

# LOZENGES



## **INTRODUCTION:**

The technology of lozenges making is based on the science and art of manipulating sugar, the principal ingredient in lozenges, particularly to achieve special textural effects. This is accomplished primarily by controlling the state of crystallization of the sugar and the sugar-moisture ratio. While the confectioner has many ingredients besides sugar to modify his confection, such as milk products, egg white, food acids, gums starches, fats emulsifier, flavours, nut, fruits, chocolate and others, all of these are secondary to sugar in determining the attributes that characterize the major candy types and some of these ingredients are chosen especially for their influence upon the chemical and physical properties of sugar.

## **OBJECTIVE:**

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of Lozenges Plant. This model report will serve as guidance to the entrepreneurs on starting up such a new project and basic technical knowledge for setting up such a facility.

## **RAW MATERIAL AVAILABILITY:**

The main raw materials for these products are sugar, flavours and colours.

## **SUITABLE LOCATION:**

Lozenges can be manufactured at any location.

## **MARKET OPPORTUNITIES:**

Lozenges, a unique mouth freshener with a specific flavour is a part of the Rs 100-crore Parle brand umbrella, which is ranked among Parle top performing Ten products, is being extended to new variants. There are so many flavours available in the market i.e. orange, pineapple, mango, mint, pan, strawberry, grapes etc. and are having good demand among the children. Similar to the existing variants, the new flavours are also being made available in pillow packs priced at 50 paise a unit. In addition, the lozenges are also being retailed in jars of 250 and 500 units each, besides refill packs. The roll out of the new flavours has been initiated in a few select markets, and will be extended nationally.

## **PROJECT DESCRIPTION:**

### **CAPACITY OF THE PROJECT:**

- The capacity of the project is 36 MT of Lozenges per year.

### **PRODUCTION TARGET:**

- Qty.: 25.20 MT/Annum or 3 MT/Month.
- The scheme is worked out per shift (8 Hour) basis and 300 working days per annum.
- Assume there'll be 70% production in first year.

## MANUFACTURING PROCESS:

The Process involve the cooking of Sugar in the stainless steel steam jacketed cooing pan then cooling of syrup on cooling table. after that add all ingredient in the vacuum batch cooker including color and flavor etc. then mixture subject to batch roller then three stage rope sizer then subject to sweet forming machine then subject to three way cooling conveyor then in the end candy wrapping machine to pack the Sugar candy.

## PROJECT COMPONENT AND COST:

### FINANCIAL ASPECTS:-

#### APPLICATION OF FUNDS

Particular	Amount
Land	200 sq. meter
Building	covered area on rent
Plant & Machinery	2,167,000.00
Office Equipment & Furniture	50,000.00
Working Capital	610,654.36
Pre-Operative Expenses	25,000.00
<b>Total</b>	<b>2,852,654.36</b>

#### SOURCE OF FUND

Particulars	Amount
Loan from Banks	1,662,750.00
Loan for Working Capital	256,540.77
<b>Total</b>	<b>2,852,654.36</b>

## FIXED ASSETS

<b>(1) Land And Building:</b>		<b>Value (Rs.)</b>		
Land & Building 200 sq. meter covered area on rent		96,000 per annum		
<b>(2) Machinery And Equipment:</b>				
S. N.	Description (Name of machine with specification)	Qty.	Rate	Value (Rs.)
<b>Production Unit</b>				
<b>i</b>	Vacuum Batch Cooker	1	250,000.00	250,000.00
<b>ii</b>	Sugar Batch Kneader	1	270,000.00	270,000.00
<b>iii</b>	Candy Forming 12" Plast-O Plast Machine with Batch Former	1	380,000.00	380,000.00
<b>iv</b>	Die 12" POP Machine with Brass Punches	1	410,000.00	410,000.00
<b>v</b>	Candy Wrapping Machine: Double Twist	1	350,000.00	350,000.00
<b>vi</b>	Heater Cum Blower for Candy Wrapping	1	25,000.00	25,000.00
<b>vii</b>	Working Table with SS Top	2	35,000.00	70,000.00
<b>viii</b>	Weighing Balance Platform Type	1	25,000.00	25,000.00
<b>ix</b>	Misc Equipments	-	-	40,000.00

