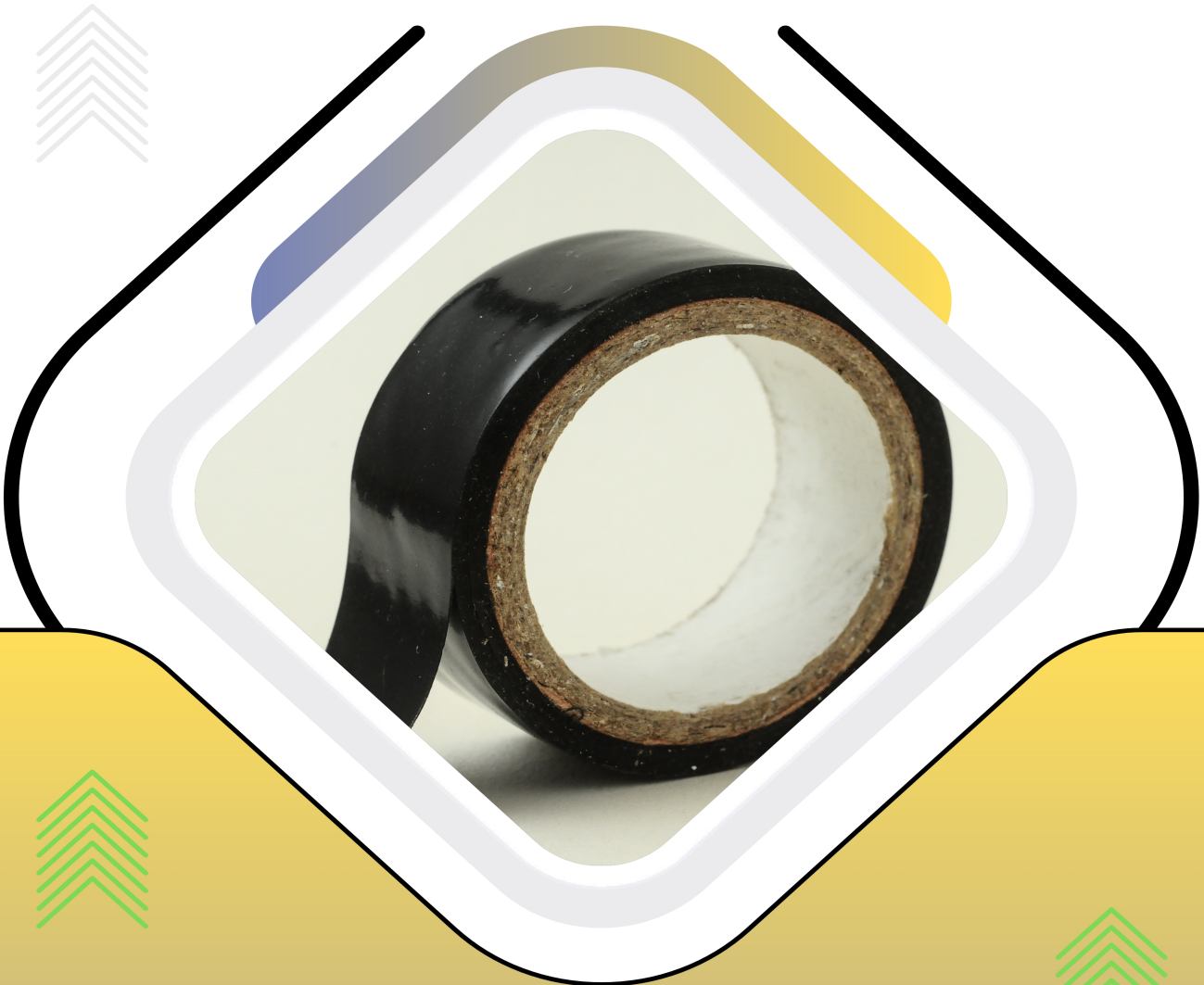




MODEL PROJECT REPORT



PROJECT REPORT ON BLACK INSULATION TAPE

SWAVALAMBI BHARAT ABHIYAN

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur XXXXXXXX
- 2 Constitution (legal Status) : XXXXXXXX
- 3 Father's/Spouce's Name XXXXXXXX
- 4 Unit Address : XXXXXXXX
- Taluk/Block: XXXXX
District : XXXXX
Pin: XXXXX
E-Mail : XXXXX
Mobile XXXXX
- State:
- 5 Product and By Product : **Black Insulation Tape**
- 6 Name of the project / business activity proposed : **Black Insulation Tape**
- 7 Cost of Project : Rs18.00lac
- 8 Means of Finance
Term Loan Rs.12.56 Lacs
KVIC Margin Money - As per Project Eligibility
Own Capital Rs.1.8 Lacs
Working Capital Rs.3.63 Lacs
- 9 Debt Service Coverage Ratio : 5.01
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 8 Months
- 12 Break Even Point : 21%
- 13 Employment : 7 Persons
- 14 Power Requirement : 7.00 HP
- 15 Major Raw materials : Fabric Rubber resin Benzene etc
- 16 Estimated Annual Sales Turnover : 28.35 Lacs
- 16 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work (2000 Sq Ft)	4.00
Plant & Machinery	9.00
Furniture & Fixtures	0.46
Pre-operative Expenses	0.50
Working Capital Requirement	4.04
Total	18.00

MEANS OF FINANCE

Particulars	Amount
Own Contribution @10%	1.80
Term Loan	12.56
Workign Capital Finance	3.63
