

PROJECT REPORT

Of

PASTA MAKING UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Pasta Making Unit**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



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PASTA UNIT

Introduction

Pasta is a type of food typically made from an unleavened dough of durum wheat flour (semolina) mixed with water or eggs, and formed into sheets or various shapes, then cooked by boiling or baking. Rice flour, or legumes such as beans or lentils, are sometimes used in place of wheat flour to yield a different taste and texture, or as a gluten-free alternative. Pasta is a staple food of Italian cuisine. Pastas are divided into two broad categories: dried (pasta secca) and fresh (pasta fresca). Most dried pasta is produced commercially via an extrusion process, although it can be produced at home. Fresh pasta is traditionally produced by hand, sometimes with the aid of simple machines.[3] Fresh pastas available in grocery stores are produced commercially by large-scale machines.

Pasta is becoming extremely popular in India even as Continental and Italian delicacy. Cereals like wheat, rice, maize and millets are staple food grain for majority of population around the world. These are the rich source of carbohydrates and supply of calorie and other nutrients to the consumers. Apart from value addition by processing to traditional products from these grains, development of new products offers Variety, Convenience, Quality, Cost efficiency and Scope for increasing nutritional value. In the developed countries many convenience foods are prepared by extrusion process using extruder, as it offers a large number of desired characteristics to be incorporated in the product.

Ingredients

Instant Pasta is made from Fine semolina (Suji), Wheat flour, Milk solid is the main ingredients in pasta.

Qualities of Instant Pasta

1. Easy to prepare
2. Lower In fat.
3. It has right thickness, allowing it to cook evenly
4. It remains compact, strong and elastic, even many hours it has been cooked.

Description of Pasta Machine

Although pasta products were first introduced in Italy in the 13th century, efficient manufacturing equipment and high-quality ingredients have been available only since the 20th century. Prior to the industrial revolution, most pasta products were made by hand in small shops. Today, most pasta is manufactured by continuous, high capacity extruders, which operate on the auger extrusion principle in which kneading and extrusion are performed in a single operation

Pasta Machines are used to produce pasta from the raw material. With the help of this machine the work of mixing, extruding, drying & packaging completes in a very short span.

Pasta Market Analysis

The popularity of Pasta can be attributed to its sensory appeal, Versatility, Low Cost, ease of preparation, Nutritional content and excellent storage stability as well as increased consumer interest in ethnic foods in the Western world. The demand for pasta is gaining immense popularity in India, particularly amongst the younger population, due to expansion in food-service restaurants. **“Indian Pasta Market: Industry Trends, Share, Size, Growth, Opportunity and Forecast 2018-2023”**, the pasta market in India reached a sales value of US\$ 286.6 Million in 2017, exhibiting a CAGR of 17.1% during 2010-2017. As noodle's main ingredients is all purpose flour (Maida), which is very bad for human apatite where pasta came from Semolina, which is good in nutrition and very easy to enzyme. Urbanization is the key factor of pasta business.

The primary factors catalysing the growth of the pasta market in India include rising urbanisation, changing lifestyles and surging demand for ready-to-eat products. In addition to this, the market is also influenced by an increasing women employment rate coupled with rising disposable incomes. Further, the health-conscious consumers are demanding food products with healthier ingredients, which have led to a rise in the demand for pasta made with whole-wheat. Some of the other forces that have been proactive in maintaining the market growth are longer shelf-life and ease of preparation. Looking forward, the market is registering a

CAGR of 16.2% during 2018-2023, Pasta product have good potential especially in the Middle east/south east Asia.

Automatic Pasta Manufacturing Process

Step 1: Take Semolina (Rava) of different batches like 300 KG/hour, 500 KG/hour, 100 KG/hour, which depends upon the machine capacity and pour it into the hopper.

Step 2: After that with the help of screw conveyer (of 12 feet, made of stainless steel) the rava is fed into the online mixer and then add water accordingly.

Step 3: Mix for 15-20 minutes by maintaining the temperature accordingly.

Step 4: After Mixing pour it into pasta extruder made of mild steel.

Step 5: Now, use the moulds for different types of shapes required for pasta and fed into the vibro feeder.

Step 6: After that dry the pasta with the help of static dryer & packed the pasta for selling it into the market.

Machinery & Equipment's required:

For 50 KG/Hour semi Automatic Capacity

Description	Quantity	Value
Batch Mixer	1	50,000
Macaroni & Pasta Mixer	1	4,50,000
Static Dryer	1	3,00,000
Total Cost	3	8,00,000

* Machine Value is exclusive of GST & other transportation cost.

