

NOODLES

Product Code (NIC)	2008: 10740
Quality and Standards	As per IS 1485:1993
Production Capacity	Qty: 150 MT per annum Value: Rs. 1, 50, 00,000/-
Month and Year of Preparation	March, 2021
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INTRODUCTION:

Noodles are a type of food made from unleavened dough which is rolled flat and cut, stretched or extruded, into long strips or strings. This is an eatable food item under instant food products and very popular food. Noodles are usually cooked in boiling water, sometimes with cooking oil or salt added. They are also often pan-fried or deep-fried. It is one of the most conventional foods available in the market.

MARKET POTENTIAL:

Noodles and chowmein, a ready-to-eat food item is very popular in developed countries and now it has created good market potential in our country also and is becoming a popular item. The factors governing its demand are:

1. Growing Demand For Convenience Food
2. Availability of Convenient Packaging Formats
3. Increasing population of the country.
4. Increase in the purchasing capacity of the people.
5. Durability of the product.
6. Change in people's eating habits especially the younger generation.

7. It is ready-to-eat product.
8. Convenience of preparation

BASIS AND PRESUMPTIONS:

1. The Project Profile has been prepared on the basis of Single Shift of 8 hrs. a day and 25 working days in a month at 75% efficiency.
2. Depreciation on building has been taken @ 5%, depreciation on machinery & equipments has been taken @ 10% minimum and depreciation on office furniture has been taken @ 20 % per annum.
3. The rates quoted in respect of salaries and wages for skilled worker and others are as per Wages Act of the State Government.
4. Interest rate for the fixed and working capital has been taken @ 12% on an average.
5. The margin money required is minimum (25% of the Working Capital).
6. The rate quoted in respect of machinery, equipment and raw materials are those prevailing at the time of preparation of the Project Profile and are likely to vary from place to place and suppliers to suppliers. When a tailor made project profile is prepared, necessary changes are to be made.
7. The pay back period may be 5 years of the Project.

IMPLEMENTATION SCHEDULE

- | | |
|---|--------------------------------|
| 1. Building construction | :3 Months |
| 2. Preparation of Project report | :1 Week |
| 3. Financial assistance | :1 Month |
| 4. Arrangement of power | :1 Month |
| 5. Acquisition of Machinery | :1 Month |
| 6. Installation of Machinery | :15 Days |
| 7. Appointment of Staff and Labour | :1 Month |
| 8. Trial production and shooting problems | :2 Weeks |
| 9. Commercial production | :1 Week after trial production |
| 10. Total time to start commercial production | :3 to 6 Months |

TECHNICAL ASPECTS

Process of Manufacture

Noodle is a widely popular food item, with a distinct and delicious taste. However, the process that goes into making instant noodles is not that easy. In here, we will see the process of instant noodles manufacturing.

Step by Step process:

- **Knead and Mix:** As a first step, the wheat flour and water goes into the mixing machine in the noodles manufacturing process. Here, dough is kneaded with water, thus providing the dough elastic feature for the noodles.
- **Creating noodle belt:** Then the dough goes into two rotating rollers wherein two noodles belt is bought together as one belt, helping to distribute the noodles evenly. The dough is also left for a specific time to mature.
- **Rolling:** With the help of pressing rollers, the 10mm thick noodles is flattened repeatedly using four rollers and finally becomes thin at 1mm thickness.
- **Slitter:** To add to the noodles manufacturing process, these noodles is then put into the slitter, where with the help of roller blades these instant noodles are made even thinner and wavy.
- **Steamer:** Then is the pregelatinization process in the steamer, where the instant noodles is steamed.
- **Dipping bath:** Then the steamed noodles are dipped in seasoning.
- **Feeder:** Then it is cut and moulded using a round- or square- shaped metal mould serving
- **Dehydration process:** Most of the noodles are dehydrated either by oil frying or air drying, thus giving rise to fried or non-fried noodles. There are also the steamed noodles that are known as Raw-type instant noodles.
- **Cooler:** Following the dehydration in the noodles manufacturing process, the noodles are cooled in air.
- **Check weight and detect metal:** In case any metal is detected in the noodles or if the weight is beyond the preset range, the product is then discarded.
- **Packing:** The ready instant noodles are then put into firm bags or containers as required along with the garnish and seasonings and then sealed.