Total	18.00

	General	Special
Beneficiary's Margin Money (% of Project Cost)	10%	5%

PROJECT REPORT **ON** **BLACK INSULATING TAPE**



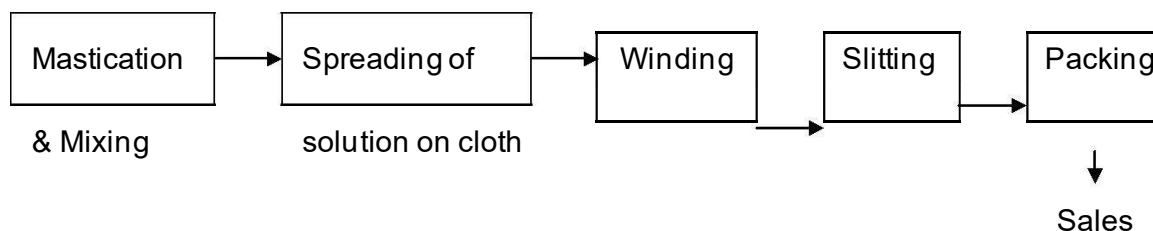
Introduction: Cotton selvedge tape for electrical insulation purposes as per IS:1923-1973 and IS:2448 (Part-I)-1963 of Bureau of Indian standards are often referred to as Black Tape. These are used in manufacture of ovens, Furnaces, Motors, etc. and in household electrical wirings & equipments. These are resistant to pressure & temperature. Electrical insulation is the main feature of Black Tapes. It is also used by cable manufacturers to cover conductors.

Market: Black insulating tapes are used to cover joints of two conductors and hence an item of everyday use of all electrifications. Joining of more than one cable/ conductor is unavoidable in electrification works and hence Black Tape is a need for electrification works. With massive Electric generation and hence distribution network under implementation in Tripura, therefore, large demand for Black insulating tapes exist. These are sold through all Electrical stores in the state.

Installed Capacity: Operating for single shift of 8 hours per day for 300 working days per annum, the unit shall have an annual installed capacity to produce 2.64 Lakh rolls of Black insulation tapes.

