Sugar Globules

PRODUCT CODE : Sugar Globules

PRODUCTION CAPACITY : Qty. : 2200 Qtls.

Value: Rs. 48.4 Lacs

: January, 2003

MONTH AND YEAR
OF PREPARATION

PREPARED BY : Small Industries Service Institute

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Introduction

As Medical Science progress is increasing day by day like wise the side effect of allopathic medicines are also being seen in the world. Looking to the adverse effect of allopathic medicines population of this era is moving towards the Ayurvedic and Homoeopathic medicines because it is well known that adverse effect of homoeopathic and Ayurvedic medicines are quite low. Therefore, demand of homoeopathic medicines is increasing day by day, looking to the demand of Homoeopathic drugs, demand of sugar globules is also increaing because Homoeopathic medicines can only be taken with sugar globules or water due to sweet in nature and easy solubility in mouth. Sugar globules are mainly being used by homoeopathic doctors. Hence, we can say that industry of Sugar Globules have bright future. In manufacturing of sugar globules basic raw material is sugar which is easily available in each and every part of the country beside this sugar globules have good absorption power than other globules and easily absorbs the homoeopathic durg without any change in composition and property.

MARKET POTENTIAL

Basic consumption of sugar globules is in homoeopathy, because drug used in homoeopathy is either to be taken with sugar globules or water. Therefore due to sweet taste these globules are being used by doctors or physicians of homoeopathy. Basic difference between manufacturing cost and selling prize is very high, hence it can be sold to wholesalers only.

IMPLEMENTATION SCHEDULE

| Na | ture of Activities | Period (in Months) |
|----|--|-----------------------|
| 1. | Preparation of Project profile | 1 |
| 2. | SSI Registration | 1 |
| 3. | Finance/Loan from Banker or Financial Institutions | 2 |

| Na | ture of Activities | Period (in Months) |
|----|--|-----------------------|
| 4. | Power connection/ Building construction | 6 |
| 5. | Machinery procurement and Trial run | 2 |
| 6. | Recruitment of Staff and Labour | 1 |
| 7. | Actual commercial production. | 1 |
| | Total | 14 months |

Basis and Presumptions

The project has been drafted taking into account of the following aspects:

- 1. No. of working shifts 1 in a day.
- 2. Duration of shift in term 8 hours of time
- 3. Number of working days 300 in a year
- 4. Working efficiency of 75% the unit
- 5. Construction of building (built up area) will be in accordance with the provision laid down by FDA.
- 6. The estimates are drawn from a production capacity generally considered techno-economically viable for a modern type of manufacturing unit.
- 7. The wages of the Staff and Labour is taken as as per the prevailing Labour Wages Laws.
- 8. The entire expenditure will be borne by entrepreneur.
- 9. The rate of interest has been shown as applicable.

- 10. Plant and Machinery, Testing equipment and all other equipments used in manufacturing such type of products may also be employed in manufacturing all other similar type of products.
- 11. Although the unit is free from pollution and effluent discharge but still provision of exhaust fan may ensure the fresh environment.

TECHNICAL ASPECTS

Process of Manufacture

Manufacturing process of sugar globules may be shown as following:

- 1. Grinding of sugar.
- 2. Formation of Globules.
- 3. Drying.
- 4. Coating.

1. Grinding of Sugar

In this process sugar grinds with grinder to fine mesh and further filter through sieve, so that any unwanted material may be sorted out easily.

2. Formation of Globules

In this process sugar generally mixes with water and paste is formed. Granules of sugar are prepared when this paste is rubbed on the surface on seive.

3. Drying

These granules are dried in tray drier to remove/eliminate moisture of the product.

4. Coating

In this process, dried sugar globules kept in coating machine having

arrangement of spray drier may be coated to desired size with sugar solution.

Quality of the product should be translucent or opaque in nature.

Pollution Control

There is no pollution, however, unit has to obtain N.O.C. from Pollution Control Authorities.

Energy Conservation

Electricity may be conserved as follows:

- 1. Use of high efficiency motors.
- 2. Down sizing the motor.
- Use of soft starter-cum-Energy Saver.
- 4. Use of variable speed drives.
- 5. Use of on load Tapn changing transformers.
- 6. Use of automatic voltage regulators.
- 7. Avoid use of Re-wounded motors.
- 8. Avoid idle running of motors.

FINANCIAL ASPECTS

A. Fixed Capital

| (i) Land and Building | (Rs.) |
|--|-----------|
| Land 250 Sq.Mtr.@1000per sq.mtr. | 2.5 lakh |
| Building | 2.5 lakii |
| Covered area 200 Sq.Mtr. having | 4.0 lakh |
| the construction of manufacturing shed. Store of Raw material, | |
| Finished products room and office. Construction value | |
| @ Rs 2000 per sq.mtr. | |
| Total value of Land and Building | 6.5 lakh |
| = Rs. 2.5 + 4.0 | |