Quality Control and Standards

The Bureau of Indian Standards has laid down the following specifications for Noodles: Makaroni, Spaghetti , Vermicelli, and Egg Noodles (2nd Revision) IS 1485:1993

Production Capacity

	<i>Qty. per annum</i>	<i>Value per annum(In Rs.)</i>
Fresh Noodles	150 MT	1, 50, 00,000/-

Motive Power: 30 HP

Pollution Control

There is no major pollution problem associated with the project. However, entrepreneurs should obtain NOC from concerned State Pollution Control Board.

Energy Conservation

Proper insulation is to be made to reduce the heat loss during drying and steaming processes.

FINANCIAL ASPECTS

A. Fixed capital

Amount (In Rs.)

(i) Land and Building

1. Land 1000 Sq. Mts. @ Rs. 2500	25, 00,000/-
2. Factory/shed 225 sq mtr. @ Rs. 4000 Sq. Mtr	9, 00,000/-
3. Office/Laboratory 70 sq mtr. @ Rs. 8500 Sq. Mtr	5, 95,000/-
Total	39, 95,000/-

(ii) Machinery and Equipment

Sl. No.	Description	Quantity	Amount (Rs.)
01.	Vertical type powder mixer 500 Kgs. cap with motor complete	1	70,000/-
02.	Dough mixer blade type 75 kgs. Cap	1	1,00,000/-
03.	Noodles making power operated machine with different size die-heads	1	9,50,000/-

04.	Tray Dryer with power operated	1	2,00,000/-
05.	Water boiler (75 litres cap)	1	1,20,000/-
06.	Wooden trays. size 2 ' x3'	100	50,000/-

Sl. No.	Description	Quantity	Amount (Rs.)
07.	Utensils i.e. Bucket, plate, mugs etc.	L.S	25,000/-
08.	Plastic Buckets of 20 liters cap	10	10,000/-
09.	Weighing balance 100 gm to 5 kg cap.	2	20,000/-
10.	Weighing Scales Platform type	1	30,000/-
11.	Working Tables Al Top	2	25,000/-
12.	Packaging Machine Pouch Pack	1	90,000/-
13.	Laboratory equipment	L.S	50,000/-
14.	Pollution Control equipment	L.S	40,000/-
15.	Installation of machinery and equipment		75,000/-
16.	Office furniture etc		40,000/-
		Total	18, 95,000/-

(iii) Pre-Operative Expenses

Amount (In Rs.)

Legal expenses, start-up expenses, establishment cost, Consultancy fee, estimate fee, interest and trial runs, etc.

50,000/-

Total Fixed Capital

Amount (In Rs.)

(i) Land and Building

39, 95,000/-

(ii)	Machinery and Equipment	18, 95,000/-
(iii)	Pre-Operative Expenses	50,000/-
	Total	59, 40,000/-

B. Working Capital (per month)

(i) Personnel

Sl. No.	Designation	No.	Salary (in Rs.)	Total (In Rs.)
01.	Manager	01	25,000/-	25,000/-
02.	Supervisor	01	20,000/-	20,000/-
03.	Food Technologist	01	22,000/-	22,000/-
04.	Clerk	01	12,000/-	12,000/-
05.	Sales Man	03	10,000/-	30,000/-
06.	Skilled Workers	03	10,000/-	30,000/-
07.	Unskilled Workers	04	8,000/-	32,000/-
08.	Peon/Watchman	02	8,000/-	16,000/-
			Total	1, 87,000/-

(ii) Raw Materials including Packaging Requirements

Sl. No.	Particulars	Quantity	Rate	Amount (Rs.)
01.	Maida/Wheat Flour	13 MT	22000/-	2, 86, 000/-
02.	Starch	2 MT	30,000/-	60,000/-
03.	Chemicals, salt, etc.	L.S		30,000/-
04.	Packaging Materials			60,000/-
			Total	4, 36,000/-

(iii) Utilities

	Amount (Rs.)
01. Power (3000 KWH @ Rs. 8.5 per/Unit)	25,500/-
02. Fuel	20,000/-
03. Water	7,500/-
	Total
	53,000/-

