



SUGAR CANDY

PRODUCT CODE	: 10733 (NIC Code)
QUALITY STANDARDS	: IS1008: 2004
PRODUCTION CAPACITY	: 300 MT (Per Annum)
ESTIMATED ANNUAL TURNOVER	: Rs. 1,80,00,000/-
PROJECT COST	: Rs. 46,71,000/- Fixed Capital – Rs. 24,87,000/- Working Capital – Rs. 21,84,000/-
MONTH AND YEAR OF PREPARATION	: February, 2021
PREPARED BY	: Shri Ambrose Royson <i>Assistant Director (Grade II)</i>

1. INTRODUCTION

Candy is a rich sweet confection made with sugar and often flavored or combined with fruits or nuts. The technology of candy making is based on the science and art of altering sugar, the principal ingredient in candy, 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 emulsifiers, flavors, nuts, 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.

2. MARKET POTENTIAL

Rapid modernization, continuously rising innovative and premium product launches, growing e-commerce market coupled with expanding organized retail channels and synchronized distribution networks are projected to drive candy market in India in the coming years. Major cities in India, such as Delhi/NCR, Mumbai, Hyderabad, Bengaluru, Chandigarh, Chennai, and Kolkata are among the leading demand generators of candies in the country. With increasing economic development in the country, lifestyle and preference of consumers is also significantly changing in Tier I and Tier II cities, which is driving candy consumption across these cities. Candy market in India is anticipated to grow at a CAGR of over 9%, on account of rising middle class households, coupled with increasing working as well as youth population. The most dominant segment in the country's candy market is sugar candy. The sugar candy segment is expected to maintain its dominance due to continuing launch of innovative products as well as aggressive branding initiatives undertaken by leading market players.

3. BASIS AND PRESUMPTIONS

- i. It is presumed that the unit will run single shift of 8 hours per day and 300 days in a year.
- ii. The rate of interest has been taken 12% on an average both for fixed investment and working capital.
- iii. To achieve full production 1 to 2 months trial production required.
- iv. The salaries and wages, cost of raw material, utilities, rent of the shed etc. are based on prevailing rates in and around local region at the time of preparation and are subject to necessary changes from time to time based on local conditions.
- v. The project preparation cost and non-refundable deposits may be considered under the head of pre-operative expenses.

4. IMPLEMENTATION SCHEDULE

The approximate time required for various activities is given below. However, it may vary from place to place depending upon the local circumstances and enthusiasm of the entrepreneur:

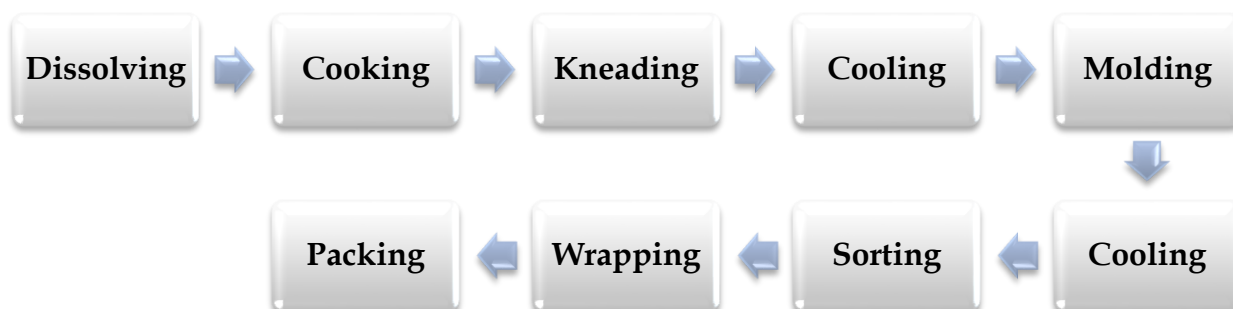
S. No.	Activity	Period (in Months)
1.	Scheme Preparation and Approval	0-1 st Month
2.	Sanction of loan	1 st -2 nd Month
3.	Clearance from State Pollution Control Board	2 nd -3 rd Month
4.	Placement of order for machinery and delivery	3 rd -4 th Month
5.	Installation of machines& Power connection	4 th -5 th Month
6.	Trial Run	6 th - 7 th Month
7.	Commercial Production	8 th Month onwards

Due to overlapping of some activities, normally 6-8 months are required to implement the project.