(ii) Plant and Machinery

| SI | . Description | Nos. | Value |
|----|--|------|--------|
| No | o. | | (Rs.) |
| 1. | Grinder with motor of 5 H.P. for grinding of sugar | 1 | 80,000 |

| SI. No. | | Nos. | Value (Rs.) |
|------------|--|--------|----------------|
| 2. | Tray drier capacity of 96 trays, electrically heated, complete with fan, heating coil, digital temperature controller and indicator having arrangement of circulating air. | 1 | 1,00,000 |
| 3. | Sieves of different mesh | 5 | 10,000 |
| 4. | Tableting machine with motors and punches | 1 | 55,000 |
| 5. | Coating pan made of SS with arrangement of heater and air blowing | 1 | 60,000 |
| 6. | Degrader having arrangement of 13 nos. sieves for various mesh and 3 H.P. motor capacity 100kg per hour (can be locally for serviceable) | 1 y | 1,00,000 |
| 7. | Physical weighing balance Lab. equipments, glass ware, | 1 | 10,000 |
| | plastic ware and other equipments like sealing machine etc. | | 35,000 |
| | Erection and electrification @ 10% | | 40,000 |
| | Total | | 4.4 Lakhs |

(iii) Furniture, Almirah and Typewriter 35,000

(iv) Pre-operative Expenses 10,000

(v) Total Value of Fixed Capital investment Rs 6.5 lakh + 4.4 lakh + 0.35 lakh + 0.10 lakh 11.35 lakh

B. Working Capital (per month)

| (i) Raw Material | (Rs.) |
|---|----------|
| Sugar 200 qntls @ 1450/qntls | 2.9 lakh |
| Polythene bag for packaging | 0.1 lakh |
| Additives used for brightness of colour | 3.0 lakh |

(ii) Staff and Labour

| Designation | No. | Value (Rs.) |
|--------------------------|-------|-------------|
| 1. Manager-cum Chemist | 1 | 4500 |
| 2. Skilled Workers | 2 | 6000 |
| 3. Unskilled Workers | 4 | 6000 |
| 4. Sales Representatives | 1 | 2000 |
| 5. Peon-cum-Chowkidar | 1 | 1500 |
| | Total | 20000 |

(iii) Other Contingent Expenses

| Utilities | (Rs.) |
|-----------------------------|-------|
| Electricity | 6000 |
| Water | 500 |
| Transportation | 2500 |
| Repairing and Maintenance | 500 |
| Insurance | 300 |
| Advertisement and publicity | 400 |
| Postage and stationery | 300 |
| Miscellaneous | 500 |
| Total | 11000 |

- (iv) Total Recurring Expenses (per month)
 - = Rs. 3.0 lakh + 0.20 lakh + 0.11 lakh
 - = Rs. 3.31 lakh

C. Total capital investment

| (i) Working Capital (for 3 Months) | |
|------------------------------------|-----------------|
| Rs. 3.31×3 = | 9.93 lakhs |
| (ii) Fixed capital investment = | Rs. 11.35 lakhs |
| Total | 21.28 lakhs |

FINANCIAL ANALYSIS

| (1) Cost of Production (per annum) | (Rs.) |
|---|-------------|
| Recurring expenses 3 | 39.72 lakhs |
| Depreciation on plant and machinery @ 10% | 0.44 lakhs |
| Depreciation on building @ 5% | 0.20 lakhs |
| Depreciation on furniture @ 20% | 0.07 lakhs |
| Interest on total capital | |
| investment @ 15% | 3.20 lakhs |
| Total 4 | 3.63 lakhs |

(2) Turnover

By sale of 2200 Quintals Sugar 48.4 lakhs Globules @ Rs. 22kg.

- (3) Net Profit
 - = Rs. 48.4 43.63
 - = Rs. 4.77 lakhs or say 4.8 lakhs

- (4) Percentage Profit on Sale
 - $= \frac{4.8 \times 100}{49.5}$
 - = 9.6%
- (5) Percentage Profit on Total Capital Investment
 - $= \frac{4.8 \times 100}{21.28}$
 - = 22.5%

| (6) Break-even Point | (Rs.) |
|--------------------------------------|-------|
| 40% of Salary | 0.96 |
| 40% of Other Expenses | 0.53 |
| Total Depreciation | 0.71 |
| Interest on total Capital Investment | 3.20 |
| Total | 5.40 |

- B.E.P. = $\frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}}$
 - $= \frac{5.4 \times 100}{5.4 + 4.8}$
 - = 52.9%
 - = Say 53%

Addresses of Machinery and Equipment Suppliers

- M/s. Pioneer Engineering Co.
 Mumbai Samachar Marg, Mumbai-400001.
- 2. M/s. Pharma Mach 10, Chaulpatty Road, (Beliaghata) Kolkata- 700010.
- 3. M/s. Kailas Machine Tools 12, Harshad Estate, Mamtanagar, Nr. Virat Nagar, Char Rasta, Rakhial (Bapu Nagar), Ahmedabad 380024.

- 4. M/s. Amba Engineers 6, Laxmi Indl. Estate, Navneet Prakashan Compound, Rakhial, Ahmedabad-380023.
- 5. M/s. Ambica Machine Tools Plot No. 1, Phase-II, G I D C, Vatva, Ahmedabad 382445.
- 6. M/s. Cip Machineries Pvt. Ltd. 10–11, Umiya Estate, Nr. Bharat Party Plot, N.H. Road 8, Amrawadi, Ahmedabad 380026.
- 7. M/s. Darshan Chaudhry Prashant Press, Gulabi Bagh, New Delhi.

Raw Materials are Locally Available.