

STATUTORY APPROVAL REQUIREMENTS

- ✓ License from the Food and Drug Control Authority (FDCA)
- ✓ GST Registration
- ✓ MSME Udyog Aadhar
- ✓ Trademark or Brand name as may be required by the manufacture
- ✓ IEC Code for Import Export
- ✓ Barcode for E-Commerce

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	5.10	8.65	13.96	19.72
Add: Additions	4.40	-	-	-	-
Add: Net Profit	3.70	8.55	12.31	15.76	19.32
Less: Drawings	3.00	5.00	7.00	10.00	15.00
Closing Balance	5.10	8.65	13.96	19.72	24.05
CC Limit	6.60	6.60	6.60	6.60	6.60
Term Loan	29.34	22.00	14.67	7.33	-
Sundry Creditors	0.57	0.65	0.74	0.84	0.94
TOTAL :	41.60	37.90	35.96	34.49	31.59
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	36.67	36.67	36.67	36.67	36.67
Gross Dep.	5.44	10.06	14.00	17.36	20.21
Net Fixed Assets	31.23	26.61	22.67	19.31	16.46
<u>Current Assets</u>					
Sundry Debtors	3.83	4.52	5.15	5.82	6.55
Stock in Hand	4.08	4.54	5.09	5.70	6.37
Cash and Bank	2.46	2.23	3.06	3.66	2.21
TOTAL :	41.60	37.90	35.96	34.49	31.59
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	76.56	90.47	102.93	116.40	130.93
Total (A)	76.56	90.47	102.93	116.40	130.93
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	34.10	39.05	44.41	50.22	56.51
Electricity Expenses	3.45	3.76	4.07	4.39	4.70
Repair & Maintenance	0.38	0.45	0.51	0.58	0.65
Labour & Wages	10.76	11.83	13.02	14.32	15.75
Depreciation	5.44	4.63	3.94	3.35	2.86
Cost of Production	54.12	59.73	65.96	72.87	80.47
Add: Opening Stock /WIP	-	1.80	1.93	2.13	2.36
Less: Closing Stock /WIP	1.80	1.93	2.13	2.36	2.60
Cost of Sales (B)	52.32	59.60	65.76	72.64	80.23
C) GROSS PROFIT (A-B)	24.24	30.87	37.17	43.76	50.70
	31.67%	34.12%	36.11%	37.59%	38.72%
D) Bank Interest (Term Loan)	3.58	2.92	2.12	1.31	0.50
ii) Interest On Working Capital	0.73	0.73	0.73	0.73	0.73
E) Salary to Staff	8.58	9.44	10.38	11.42	12.56
F) Selling & Adm Expenses Exp.	7.66	9.05	10.29	11.64	13.09
TOTAL (D+E)	20.54	22.13	23.52	25.10	26.88
H) NET PROFIT	3.70	8.73	13.65	18.66	23.82
	4.8%	9.7%	13.3%	16.0%	18.2%
I) Taxation	-	0.19	1.34	2.89	4.49
J) PROFIT (After Tax)	3.70	8.55	12.31	15.76	19.32

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	4.40	-			
Net Profit	3.70	8.73	13.65	18.66	23.82
Depreciation & Exp. W/off	5.44	4.63	3.94	3.35	2.86
Increase In Cash Credit	6.60				
Increase In Term Loan	33.00	-	-	-	-
Increase in Creditors	0.57	0.08	0.09	0.10	0.10
TOTAL :	53.71	13.44	17.68	22.11	26.78
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	36.67	-	-	-	-
Increase in Stock	4.08	0.46	0.56	0.61	0.66
Increase in Debtors	3.83	0.70	0.62	0.67	0.73
Repayment of Term Loan	3.67	7.33	7.33	7.33	7.33
Taxation	-	0.19	1.34	2.89	4.49
Drawings	3.00	5.00	7.00	10.00	15.00
TOTAL :	51.24	13.67	16.86	21.51	28.22
Opening Cash & Bank Balance	-	2.46	2.23	3.06	3.66
Add : Surplus	2.46	- 0.23	0.82	0.60	- 1.44
Closing Cash & Bank Balance	2.46	2.23	3.06	3.66	2.21