Note: We can also prepare pasta with different capacity like: 100KG/hour, 200KG/Hour, 300KG/hour, 500KG/Hour and 1000KG/Hour.

Work sheet For Pasta Manufacturing

Parameters

Design Capacity	50 KG per hour
Working hours in day (2 shift of 8 hours each)	16 hours
Production per day	800 KG

Furniture & Fixture Requirement:

Cost of office furniture (Table, chairs, workstation): Rs. 70,000.

Raw Material Requirement

Durum Wheat Semolina (cost per KG) = Rs. 24

Labour Requirement:

2 Manpower are required for the Instant pasta unit.

Includes:

1 skilled labour

1 unskilled Labour

Land & Building required:

Land required 700 Square Feet (approx.)

Approximate rent for the same is 14000 per Month.

Pasta License & Registration

For Proprietorship

- Obtain the GST registration.
- Fire/ Pollution Registration as required.
- Choice of a Brand Name of the product and secure the name with Trademark if required.

Implementation Schedule

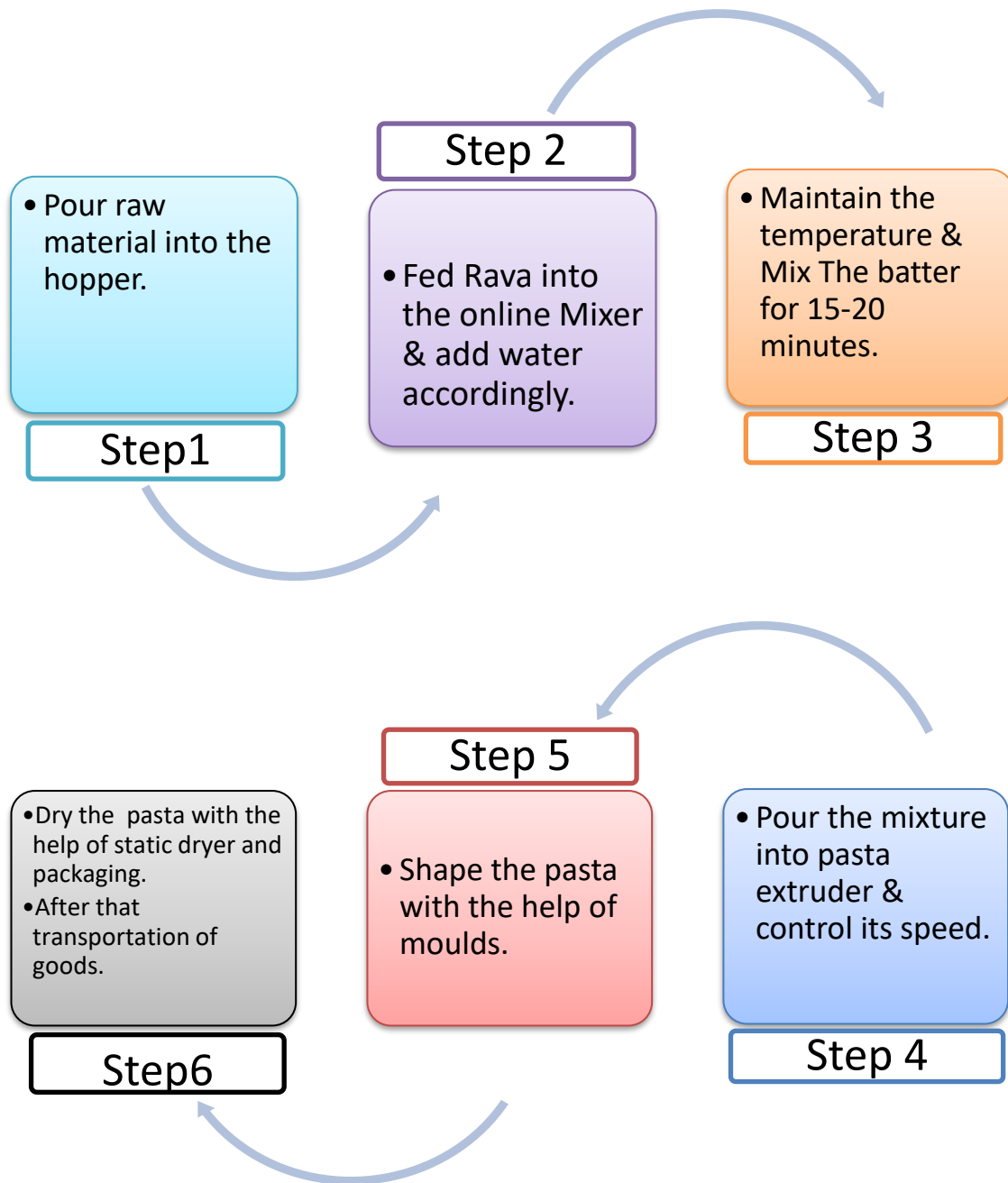
S.N.	Activity	Time Required (In Months)
1	Registration, selection of site, statutory, Licensing	1 Month
2	Order to Machine, Raw material & recruitment	1 Month
3	Training & market survey	1 Month
4	Commissioning & commercial production	1 Month
5	Arrangement of Finance	1 month
	Total time Required (some activities shall run simultaneously)	2-3 months (approx.)