5. TECHNICAL ASPECTS

5.1. Process of Manufacturing

The manufacturing process for sugar candy involves the following steps:



5.2. Quality Control and Standards

Quality of the Sugar Candies has to be ensured as per IS 1008: 2004 (Sugar Boiled Confectionery - Specification). Also, provisions of the Food Safety & Standards Act and rules & regulations which as notified by the Government have to be complied with.

5.3. Production Capacity

This scheme envisages manufacturing of 300 MT of Sugar Candy per annum.

5.4. Pollution Control

This industry may involve pollution to some extent for which State Pollution Control Board has to be approached for NOC. Minimum height of shed will be maintained with exhaust fans for removingdecongestion, proper ventilation, removal of fumes etc.

5.5. Energy Conservation

Suitable measures should be used for the appropriate use of electricity.

5.6. Motive Power Requirement

25 KW

5.7. Machinery Utilisation

The capacity utilization is considered to be 80% of the total installed capacity.

6. FINANCIAL ASPECT

6.1. Fixed Capital

Land & Building: Covered area for workshop, office, stores etc. 1,000 sq. ft. on rent.

6.1.1. Machinery and Equipments

Description	Rate (Rs.)	Nos.	Total Price (Rs.)
Vacuum Batch Cooker with SS steam jacket(Capacity : 1000 kg/shift)	2,50,000	1	2,50,000
Sugar Batch Kneader (Capacity 50 kg)	3,20,000	1	3,20,000
Candy Forming 12" Plast-O-Plast machine with Batch former, three stage rope sizer , three-way conveyor, motor, panel	6,75,000	1	6,75,000
Die 12" POP Machine with Brass Punches	10,000	5	50,000
Candy Wrapping machine double twist style(Speed 300 Pcs./Min.)	3,50,000	2	7,00,000
Heater cum Blower for Candy Wrapping	25,000	1	25,000
Die Carrier	20,000	1	20,000
Working table with S.S./Aluminium top	10,000	2	20,000
Weighing Balance platform type	10,000	1	10,000
Aluminium vessels, Mats, cups, Mugs, ladle, spoons, gloves,etc. and misc. equipments		L.S	1,00,000
		Total	21,70,000

Electrification and installation @ 10% Rs. 2,17,000

Office equipments and furnitures Rs. 50,000

Pre-operative expenses Rs. 50,000

Total Fixed Capital Requirement Rs. 24,87,000/-

6.2. Working Capital (per annum)

6.2.1. Land & Building

Building on Rent	Rent per month (Rs.)	Amount (Rs.)
Covered area for production, office, stores etc. 1000 sq. feet	20,000	2,40,000

6.2.2. Personnel

Description	Nos.	Salary/month (Rs.)	Total (Rs.)
Manager	1	25,000	3,00,000
Accountant/Cashier	1	20,000	2,40,000
Salesman	2	20,000	4,80,000
Skilled Workers	2	15,000	3,60,000
Semi-skilled Workers	2	12,500	3,00,000
Un-skilled Workers/Helpers	4	12,000	5,76,000
Peon cum Watchman	1	11,500	1,38,000
Total			23,94,000

6.2.3. Raw Material

Description	Quantity (kg)	Rate (Rs./kg)	Total (Rs.)
Sugar	3,00,000	32	96,00,000
Other Materials viz. chemicals, herb extracts, flavors, colours, etc.	2,400	150	3,60,000
Packaging Material		L.S.	10,00,000
Total			1,09,60,000

6.2.4. Utilities

Electricity: Rs. 3,60,000

Water: Rs. 36,000

Total: Rs. 3,96,000

6.2.5. Other Contingent Expenses - Rs. 3,00,000

6.2.6. Total Recurring Expenditure per annum - Rs. 1,42,90,000

6.2.7. Working Capital requirement:

Working Capital		Amount (Rs.)
Raw Material	1 Month	9,13,333
In Process	1 Week	2,33,120
Finished Goods	2 Weeks	4,66,240
Receivables	2 Weeks	5,71,600