<b>Total Cost of Machinery &amp; Equipments</b>		<b>1,820,000.00</b>
Electrification & Installation Charges @ 10%		182,000.00
<b>Total Cost of Production Unit</b>		<b>2,002,000.00</b>
Furniture & Fixtures	-	50,000.00
<b>3 Pre-Operative Expenses:</b>	-	25,000.00
<b>Total Fixed Capital ( 2+3)</b>	-	<b>2,027,000.00</b>

### RAW MATERIAL REQUIREMENT & STOCK

Particulars	Mode	Year' 1
Capacity Utilisation		<b>70%</b>
Daily Production at 100% capacity	200.00	
No of Working days per annum	300	
Annual Production	Kg	42,000.00
Wastage	%	2.00
Net Production	Kg	41,160.00
<b>Gross Consumption</b>		
Sugar	Kg	41,160.00
Other materials like Chemicals, Flavours, Colors etc.		-
<b>Rate (Per Kg)</b>		
Sugar	Rs	33.00
Other materials like Chemicals, Flavours, Colors etc.	-	-
<b>Annual Consumption</b>		
Sugar	Rs	1,358,280.00
Other materials like Chemicals, Flavours, Colors etc.	Rs	36,000.00
<b>Total</b>		<b>1,394,280.00</b>
Stock of Raw Material	30 days	114,598.36
Stock of WIP	02 days	7,442.63
Purchase Cost of Raw Material	Rs	1,516,320.99

### WORKING CAPITAL REQUIREMENT

Particulars	Days	Year' 1
Raw Material	30	114,598.36
Work in Process	2	7,442.63

Finished Goods	10	71,285.95
Receivables	30	343,000.00
Advance/Security		200,000.00
Total		736,326.94
Less: Creditors	30	126,360.08
<b>Net Current Assets</b>		<b>609,966.86</b>
Paid Stock		66,966.86
75% of Paid Stock		50,225.14
60% of Book Debts		205,800.00
Bank Limits		256,025.14
Margin for Working Capital		353,941.71

**SELLING & ADMINISTRATION EXPENSES**

Particular	Year I
<b>i</b> Postage	18,000.00
<b>ii</b> Commission on sales	60,000.00
<b>iii</b> Office Expenses	29,000.00
<b>iv</b> Tour & Travel	18,000.00
<b>v</b> Printing & Stationary	20,000.00
<b>vi</b> Advertisement	52,000.00
<b>vii</b> Telephone	20,000.00
<b>viii</b> Repair & Maintenance	22,000.00
<b>ix</b> Conveyance	27,000.00
<b>x</b> Sales expenses	34,000.00
<b>xi</b> Insurance	20,000.00
<b>xii</b> Misc. Expenses	30,000.00
<b>Total</b>	<b>350,000.00</b>

**STAFF AND LABOUR EXPENSES**

S. N.	Description	No.	Salary PM	Total Salaries-Year I
<b>(a) Administrative &amp; Supervisory</b>				
<b>i</b>	Production Incharge cum accountant	1	15,000.00	180,000.00
<b>Total Salaries</b>				<b>180,000.00</b>
<b>(b) Skilled &amp; Unskilled-Wages</b>				
<b>i</b>	Skilled Worker	1	10,000.00	120,000.00
<b>ii</b>	Semi Skilled Worker	1	8,000.00	96,000.00
<b>iii</b>	Helper	2	5,000.00	120,000.00
<b>Total</b>				<b>336,000.00</b>
<b>Grand Total</b>				<b>516,000.00</b>