Conclusion:

After completion of manufacturing process, product is ready to sell in the market. Pasta is very easy to cook & can be prepared in a very short time. This machine can be installed with small investment & one can earn a good Margin profit if having knowledge about doing this business. Pasta product has a very good market potential.

Technical Process Flow Chart

Automatic Pasta Manufacturing Process



FINANCIAL ASSISTANCE REQUIRED

Term Loan of Rs.7.46 Lacs and Working Capital limit of Rs. 7.50Lacs

<u>COST OF PROJECT</u>	PARTICULARS	AMOUNT	AMOUNT	AMOUNT
	Building Civil Work		25.00%	75.00%
	Plant & Machinery	9.44	2.36	7.08
	Furniture & Fixtures and Other Assets	0.70	0.18	0.53
	Working capital	10.00	2.50	7.50
	Total	20.14	5.04	15.11

<u>MEANS OF FINANCE</u>	PARTICULARS	AMOUNT
	Own Contribution	5.04
	Bank Loan	7.61
	Working capital Limit	7.50
	Total	20.14

COMPUTATION OF PRODUCTION OF PASTA**Items to be Manufactured**

Raw Pasta

Machine Capacity	50	KG per hour
Per day capacity	800	KG
Per annum Capacity	240,000	KG
Wastage	3.00%	Of input
Total Raw material Requirement		
Raw Material required per day	825	KG
Raw Material(Suji) Per Annum	247423	KG

Production of Pasta

Production	Capacity	KG
1st year	65%	156,000
2nd year	70%	168,000
3rd year	75%	180,000
4th year	80%	192,000
5th year	85%	204,000
6th year	90%	216,000

<u>CALCULATION OF CONSUMPTION OF RAW MATERIAL</u>		
Item Name	At Capacity	Quantity of Raw Material
		KG
Raw Material	100%	247,423

Raw Material Consumed	Capacity	Rate per Kg	Amount
	Utilisation		(Rs. in lacs)
1st year	65%	24.00	38.60
2nd year	70%	24.72	42.81
3rd year	75%	25.46	47.25
4th year	80%	26.23	51.91
5th year	85%	27.01	56.81
6th year	90%	27.82	61.96

<u>COMPUTATION OF SALE</u>						
Particulars	1st year	2nd year	3rd year	4th year	5th year	6th year
Op Stock	-	13,000	14,000	15,000	16,000	17,000
Production	156,000	168,000	180,000	192,000	204,000	216,000
Less : Closing Stock	13,000	14,000	15,000	16,000	17,000	18,000
Net Sale	143,000	167,000	179,000	191,000	203,000	215,000
sale price per KG	33.00	34.00	35.00	36.00	37.00	38.00
Sales Value (in Lacs)	47.19	56.78	62.65	68.76	75.11	81.70

BREAK UP OF LABOUR CHARGES

Particulars	Wages Per Month	No of Employees	Total Salary
Skilled labour	15000	1	15000
Unskilled labour	8000	1	8000
Total Salary Per Month			23000
Total Annual Labour Charges	(in Lacs)		2.76

Utility Charges at 100% capacity (per month)

Particulars	value	Description
Power connection required	5	KWH
consumption per day	80	units
Consumption per month	2000	units
Rate per Unit	7	Rs.
power Bill per month	14000	Rs.