Total **21,84,292**

Say **Rs. 21,84,000/-**

6.3.Total Capital Investment

Fixed Capital	Rs. 24,87,000
Working Capital	Rs. 21,84,000
Total	Rs. 46,71,000/-

7. FINANCIAL ANALYSIS

7.1. Cost of Production (per annum)

S.No.	Description	Amount (Rs.)
1	Total Recurring Cost per year	1,42,90,000
2	Total Depreciation (Machinery & Equipment @ 15%, furniture and office equipments @ 20%)	3,35,500
3	Interest on Total Capital Investment @ 12%	5,60,520
Total		1,51,86,020

7.2.Turnover (per annum)

S. No.	Item	Qty. (kg)	Rate (Rs./kg)	Value (Rs.)
1	Flavoured candy	3,00,000	60	1,80,00,000
Total				1,80,00,000

7.3.Net Profit (per annum)

$$\begin{aligned} &= \text{Turnover} - \text{Cost of Production} \\ &= \text{Rs. } 1,80,00,000 - 1,51,86,020 = \text{Rs. } 28,13,980/- \end{aligned}$$

7.4.Net Profit Ratio

$$\begin{aligned} &= \frac{\text{Net profit per year}}{\text{Turnover per year}} \times 100 \\ &= \frac{28,13,980}{1,80,00,000} \times 100 \\ &= 15.6 \% \end{aligned}$$

7.5. Rate of Return

$$\begin{aligned} &= \frac{\text{Net profit per year}}{\text{Total Capital Investment}} \times 100 \\ &= \frac{28,13,980}{46,71,000} \times 100 \\ &= 60.2 \% \end{aligned}$$

7.6. Break-even Point

S.No.	Description	Amount (Rs.)
1	Fixed Cost	35,30,020
2	Variable Cost	1,16,56,000
3	Contribution (Turnover - Variable Cost)	63,44,000

B.E.P

$$\begin{aligned} &= \frac{\text{Fixed Cost}}{\text{Contribution}} \times 100 \\ &= \frac{35,30,020}{63,44,000} \times 100 \\ &= 55.6 \% \end{aligned}$$

Addresses of Machinery Suppliers

1. ***M/s. B Kay Machine Works***
181, Avanashi Road, Opposite Lotus Eye Care Hospital,
Civil Aerodrome Post, Coimbatore-641014
2. ***M/s. Shri Verai Engineering***
Plot No. 350, Road No - 7, G. I. D. C., Kathwada,
Near Odhav Octroi, NakaKathwada
Ahmedabad - 382430
3. ***M/s. Patel Industries***
Plot No.5 & 6,Gurudev Industrial Area, 3 - Ravki,
Lodhika, Rajkot - 360004
4. ***M/s. S. P. Engineering Works***
Moh Boghran, Nakoder,
Khiwa, Jalandhar - 144040
5. ***M/s. Emcube Industries***
25A/2, Puliamarathottam,
Ganapathy, Coimbatore - 641006
6. ***M/s. Arruthra Food Machines***
No. 192/8, Kamakoti Nagar, Rajiv Gandhi Salai,
Sanganoor, Coimbatore - 641006
7. ***M/s. J. K. Engineering Works***
No. 232/2, Atlas Metal Compound, Nashik Pune Road,
Bhosari, Pune - 411039
8. ***M/s. Shri Bhadrakali Industries***
74, Vrundavan Estate, Near Bhikshuk Gruh,
Ahmedabad - 382415

Raw Material Suppliers

1. ***M/s. S.I.S Industries***
23/10, Flat Number 7, 3rd Avenue, Vaishnavi Apartments
Adyar, Chennai - 600020
2. ***M/s. Viya Karupattimart***
5K/8B, Briyant Nagar, 6th Street
Thoothukudi - 628008
3. ***M/s. JNS Commodities & Specialities Private Limited***
No. 512, Kakad Market, No. 306
Kalbadevi, Mumbai - 400002
4. ***M/s. Jagan Industries***
S 7, Badali Industrial Area, Phase 1
Samaypur, Delhi - 110042