Process of Manufacture: The unit will purchase 54 inch wide evenly and firmly woven cotton fabrics, free from weaving defects. Normally the fabric is Black in colour. Rubber compound with 12.50 percent Crepe Rubber, 5 percent National Rubber, 49.50 percent asbestos powder, 12.50 percent Resin, 0.50 percent Carbon Black and 20 percent castor oil are made in Mixing Mill so that the Rubber mix is made into a homogeneous mass. This Rubber mass is mixed with turpentine oil/ Benzene in the same Mixing Mill. This fluid is spread over the cotton fabric in a spreading Machine by using Doctors Blade Technique so that the cost of Rubber solution is uniform. The coated fabric is cut to the required width on a slitting Machine and wound on a winding machine into rolls of desired length. These are then labeled on sides of Rolls and packed in polyethylene.

Process Flow Sheet:



Raw Materials: The principal raw material of the unit will be petroleum based solvent as double the quantum of all other raw materials taken together shall be solvent. It will be available from Assam Oil Division of Indian Oil Corporation. All other raw materials are available comparatively cheap. The annual requirement at the installed capacity and costs are shown below:

Sl.No.	Description	Quantity required	Cost in Rs.
1.	Benzene	3000 Liters	2,55,000.00
2.	Asbestos Powder	743 kilograms	52,010.00
3.	Castor oil	300 Liters	30,000.00
4.	Crepe Rubber	188 kilograms	37,600.00
5.	Resin	187 kilograms	14,025.00
6.	National Rubber	75 kilograms	11,250.00
7.	Carbon Black	8 kilograms	400.00

8.	Zinc oxide	8 kilograms	1,600.00
9.	Labels	1,50,000 Numbers	15,000.00
10.	Polyethylene films	100 kilograms	45,000.00
		Total:	4,61,885.00

PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Capital Account	1.80	1.80	1.80	1.80	1.80
Retained Profit	14.93	31.12	48.26	65.16	81.65
Term Loan	12.56	9.42	6.28	3.14	0.47
Cash Credit	3.63	3.63	3.63	3.63	3.63
Sundry Creditors	0.08	0.09	0.10	0.10	0.10
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL :	33.36	46.45	60.51	74.31	88.17
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	13.46	13.46	13.46	13.46	13.46
Gross Dep.	1.77	3.32	4.66	5.82	6.82
Net Fixed Assets	11.69	10.14	8.80	7.64	6.64
Current Assets					
Sundry Debtors	0.95	1.19	1.34	1.35	1.35
Stock in Hand	3.17	3.62	4.07	4.07	4.07
Cash and Bank	15.06	28.76	43.28	57.92	72.45
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL :	33.36	46.45	60.51	74.31	88.17
	-	-	-	-	-

PROJECTED CASH FLOW STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>SOURCES OF FUND</u>					
Share Capital	1.80	-			
Reserve & Surplus	14.93	17.99	21.43	21.12	20.61
Depreciation & Exp. W/off	1.77	1.55	1.34	1.16	1.00
Increase in Cash Credit	3.63	-	-	-	-
Increase In Term Loan	12.56	-	-	-	-
Increase in Creditors	0.08	0.01	0.01	-	-
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
TOTAL :	35.13	19.59	22.82	22.32	21.66
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	13.46	-	-	-	-
Increase in Stock	3.17	0.45	0.45	-	-
Increase in Debtors	0.95	0.24	0.15	0.02	-
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	3.14	3.14	3.14	2.67
Taxation	-	1.80	4.29	4.22	4.12
TOTAL :	20.07	5.88	8.31	7.68	7.13
Opening Cash & Bank Balance	-	15.06	28.76	43.28	57.92
Add : Surplus	15.06	13.71	14.52	14.64	14.53
Closing Cash & Bank Balance	15.06	28.76	43.28	57.92	72.45