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	6th year
Capacity Utilisation %	65%	70%	75%	80%	85%	90%
<u>SALES</u>						
Gross Sale						
Pasta	47.19	56.78	62.65	68.76	75.11	81.70
Total	47.19	56.78	62.65	68.76	75.11	81.70
<u>COST OF SALES</u>						
Raw Material Consumed	38.60	42.81	47.25	51.91	56.81	61.96
Electricity Expenses	1.68	1.76	1.94	2.13	2.35	2.58
Repair & Maintenance	0.47	0.57	0.63	0.69	0.75	0.82
Labour & Wages	2.76	3.17	3.49	3.84	4.22	4.65
Consumables	1.18	1.14	1.25	1.38	1.50	1.63
Cost of Production	44.69	49.46	54.56	59.95	65.63	71.64
Add: Opening Stock /WIP	-	3.72	4.12	4.55	5.00	5.47
Less: Closing Stock /WIP	3.72	4.12	4.55	5.00	5.47	5.97
Cost of Sales	40.97	49.06	54.13	59.50	65.16	71.14
GROSS PROFIT	6.22	7.72	8.52	9.26	9.95	10.56
Depreciation	1.49	1.27	1.08	0.92	0.79	0.67
Interest on Term Loan	0.82	0.75	0.57	0.40	0.23	0.06
Interest on working Capital	0.83	0.83	0.83	0.83	0.83	0.83
rent	1.68	1.93	2.22	2.56	2.94	3.38
Selling & Adm Expenses Exp.	1.06	1.28	1.41	1.55	1.69	1.84
TOTAL	4.39	4.78	5.03	5.33	5.68	6.10
NET PROFIT	1.84	2.94	3.49	3.93	4.27	4.46
Taxation	-	-	-	-	-	-
PROFIT (After Tax)	1.84	2.94	3.49	3.93	4.27	4.46

PROJECTED BALANCE SHEET

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	6th year
<u>Liabilities</u>						
Capital						
opening balance		6.47	8.91	10.65	12.58	14.35
<i>Add:- Own Capital</i>	5.04					
Add:- Retained Profit	1.84	2.94	3.49	3.93	4.27	4.46
Less:- Drawings	0.40	0.50	1.75	2.00	2.50	2.75
Closing Blance	6.47	8.91	10.65	12.58	14.35	16.06
Term Loan	6.89	5.45	4.01	2.57	1.12	-
Working Capital Limit	7.50	7.50	7.50	7.50	7.50	7.50
Sundry Creditors	0.64	0.71	0.79	0.87	0.95	1.03
Provisions & Other Liab	0.50	0.75	0.90	1.08	1.35	1.62
TOTAL :	22.00	23.32	23.84	24.59	25.27	26.21
<u>Assets</u>						
Fixed Assets (Gross)	10.14	10.14	10.14	10.14	10.14	10.14
Gross Dep.	1.49	2.75	3.83	4.75	5.54	6.21
Net Fixed Assets	8.65	7.39	6.31	5.39	4.60	3.93
Current Assets						
Sundry Debtors	5.51	6.25	6.89	7.56	8.26	8.99
Stock in Hand	5.91	8.12	8.96	9.84	10.77	11.75
Cash and Bank	1.93	1.57	1.69	1.80	1.64	1.55
TOTAL :	22.00	23.32	23.84	24.59	25.27	26.22

PROJECTED CASH FLOW STATEMENT

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	6th year
<u>SOURCES OF FUND</u>						
Own Margin	5.04					
Net Profit	1.84	2.94	3.49	3.93	4.27	4.46
Depreciation & Exp. W/off	1.49	1.27	1.08	0.92	0.79	0.67
Increase in Cash Credit	7.50	-	-	-	-	-
Increase In Term Loan	7.61	-	-	-	-	-
Increase in Creditors	0.64	0.07	0.07	0.08	0.08	0.09
Increase in Provisions & Oth lib	0.50	0.25	0.15	0.18	0.27	0.27
TOTAL :	24.61	4.53	4.79	5.11	5.40	5.49
<u>APPLICATION OF FUND</u>						
Increase in Fixed Assets	10.14	-	-	-	-	-
Increase in Stock	5.91	2.21	0.84	0.88	0.93	0.98
Increase in Debtors	5.51	0.74	0.65	0.67	0.70	0.72
Repayment of Term Loan	0.72	1.44	1.44	1.44	1.44	1.12
Drawings	0.40	0.50	1.75	2.00	2.50	2.75
Taxation	-	-	-	-	-	-
TOTAL :	22.68	4.89	4.67	5.00	5.57	5.58
Opening Cash & Bank Balance	-	1.93	1.57	1.69	1.80	1.64
Add : Surplus	1.93 -	0.36	0.11	0.11 -	0.17 -	0.09
Closing Cash & Bank Balance	1.93	1.57	1.69	1.80	1.64	1.55