COMPUTATION OF SURGICAL ADHESIVE PLASTERS MANUFACTURING UNIT**Items to be Manufactured Surgical Adhesive Plasters**

Size of 1box		8cm*6cm	
Manufacturing Capacity per Day		120.00	boxes
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		36,000	boxes
Year		Capacity	Surgical Adhesive Plasters
		Utilisation	
I		55%	19,800
II		60%	21,600
III		65%	23,400
IV		70%	25,200
V		75%	27,000

COMPUTATION OF RAW MATERIAL

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total CostPer Annum (100%)
Bleached Cotton Thread	20.00	MT	300,000.00	6,000,000.00
Zinc Oxide based Adhesive	1.s			200,000.00
Total	20.00			6,200,000.00

Total Raw material in Rs lacs at 100% Capacity 62.00
 Cost per Box (In Rs) 172.20

Raw Material Consumed	Capacity Utilisation	Rate	Amount (Rs.)
I	55%	172.20	34.10
II	60%	180.80	39.05
III	65%	189.80	44.41
IV	70%	199.30	50.22
V	75%	209.30	56.51

COMPUTATION OF SALE

Particulars	I	II	III	IV	V
Op Stock	-	660.00	720.00	780.00	840.00
Production	19,800.00	21,600.00	23,400.00	25,200.00	27,000.00
	19,800.00	22,260.00	24,120.00	25,980.00	27,840.00
Less : Closing Stock(10 Days)	660.00	720.00	780.00	840.00	900.00
Net Sale	19,140.00	21,540.00	23,340.00	25,140.00	26,940.00
Sale Price per Box	400.00	420.00	441.00	463.00	486.00
Sale (in Lacs)	76.56	90.47	102.93	116.40	130.93

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
<u>Finished Goods</u>					
(10 Days requirement)	1.80	1.93	2.13	2.36	2.60
<u>Raw Material</u>					
(20 Days requirement)	2.27	2.60	2.96	3.35	3.77
Closing Stock	4.08	4.54	5.09	5.70	6.37

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	4.08		
Less:			
Sundry Creditors	0.57		
Paid Stock	3.51	0.35	3.16
Sundry Debtors	3.83	0.38	3.45
Working Capital Requirement			6.60
Margin			0.73
MPBF			6.60
Working Capital Demand			6.60

BREAK UP OF LABOUR

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		20,000.00	1	20,000.00
Plant Operator		15,000.00	1	15,000.00
Unskilled Worker		8,500.00	4	34,000.00
Helper		5,000.00	1	5,000.00
Security Guard		7,500.00	1	7,500.00
				81,500.00
Add: 10% Fringe Benefit				8,150.00
Total Labour Cost Per Month				89,650.00
Total Labour Cost for the year (In Rs. Lakhs)			8	10.76

BREAK UP OF SALARY

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Accountant cum store keeper		15,000.00	1	15,000.00
Administrative Staffs		12,500.00	4	50,000.00
Total Salary Per Month				65,000.00
Add: 10% Fringe Benefit				6,500.00
Total Salary for the month				71,500.00
Total Salary for the year (In Rs. Lakhs)			5	8.58

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation			15.00%	10.00%	
Opening Balance	Own/Rented		-	-	-
Addition	-		35.40	1.27	36.67
	-		35.40	1.27	36.67
TOTAL		-	35.40	1.27	36.67
Less : Depreciation	-	-	5.31	0.13	5.44
WDV at end of Ist year	-	-	30.09	1.14	31.23
Additions During The Year	-	-	-	-	-
	-	-	30.09	1.14	31.23
Less : Depreciation	-	-	4.51	0.11	4.63
WDV at end of IIInd Year	-	-	25.58	1.03	26.61
Additions During The Year	-	-	-	-	-
	-	-	25.58	1.03	26.61
Less : Depreciation	-	-	3.84	0.10	3.94
WDV at end of IIIrd year	-	-	21.74	0.93	22.67
Additions During The Year	-	-	-	-	-
	-	-	21.74	0.93	22.67
Less : Depreciation	-	-	3.26	0.09	3.35
WDV at end of IV year	-	-	18.48	0.83	19.31
Additions During The Year	-	-	-	-	-
	-	-	18.48	0.83	19.31
Less : Depreciation	-	-	2.77	0.08	2.86
WDV at end of Vth year	-	-	15.71	0.75	16.46