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>A) SALES</u>					
Gross Sale	28.35	35.55	40.05	40.50	40.50
Total (A)	28.35	35.55	40.05	40.50	40.50
<u>B) COST OF SALES</u>					
Raw Mateiral Consumed	3.23	3.70	4.16	4.16	4.16
Elecricity Expenses	0.70	0.80	0.90	0.90	0.90
Repair & Maintenance	-	0.36	0.40	0.41	0.41
Labour & Wages	4.75	5.23	5.75	6.32	6.96
Depriciation	1.77	1.55	1.34	1.16	1.00
Consumables and Other Expense	0.57	0.71	0.80	0.81	0.81
Cost of Production	11.03	12.34	13.35	13.76	14.23
Add: Opening Stock /WIP	-	2.52	2.88	3.24	3.24
Less: Closing Stock /WIP	2.52	2.88	3.24	3.24	3.24
Cost of Sales (B)	8.51	11.98	12.99	13.76	14.23
C) GROSS PROFIT (A-B)	19.84	23.57	27.06	26.74	26.27
	70%	66%	68%	66%	65%
D) Bank Interest (Term Loan)	1.08	1.31	0.95	0.59	0.23
Bank Interest (C.C. Limit)	0.36	0.36	0.36	0.36	0.36
E) Salary to Staff	2.90	3.19	3.51	3.87	4.25
F) Selling & Adm Expenses Exp.	0.57	0.71	0.80	0.81	0.81
TOTAL (D+E)	4.92	5.58	5.63	5.63	5.66
H) NET PROFIT	14.93	17.99	21.43	21.12	20.61
I) Taxation	-	1.80	4.29	4.22	4.12
J) PROFIT (After Tax)	14.93	16.19	17.15	16.90	16.49

Items to be Manufactured **Black insulation tape**

Manufacturing Capacity per day	-	750.00	pcs
	-		
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		2,25,000.00	pcs
Year		Capacity	pcs
		Utilisation	
IST YEAR		70%	1,57,500
IIND YEAR		80%	1,80,000
IIIRD YEAR		90%	2,02,500
IVTH YEAR		90%	2,02,500
VTH YEAR		90%	2,02,500

COMPUTATION OF RAW MATERIAL

Item Name	UOM	Quantity of		Unit Rate	Total Cost
		Raw Material			Per Annum (100%)
Benzene	Litres	3000		85.00	2,55,000.00
Asbestos Powder	Kilograms	743		70.00	52,010.00
Castor oil	Litres	300		100.00	30,000.00
Crepe Rubber	Kilograms	188		200.00	37,600.00
Resin	Kilograms	187		75.00	14,025.00
National Rubber	Kilograms	75		150.00	11,250.00
Carbon Black	Kilograms	8		50.00	400.00
Zinc oxide	Kilograms	8		200.00	1,600.00
Labels	Numbers	1,50,000.00		0.10	15,000.00
Polyethylene films	Kilograms	100		450.00	45,000.00
Total (Rounded off in lacs)					4,61,885.00

Annual Consumption cost	(In Lacs)	4.62
Raw Material Consumed	Capacity Utilisation	Amount (Rs.)
IST YEAR	70%	3.23
IIND YEAR	80%	3.70
IIIRD YEAR	90%	4.16
IVTH YEAR	90%	4.16
VTH YEAR	90%	4.16

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>Finished Goods</u>					
(30 Days requirement)	2.52	2.88	3.24	3.24	3.24
<u>Raw Material</u>					
(60Days requirement)	0.65	0.74	0.83	0.83	0.83
Closing Stock	3.17	3.62	4.07	4.07	4.07

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars			Total
			Amount
Stock in Hand			3.17
Sundry Debtors			0.95
		Total	4.11
Sundry Creditors			0.08
Working Capital Requirement			4.04
Margin			0.40
Working Capital Finance			3.63

BREAK UP OF LABOUR

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Skilled Worker		9,000.00	2	18,000.00
Unskilled Worker		6,000.00	3	18,000.00
				36,000.00
Add: 10% Fringe Benefit				3,600.00
Total Labour Cost Per Month				39,600.00
Total Labour Cost for the year (In Rs. Lakhs)			5	4.75

