

PROJECT PROFILE

ON

HARD-BOILED CANDIES

Month & Year Aug 2010

PREPARED BY TANSTIA-FNF SERVICE CENTRE B-22, INDUSTRIAL ESTATE CHENNAI-600032

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HARD-BOILED CANDIES

1. Introduction

Hard-boiled candies or sweets are prepared from sugar along with invert sugar, citric acid and flavours. Being available in different flavours like orange, lemon, mango etc., and easily affordable children find it a delicacy. It is consumed as a pastime fun product.

2. Market

The major market outlets are the "A" and "B" class outlets. The product also finds placement in self service counters and departmental stores. Some "C" class outlets also stock the product.

3. Packaging

The processed product is packed in twist and wrap cellophane wrapper.

4. *Production capacity*

- The plant will be in operation for two shifts a day with each shift of 8 hours duration.
- The plant operates to a production capacity of 500 kilograms per shift.
- The estimated production per day is 1000 kilograms.
- The total production per month will be 25.0 M.T while the annual production is estimated at 300 M.T
- The time period required for achieving full capacity utilization is one year.



5. Sales revenue

• The ex-factory selling price will be Rs. 80 per kilogram thereby yielding a sales revenue of Rs. 240 lakhs on full capacity utilization.

6. Production process outline.

The required quantity of sugar per batch is taken in the candy cooker and boiled with the required quantities of invert sugar and citric acid. When the desired consistency is achieved, it is poured on to the cooling tables and rolled to the desired sizes in the roller. The candy former forms the candies to the desired shapes and sizes when it begins to harden. The candies are further rolled on to the cooling conveyer wherein the product is brought to room temperature before being twist wrapped in the wrapping machine. They are then packed into weights of one kilogram in polypropylene pouches before being dispatched into the market.

7. Quality specifications

•	Sulphated ash	- Maximum 1.5%
-	Ouiphated ash	

- Ash
 Acid insoluble ash
 Maximum 1.0%
 Maximum 0.5%
- Acid insoluble ash Maximu
 Sulphur dioxide Maximu
 - Maximum 350 parts per million.

8. Pollution control measures

Not necessary as there are no pollutants or effluents.

9. Energy conservation measures

Common measures will do.



10. Land and construction cost for the proposed unit

The unit is proposed to be set up in a leased area. The area required is 3500 square feet as detailed below:

SI	Description	Sq. feet
1	Processing area	1500
2	Packing room	500
3	Sugar storage room	200
4	Other raw materials storage room	200
5	Finished goods storage room	200
6	Packaging material storage room	100
7	Laboratory	200
8	Office space	200
9	Machinery spares room	100
10	Toilet space	100
11	Miscellaneous space	200
12	Total	3500

Lease rent – Rs. 6.00 per square foot

Total rent per month – Rs. 21000

Lease advance - Rs. 100000

11. Costing of machinery and equipment

SI	Description	Rs. lakhs
1	Baby boiler and accessories	1.850
2	Candy cooker	2.039
3	Cooling tables (2)	1.600
4	Roto plant candy former	3.600
5	Batch roller	2.086
6	Cooling conveyer	1.728
7	Wrapping machines (2 nos)	8.240
8	Total	21.143
9	Laboratory equipment	1.000
10	Grand total machinery and equipment	22.143



12.	Project cost	
SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	21.143
4	Laboratory equipment	1.000
5	Transport vehicle (Tata Ace)	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.500
9	Cost of electrification	0.500
10	Erection and commissioning	1.414
11	Cost of machinery spares	0.200
12	Cost of office equipment	1.000
13	Deposits if any	0.700
14	Company formation expenses	0.100
15	Gestation period expenses	1.000
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	10.000
18	Contingencies	1.000
19	Working capital margin money	7.046
20	Total	49.463

12. Project cost

13. Working capital requirements per month

a. Salaries and wages

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Manager	1	0.400
2	Production supervisor cum chemist	2	0.500
3	Skilled workers	2	0.200
4	Unskilled workers	4	0.200
5	Packing workers	4	0.160
6	Administrative staff	2	0.500
7	Sales staff	2	0.300
8	Driver	1	0.070
9	Total	18	2.330



D.					
SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)	
1	Sugar	20000	24.00	4.800	
2	Invert sugar syrup	6000	24.00	1.440	
3	Citric acid	250	140.00	0.350	
4	Flavours and colours	50	500.00	0.250	
5	Total raw material	26300		6.840	

b. Raw material requirement per month

c. Packaging material requirement per month

SI	Description	Qty	Rate / unit Rs)	Value (Rs. lakhs)
1	Primary packaging material – candy cellophane wrapper film	1000 kgs	100.00	1.000
2	Polypropylene pouches	25000 nos	1.00	0.250
3	Cartons and straps	1000 nos	40.00	0.400
4	Total			1.650

Total raw + packaging material = Rs. 8.490 lakhs

d. Utilities per month

SI	Description	Rs. lakhs
1	Power 6000 kwh @ Rs. 5.50 per unit	0.330
2	Water	0.050
3	Boiler fuel	0.250
4	Total utilities	0.630



е.	Comingent expenses per month	
SI	Description	Rs. lakhs
1	Rent for processing shed	0.210
2	Postage and stationery	0.020
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.156
6	Local transports, loading and unloading	0.100
7	Advertisement and publicity @ 20% of sales	4.000
8	Insurance	0.010
9	Sales expenses @ 1% of sales	0.200
10	Miscellaneous expenses @ 1% of sales	0.200
11	Trade incentives @ 2% of sales	0.400
12	Taxes @ 4%	0.800
13	Total contingent expenses	6.166

e. Contingent expenses per month

f. Total working capital requirement per month

SI	Description	Rs. lakhs
1	Salaries and wages	2.330
2	Raw material and packaging material	8.490
3	Utilities	0.630
4	Contingent expenses	6.166
5	Total	17.616

14. Means of finance

SI	Description	Rs. lakhs
1	Total Project Cost	49.463
2	Equity	16.322
3	Debt	33.141
4	Working capital margin money	7.046



15. Financial analysis

SI	Description	Rs. lakhs
1	Total recurring cost per year	211.392
2	Depreciation on land and building	0.000
3	Depreciation on machinery	2.593
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 13.5%	4.474
8	Interest on short term borrowings@ 13.5%	1.427
9	Total cost of production	220.006

16. Turnover per year

SI	ltem	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Hard Boiled Candies	300,000 kgs	80	240.00

17. Viability analysis

SI	Description	Value
1	Net profit before income tax (Rs. lakhs)	19.994
2	Net profit ratio	8.3%
3	Internal rate of return	24.9%
4	Break even percentage	43%
5	Debt service coverage ratio	2.069

List of machinery suppliers for Hard Boiled Candies

- 1. Mangal Engineering Works, Factory Area, Patiala 147001, Punjab. Tel: 0175 - 2364702; Fax: 0175 - 2360652
- 2. Emersion Engineering Enterprise, Near Gate Station, Surendarnagar, 363001, Gujarat.; Tel: 02752 221940
- 3. The Ravalgoan Sugar Farm Limited, Factory P.O. Ravalgoan 423108, District Nashik, Maharashtra.