(iv) Other Contingent Expenses

	Amount (Rs.)
01. Postage and Stationery	3,000/-
02. Advertisement	20,000/-

03.	Telephone	2,000/-
04.	Consumable Stores	10,000/-
05.	Repairs and Maintenance	15,000/-
06.	Transport Charges	80,000/-
07.	Insurance	10,000/-
08.	Sales expenses	25,000/-
09.	Misc Expenditure	30,000/-
	Total	1, 95,000/-

Total Recurring Expenditure (Per Month): **Rs. 8, 71,000/-**

Total Working Capital (for 3 months): **Rs. 26, 13,000/-**

C. Total Capital Investment

(i) Fixed Capital	Rs. 59, 40,000/-
(ii) Working Capital	Rs. 26, 13,000/-
Total	85, 53,000/-

Machinery Utilization

The bottleneck operation in the manufacturing process is extrusion. The unit will utilize 75% of the installed capacity.

Financial Analysis

1. Cost of Production (per year)	Amount (Rs.)
(i) Total recurring cost per year	1,04,52,000
(ii) Depreciation on building @ 5%	74,750
(iii) Depreciation on M/C @ 10%	1,85,500
(iv) Depreciation on office equipment @ 20%	8000
(v) Interest on total capital investment @ 12%	10,26,360
Total	1, 17, 46,610

2. Turn Over (per year)

Item	Qty.	Rate (Rs.)	Amount (Rs.)
Fresh Noodles in 200 gms. Packets	7 .50 lakh pkts	20/-	1, 50, 00,000/-

3. Net Profit (Per Year)

$$\begin{aligned} &= \text{Sales} - \text{Cost of Production} \\ &= 1, 50, 00,000 - 1, 17, 46,610 \\ &= 32, 53,390/- \end{aligned}$$

4. Net Profit Ratio

$$\begin{aligned} &= \frac{\text{Net profit per year}}{\text{Turn Over per year}} \times 100 \% \\ &= \frac{32, 53,390/-}{1, 50, 00,000/-} \times 100 \% \\ &= 21.68 \% \end{aligned}$$

5. Rate of Return

$$\begin{aligned} &= \frac{\text{Net profit per year}}{\text{Total investment}} \times 100 \% \\ &= \frac{32, 53,390/-}{85, 53,000/-} \times 100 \% \\ &= 38.03 \% \end{aligned}$$

6. Break-even Point

Fixed Cost	Amount (Rs.)
(i) Depreciation on Building @ 5%	74,750
(ii) Depreciation on Machinery	1,85,500
(iii) Depreciation on Office Equipments	8000
(iv) Interest on Total Investment	10,26,360
(v) Insurance	1,20,000
(vi) 40% of salary and wages	8,97,600
(vii) 40% of other contingent expenses	8,88,000
Total	32, 00, 210

B.E.P.

$$= \frac{FC \times 100}{FC + P}$$

$$= \frac{32,00,210 \times 100}{(32,00,210 + 32,53,390)}$$

$$= 49.58 \%$$

List of Machinery and Equipment Supplier

1. M/s. Mona Machinery Mfg. Co. Chandralok, 111 SD Road, Secunderabad.
2. M/s. Vinod Industries, Lal Kua, Chwadi Bajar, Delhi
3. M/s. Kalpana Boilers,18, Kailash Park, Chirag Nager, L.B.Shastrri Marg, Chatkopar (W), Mumbai 36
4. M/s. Khan Engg. Works 5-5-274 Namally, Near Gandhi Bhavan, Patel Nagar, Hyderabad.
5. M/s. Shanti Turning Works 4-1-590 / 12, Troop Bazar, Hyderabad-500001.
6. M/s. Jogindra Engg Works Pvt. Ltd. 70, Rama Road , New Delhi -110 015
7. M/s. Mahalaxmi Engg. Works Craftman, Gylid, Mallepally, Hyderabad.
8. M/s. Debdoot India 67-B, Biddan St., Kolkata – 700006
9. M/s. Urjex Industries, S26, Indl. Estate, Partapur, Meerut-250102(UP).
10. M/s.Jain Packaing Products, 33,Sarai Pipal Thala, Behind Mangat Ram Dal Mill, Subzi Mandi ,Azadpur, Delhi-110033.

Raw Material Suppliers

Local Market.