BREAK UP OF SALARY

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager cum chemist		12,000.00	1	12,000.00
Sales		10,000.00	1	10,000.00
Total Salary Per Month				22,000.00
Add: 10% Fringe Benefit				2,200.00
Total Salary for the month				24,200.00
Total Salary for the year (In Rs. Lakhs)			2	2.90

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased	-	-	-	-
Addition	-	4.00	9.00	0.46	13.46
	-	4.00	9.00	0.46	13.46
Less : Depreciation	-	0.40	1.35	0.02	1.77
WDV at end of Ist year	-	3.60	7.65	0.44	11.69
Additions During The Year	-	-	-	-	-
	-	3.60	7.65	0.44	11.69
Less : Depreciation	-	0.36	1.15	0.04	1.55
WDV at end of IIInd Year	-	3.24	6.50	0.39	10.14
Additions During The Year	-	-	-	-	-
	-	3.24	6.50	0.39	10.14
Less : Depreciation	-	0.32	0.98	0.04	1.34
WDV at end of IIIrd year	-	2.92	5.53	0.35	8.80
Additions During The Year	-	-	-	-	-
	-	2.92	5.53	0.35	8.80
Less : Depreciation	-	0.29	0.83	0.04	1.16
WDV at end of IV year	-	2.62	4.70	0.32	7.64
Additions During The Year	-	-	-	-	-
	-	2.62	4.70	0.32	7.64
Less : Depreciation	-	0.26	0.70	0.03	1.00
WDV at end of Vth year	-	2.36	3.99	0.29	6.64

REPAYMENT SCHEDULE OF TERM LOAN

11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
IST YEAR	Opening Balance						
	Ist Quarter	-	12.56	12.56	-	-	12.56
	Iind Quarter	12.56	-	12.56	0.36	-	12.56
	IIIRD Quarter	12.56	-	12.56	0.36	-	12.56
	Ivth Quarter	12.56	-	12.56	0.36	-	12.56
					1.08	-	
IIND YEAR	Opening Balance						
	Ist Quarter	12.56	-	12.56	0.36	0.79	11.78
	Iind Quarter	11.78	-	11.78	0.34	0.79	10.99
	IIIRD Quarter	10.99	-	10.99	0.32	0.79	10.21
	Ivth Quarter	10.21		10.21	0.29	0.79	9.42
					1.31	3.14	
IIIRD YEAR	Opening Balance						
	Ist Quarter	9.42	-	9.42	0.27	0.79	8.64
	Iind Quarter	8.64	-	8.64	0.25	0.79	7.85
	IIIRD Quarter	7.85	-	7.85	0.23	0.79	7.07
	Ivth Quarter	7.07		7.07	0.20	0.79	6.28
					0.95	3.14	
IVTH YEAR	Opening Balance						
	Ist Quarter	6.28	-	6.28	0.18	0.79	5.50
	Iind Quarter	5.50	-	5.50	0.16	0.79	4.71
	IIIRD Quarter	4.71	-	4.71	0.14	0.79	3.93
	Ivth Quarter	3.93		3.93	0.11	0.79	3.14
					0.59	3.14	
VTH YEAR	Opening Balance						
	Ist Quarter	3.14	-	3.14	0.09	0.79	2.36
	Iind Quarter	2.36	-	2.36	0.07	0.79	1.57
	IIIRD Quarter	1.57	-	1.57	0.05	0.55	1.02
	Ivth Quarter	1.02		1.02	0.03	0.55	0.47
					0.23	2.67	

CALCULATION OF D.S.C.R

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<u>CASH ACCRUALS</u>	16.70	17.74	18.49	18.05	17.49
Interest on Term Loan	1.08	1.31	0.95	0.59	0.23
Total	17.78	19.05	19.43	18.64	17.72
<u>REPAYMENT</u>					
Instalment of Term Loan	3.14	3.14	3.14	2.67	2.67
Interest on Term Loan	1.08	1.31	0.95	0.59	0.23
Total	4.22	4.45	4.09	3.26	2.90
DEBT SERVICE COVERAGE R	4.21	4.28	4.75	5.72	6.10
AVERAGE D.S.C.R.			5.01		