**MANUFACTURING AND PROFIT & LOSS****ACCOUNT**

Particulars	Year' 1
Sales Value @ Rs 100 per Kg	4,116,000.00
<b>Cost of Production:</b>	
Raw Material Consumed:	
Opening Stock	-
Add: Purchases	1,516,320.99
	<hr/> 1,516,320.99
Less: Closing Stock	114,598.36
Raw Material Consumption	<hr/> 1,401,722.63
Add: Op Stock of WIP	-
	<hr/> 1,401,722.63
Less: Cl Stock of WIP	7,442.63
	<hr/> 1,394,280.00
Power & Fuel	300,000.00
Manufacturing Wages	336,000.00
Bonus & Incentives	16,800.00
Packaging Materials	100,000.00
Rent	96,000.00
Raw material storage & ins.	4,800.00
Cost	
Carriage inward	10,614.25
Depreciation	307,800.00
<b>Total Cost of Production</b>	<b>2,566,294.25</b>
Add: Op. Stock of Finish. Goods	-
	<hr/> 2,566,294.25
Less: Cls. Stock of F.Goods	71,285.95
<b>Cost of Sales</b>	<b>2,495,008.30</b>
<b>Gross Profit</b>	<b>1,620,991.70</b>
	0.39
Selling & Admin Cost:	
Expenses	350,000.00
Salary	180,000.00
Financial Expenses	
Interest on Term Loan	209,688.75
Interest on W.Capital	32,003.14
Pre. Expenses	5,000.00
<b>Profit Before Taxation</b>	<b>844,299.81</b>
Taxation	253,289.94
<b>Net Profit After Taxation</b>	<b>591,009.87</b>
Cash withdrawal	236,403.95
Transfer to Reserves	354,605.92
Cumulative Reserves	354,605.92
% of PBT on Sales	20.51

**BALANCE SHEET**

Particulars	Year' 1
<b>Liabilities:</b>	
Capital	891,941.71
Reserve & Surplus	354,605.92
Secured Loan:	
Term Loan	1,231,200.00
Unsecured loan:	
Current Liabilities:	
Bank Borrowings	256,025.14
Sundry Creditors	126,360.08
	<hr/> 2,860,132.86
<b>Assets:</b>	
Fixed Assets:	
Gross Block:	2,052,000.00
Less: Depreciation	307,800.00
	<hr/> 1,744,200.00
Current Assets:	
Inventories	193,326.94
Receivables	343,000.00
Advance/Security	200,000.00
Cash & Bank	359,605.92
Balance	
Preliminary Expenses	20,000.00
	<hr/> 2,860,132.86
Difference	0.00

## RATIO ANALYSIS

Particulars	Year' 1
<b>NET PROFIT RATIO</b>	
NP*100/Total sales	<b>14.36</b>
<b>RATE OF RETURN</b>	
NP*100/Total Investment	<b>22.00</b>

## BREAK EVEN ANALYSIS

Fixed Cost	
Rent	96,000.00
Interest on Borrowing	209,688.75
40% of Salaries	72,000.00
40% of Utilities	120,000.00
25% of Admin Exp	87,500.00
Depreciation	307,800.00
<b>Total</b>	<b>892,988.75</b>
<b>BREAK EVEN POINT</b>	$\frac{\text{Fixed Cost} * 100}{\text{Fixed Cost} + \text{Profit}}$
	<b>60.17</b>

### **ADDRESS OF MACHINERY & EQUIPMENT SUPPLIERS:**

- M/s Bajaj Processpack Maschinen Pvt. Ltd., 7/27, Jai Lakshmi Industrial Estate, Sahibabad Industrial Area, Sahibabad, Dist. Ghaziabad (U.P.) - 201301.
- M/s Kanchan Metals Pvt Ltd., 19G, Everest House, 46C, Jawaharlal Nehru Road, Kolkata (West Bengal) - 700 071.
- M/s Jayems Engineering Works, Strand Road, Kolkata – 700 001
- M/s Ambica Engineering Works, Bhagyoday Estate Chakudiya Mahadev Road, Rakhial, Ahmedabad-380023, Gujarat
- M/s KSJ Foods & Services Pvt. Ltd., 7/87, Vishnu Prasad, Mahanti Road, Vile Parle (E), Mumbai – 400057.
- M/s Econo Mode Food Equipment ( India ) Private Limited, B - 6, 5 - Acre, Kothari Compound, Tikuji - Ni - Wadi Road, Thane - 400607, Maharashtra.