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL						
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	6th year
Finished Goods						
	3.72	4.12	4.55	5.00	5.47	5.97
Raw Material						
	2.19	4.00	4.41	4.84	5.30	5.78
Closing Stock	5.91	8.12	8.96	9.84	10.77	11.75

COMPUTATION OF WORKING CAPITAL REQUIREMENT						
TRADITIONAL METHOD						
Particulars	Amount	Own Margin		Bank Finance		
Finished Goods & Raw Material Stock	5.91					
Less : Creditors	0.64					
Paid stock	5.27	30%	1.58	70%	3.69	
Sundry Debtors	5.51	30%	1.65	70%	3.85	
	10.77		3.23		7.54	
WORKING CAPITAL LIMIT DEMAND (from Bank)						
				7.50		

2nd Method		
PARTICULARS	2020-21	2021-22
Total Current Assets	13.35	15.94
Other Current Liabilities	1.14	1.46
Working Capital Gap	12.21	14.47
Min Working Capital		
25% of WCG	3.05	3.62
Actual NWC	4.71	6.97
Item III - IV	9.15	10.85
Item III - V	7.50	7.50
MPBF (Lower of VI & VII)	7.50	7.50

3rd Method		
PARTICULARS	2020-21	2021-22
Total Current Assets	13.35	15.94
Other Current Liabilities	1.14	1.46
Working Capital Gap	12.21	14.47
Min Working Capital		
25% of Current Assets	3.34	3.98
Actual NWC	4.71	6.97
Item III - IV	8.87	10.49
Item III - V	7.50	7.50
MPBF (Lower of VI & VII)	7.50	7.50

COMPUTATION OF DEPRECIATION

Description	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	9.44	0.70	10.14
Total	9.44	0.70	10.14
Less : Depreciation	1.42	0.07	1.49
WDV at end of Year	8.02	0.63	8.65
Additions During The Year	-	-	-
Total	8.02	0.63	8.65
Less : Depreciation	1.20	0.06	1.27
WDV at end of Year	6.82	0.57	7.39
Additions During The Year	-	-	-
Total	6.82	0.57	7.39
Less : Depreciation	1.02	0.06	1.08
WDV at end of Year	5.80	0.51	6.31
Additions During The Year	-	-	-
Total	5.80	0.51	6.31
Less : Depreciation	0.87	0.05	0.92
WDV at end of Year	4.93	0.46	5.39
Additions During The Year	-	-	-
Total	4.93	0.46	5.39
Less : Depreciation	0.74	0.05	0.79
WDV at end of Year	4.19	0.41	4.60
Additions During The Year	-	-	-
Total	4.19	0.41	4.60
Less : Depreciation	0.63	0.04	0.67
WDV at end of Year	3.56	0.37	3.93

CALCULATION OF D.S.C.R

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	6th year
CASH ACCRUALS	3.33	4.21	4.56	4.85	5.05	5.13
Interest on Term Loan	0.82	0.75	0.57	0.40	0.23	0.06
Total	4.14	4.95	5.14	5.25	5.28	5.19
<u>REPAYMENT</u>						
Instalment of Term Loan	0.72	1.44	1.44	1.44	1.44	1.12
Interest on Term Loan	0.82	0.75	0.57	0.40	0.23	0.06
Total	1.54	2.19	2.01	1.84	1.67	1.18
DEBT SERVICE COVERAGE RATIO	2.69	2.27	2.55	2.85	3.16	4.40
AVERAGE D.S.C.R.	2.99					