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	33.00	33.00	0.91	-	33.00
	IInd Quarter	33.00	-	33.00	0.91	-	33.00
	IIIrd Quarter	33.00	-	33.00	0.91	1.83	31.17
	Ivth Quarter	31.17	-	31.17	0.86	1.83	29.34
				3.58	3.67		
II	Opening Balance						
	Ist Quarter	29.34	-	29.34	0.81	1.83	27.50
	IInd Quarter	27.50	-	27.50	0.76	1.83	25.67
	IIIrd Quarter	25.67	-	25.67	0.71	1.83	23.84
	Ivth Quarter	23.84	-	23.84	0.66	1.83	22.00
				2.92	7.33		
III	Opening Balance						
	Ist Quarter	22.00	-	22.00	0.61	1.83	20.17
	IInd Quarter	20.17	-	20.17	0.55	1.83	18.34
	IIIrd Quarter	18.34	-	18.34	0.50	1.83	16.50
	Ivth Quarter	16.50	-	16.50	0.45	1.83	14.67
				2.12	7.33		
IV	Opening Balance						
	Ist Quarter	14.67	-	14.67	0.40	1.83	12.83
	IInd Quarter	12.83	-	12.83	0.35	1.83	11.00
	IIIrd Quarter	11.00	-	11.00	0.30	1.83	9.17
	Ivth Quarter	9.17	-	9.17	0.25	1.83	7.33
				1.31	7.33		
V	Opening Balance						
	Ist Quarter	7.33	-	7.33	0.20	1.83	5.50
	IInd Quarter	5.50	-	5.50	0.15	1.83	3.67
	IIIrd Quarter	3.67	-	3.67	0.10	1.83	1.83
	Ivth Quarter	1.83	-	1.83	0.05	1.83	0.00
				0.50	7.33		

Door to Door Period 60 Months
Moratorium Period 6 Months
Repayment Period 54 Months

CALCULATION OF D.S.C.R

PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	9.14	13.17	16.25	19.12	22.18
Interest on Term Loan	3.58	2.92	2.12	1.31	0.50
Total	12.72	16.10	18.37	20.43	22.68
<u>REPAYMENT</u>					
Repayment of Term Loan	3.67	7.33	7.33	7.33	7.33
Interest on Term Loan	3.58	2.92	2.12	1.31	0.50
Total	7.25	10.26	9.45	8.64	7.84
DEBT SERVICE COVERAGE RATIO	1.76	1.57	1.94	2.36	2.89
AVERAGE D.S.C.R.			2.08		

COMPUTATION OF ELECTRICITY**(A) POWER CONNECTION**

Total Working Hour per day	Hours	8	
Electric Load Required	HP	40	
Load Factor		0.7460	
Electricity Charges	per unit	7.50	
Total Working Days		300	
Electricity Charges			5.37

Add : Minimim Charges (@ 10%)

(B) DG set

No. of Working Days		300	days
No of Working Hours		0.5	Hour per day
Total no of Hour		150	
Diesel Consumption per Hour		8	
Total Consumption of Diesel		1,200	
Cost of Diesel		65.00	Rs. /Ltr
Total cost of Diesel		0.78	
Add : Lube Cost @15%		0.12	
Total		0.90	

Total cost of Power & Fuel at 100%

6.27

Year	Capacity	Amount (in Lacs)
I	55%	3.45
II	60%	3.76
III	65%	4.07
IV	70%	4.39
V	75%	4.70

DISCLAIMER

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