COMPUTATION OF SALE

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	15,750.00	18,000.00	20,250.00	20,250.00
Production	1,57,500.00	1,80,000.00	2,02,500.00	2,02,500.00	2,02,500.00
	1,57,500.00	1,95,750.00	2,20,500.00	2,22,750.00	2,22,750.00
Less : Closing Stock	15,750.00	18,000.00	20,250.00	20,250.00	20,250.00
Net Sale	1,41,750.00	1,77,750.00	2,00,250.00	2,02,500.00	2,02,500.00
Sale Price per Average	20.00	20.00	20.00	20.00	20.00
Sale (in Lacs)	28.35	35.55	40.05	40.50	40.50

COMPUTATION OF ELECTRICITY

(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	7	
Load Factor			0.7460	
Electricity Charges		per unit	8.00	
Total Working Days			300	
Electricity Charges (8 Hrs Per day)				1,00,262.40
Add : Minimum Charges (@ 10%)				
(B) D.G. SET				
No. of Working Days			300	days
No of Working Hours			-	Hour per day
Total no of Hour			-	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				1.00
Year		Capacity		Amount
				(in Lacs)
IST YEAR		70%		0.70
IIND YEAR		80%		0.80
IIIRD YEAR		90%		0.90
IVTH YEAR		90%		0.90
VTH YEAR		90%		0.90

BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
Net Sales & Other Income	28.35	35.55	40.05	40.50	40.50
Less : Op. WIP Goods	-	2.52	2.88	3.24	3.24
Add : Cl. WIP Goods	2.52	2.88	3.24	3.24	3.24
Total Sales	30.87	35.91	40.41	40.50	40.50
Variable & Semi Variable Exp.					
Raw Material & Tax	3.23	3.70	4.16	4.16	4.16
Electricity Exp/Coal Consumption at 85%	0.60	0.68	0.77	0.77	0.77
Manufacturing Expenses 80%	0.45	0.85	0.96	0.97	0.97
Wages & Salary at 60%	4.59	5.05	5.56	6.11	6.73
Selling & administrative Expenses 80%	0.45	0.57	0.64	0.65	0.65
Intt. On Working Capital Loan	0.36	0.36	0.36	0.36	0.36
Total Variable & Semi Variable Exp	9.69	11.22	12.45	13.02	13.63
Contribution	21.18	24.69	27.96	27.48	26.87
Fixed & Semi Fixed Expenses					
Manufacturing Expenses 20%	0.11	0.21	0.24	0.24	0.24
Electricity Exp/Coal Consumption at 15%	0.11	0.12	0.14	0.14	0.14
Wages & Salary at 40%	3.06	3.37	3.71	4.08	4.48
Interest on Term Loan	1.08	1.31	0.95	0.59	0.23
Depreciation	1.77	1.55	1.34	1.16	1.00
Selling & administrative Expenses 20%	0.11	0.14	0.16	0.16	0.16
Total Fixed Expenses	6.25	6.71	6.53	6.36	6.26
Capacity Utilization	70%	80%	90%	90%	90%
OPERATING PROFIT	14.93	17.99	21.43	21.12	20.61
BREAK EVEN POINT	21%	22%	21%	21%	21%
BREAK EVEN SALES	9.11	9.75	9.43	9.37	9.43

PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
25 Cmx50 Cm Mixing Mill with all accessories	1	3,84,000.00	3,84,000.00
Double Roll Spreading Machine	1	2,70,000.00	2,70,000.00
Slitting Machine	1	54,000.00	54,000.00
Sigma Mixer	1	54,000.00	54,000.00
Misc. tools & equipments	1	60,000.00	60,000.00
H.V. Break Down Tester, Laboratory Oven, adhesion Test & Pin hole testing equipments	1	78,000.00	78,000.00
Total			9,00,000.00