REPAYMENT SCHEDULE OF TERM LOAN

Interest 12.00%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	7.61	7.61	-	-	7.61
	2nd month	7.61	-	7.61	0.08	-	7.61
	3rd month	7.61	-	7.61	0.08	-	7.61
	4th month	7.61	-	7.61	0.08	-	7.61
	5th month	7.61	-	7.61	0.08	-	7.61
	6th month	7.61	-	7.61	0.08	-	7.61
	7th month	7.61	-	7.61	0.08	0.12	7.49
	8th month	7.49	-	7.49	0.07	0.12	7.37
	9th month	7.37	-	7.37	0.07	0.12	7.25
	10th month	7.25	-	7.25	0.07	0.12	7.13
	11th month	7.13	-	7.13	0.07	0.12	7.01
	12th month	7.01	-	7.01	0.07	0.12	6.89
					0.82	0.72	
2nd	Opening Balance						
	1st month	6.89	-	6.89	0.07	0.12	6.77
	2nd month	6.77	-	6.77	0.07	0.12	6.65
	3rd month	6.65	-	6.65	0.07	0.12	6.53
	4th month	6.53	-	6.53	0.07	0.12	6.41
	5th month	6.41	-	6.41	0.06	0.12	6.29
	6th month	6.29	-	6.29	0.06	0.12	6.17
	7th month	6.17	-	6.17	0.06	0.12	6.05
	8th month	6.05	-	6.05	0.06	0.12	5.93
	9th month	5.93	-	5.93	0.06	0.12	5.81
	10th month	5.81	-	5.81	0.06	0.12	5.69
	11th month	5.69	-	5.69	0.06	0.12	5.57
	12th month	5.57	-	5.57	0.06	0.12	5.45
					0.75	1.44	
3rd	Opening Balance						
	1st month	5.45	-	5.45	0.05	0.12	5.33
	2nd month	5.33	-	5.33	0.05	0.12	5.21
	3rd month	5.21	-	5.21	0.05	0.12	5.09
	4th month	5.09	-	5.09	0.05	0.12	4.97
	5th month	4.97	-	4.97	0.05	0.12	4.85
	6th month	4.85	-	4.85	0.05	0.12	4.73
	7th month	4.73	-	4.73	0.05	0.12	4.61
	8th month	4.61	-	4.61	0.05	0.12	4.49
	9th month	4.49	-	4.49	0.04	0.12	4.37
	10th month	4.37	-	4.37	0.04	0.12	4.25
	11th month	4.25	-	4.25	0.04	0.12	4.13
	12th month	4.13	-	4.13	0.04	0.12	4.01
					0.57	1.44	
4th	Opening						

	Balance						
	1st month	4.01	-	4.01	0.04	0.12	3.89
	2nd month	3.89	-	3.89	0.04	0.12	3.77
	3rd month	3.77	-	3.77	0.04	0.12	3.65
	4th month	3.65	-	3.65	0.04	0.12	3.53
	5th month	3.53	-	3.53	0.04	0.12	3.41
	6th month	3.41	-	3.41	0.03	0.12	3.29
	7th month	3.29	-	3.29	0.03	0.12	3.17
	8th month	3.17	-	3.17	0.03	0.12	3.05
	9th month	3.05	-	3.05	0.03	0.12	2.93
	10th month	2.93	-	2.93	0.03	0.12	2.81
	11th month	2.81	-	2.81	0.03	0.12	2.69
	12th month	2.69	-	2.69	0.03	0.12	2.57
					0.40	1.44	
5th	Opening Balance						
	1st month	2.57	-	2.57	0.03	0.12	2.45
	2nd month	2.45	-	2.45	0.02	0.12	2.33
	3rd month	2.33	-	2.33	0.02	0.12	2.21
	4th month	2.21	-	2.21	0.02	0.12	2.09
	5th month	2.09	-	2.09	0.02	0.12	1.97
	6th month	1.97	-	1.97	0.02	0.12	1.85
	7th month	1.85	-	1.85	0.02	0.12	1.73
	8th month	1.73	-	1.73	0.02	0.12	1.61
	9th month	1.61	-	1.61	0.02	0.12	1.48
	10th month	1.48	-	1.48	0.01	0.12	1.36
	11th month	1.36	-	1.36	0.01	0.12	1.24
	12th month	1.24	-	1.24	0.01	0.12	1.12
					0.23	1.44	
6th	Opening Balance						
	1st month	1.12	-	1.12	0.01	0.12	1.00
	2nd month	1.00	-	1.00	0.01	0.12	0.88
	3rd month	0.88	-	0.88	0.01	0.12	0.76
	4th month	0.76	-	0.76	0.01	0.12	0.64
	5th month	0.64	-	0.64	0.01	0.12	0.52
	6th month	0.52	-	0.52	0.01	0.12	0.40
	7th month	0.40	-	0.40	0.00	0.12	0.28
	8th month	0.28	-	0.28	0.00	0.12	0.16
	9th Month	0.16	-	0.16	0.00	0.12	0.04
	10th month	0.04	-	0.04	0.00	0.04	0.00
					0.06	1.12	
DOOR TO DOOR	70	MONTHS					
MORATORIUM PERIOD	6	MONTHS					
REPAYMENT PERIOD	64	MONTHS					

Machinery Supplier:

S.K. INDUSTRIES

Address:

A - 66, Sector - 8. Noida, 201301, G B Nagar,
UP. India. Telephone: 09350378368,
09457472321, Office: 08700445587

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