

PROJECT REPORT

Of

ELECTRIC TOASTER

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Electric Toaster**.

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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PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxx
Pin: xxxxxx State: xxxxxxxxx
Mobile : xxxxxx
- 5 Product and By Product : **ELECTRIC TOASTER**
- 6 Name of the project / business activity proposed : **ELECTRIC TOASTER MAKING UNIT**
- 7 Cost of Project : Rs.32.33 Lakhs
- 8 Means of Finance
Term Loan Rs.21.6 Lakhs
Own Capital Rs.3.23 Lakhs
Working capital Rs.7.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.03
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 28%
- 13 Employment : 8 Persons
- 14 Power Requirement : 40.00 HP
- 15 Major Raw materials : Aluminium Sheets, PVC Pellets, Mica Heating Element, Thermostat, Toaster Circuit Board, Electric Cord, Bakelite Handle
- 16 Estimated Annual Sales Turnover (Max Capacity) : 157.96 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount	
	Own	Rented
Land		22.25
Plant & Machinery		1.75
Furniture & Fixtures		8.33
Working Capital		32.33
Total		32.33

MEANS OF FINANCE

Particulars	Amount
Own Contribution	3.23
Working Capital(Finance)	7.50
Term Loan	21.60
Total	32.33

ELECTRIC TOASTER

Introduction: Electric toaster as the name suggest is essentially a portable domestic appliance intended for toasting bread and is operated electrically. The bread is inserted in the toaster, heated at desired temperature till brown in colour and a reasonable texture. That is the duration of the toasting period is predetermined by setting of built in control device. It is useful to domestic household as well as restaurants and hotels etc. The advantages are, it saves labour and time, easy maintenance, keeps kitchen clean and tidy. Electrical energy flows into the toaster from a wire plugged into the domestic electricity supply. The electric current flows through a series of thin filaments connected together but spaced widely enough apart to toast the whole bread surface. The filaments are so thin that they glow red hot when the electricity flows through them. Like a series of small radiators, the filaments beam heat toward the bread in the toaster. The steady supply of heat rapidly cooks the bread. There are filaments on each wall of the toaster so the two sides of the bread cook at the same time.



Uses & Market Potential: A toaster, or a toast maker, is an electric small appliance designed to brown sliced bread by exposing it to radiant heat, thus converting it into toast. The global toaster market size is expected to reach USD 4.5 billion by 2025, according to a new report by Grand View Research, Inc., registering a 4.8% CAGR during the forecast period. The market is mainly

driven by increasing demand from quick service restaurants. This is one of the best labor-saving appliances used across homes, hotels, cafes, and restaurants. Technological advancements in the appliance over years have significantly benefited market growth. Manufacturers are constantly looking to innovate new and versatile appliances that can fit into different spaces, have various capabilities and sizes, and offer varied heating specifications that can range from simplistic to extreme, depending on how one prefers their bread.

Raw Material: Major raw materials are as follows:

1. Aluminium Sheets
2. PVC Pellets
3. Mica Heating Element
4. Thermostat
5. Slice Pop-up Toaster Circuit Board
6. Electric Cord
7. Bakelite Handle

Machinery requirement: Major machinery and equipments are as follows:

Description	Quantity	Rate	Value
Shearing Machine	1	334500	334500
Punch Press	1	162750	162750
Bending Machine	1	342500	342500
Hand Drilling machine	1	2100	2100
Injection Molding machine(200gm)	1	1250000	1250000
Welding Machine	1	12500	12500
Stud Welding Machine	1	70000	70000
Other equipments & hand tools	Ls		50000
Total Amount			2224350
Net Amount(Round off)			2225000

Manufacturing Process: At first, the raw material is procured from the authorized local vendor and stored in the inventory. In the first step, the design for the toaster assembly is prepared and approved by the design department. The stainless steel sheets are procured from the inventory and dipped in acid tank to remove any dust, rust and harmful elements for pickling. After this, the cleaned sheets are fed into shearing machine that cuts the sheet along its length as per the product dimensions. The sheets are cut with allowable tolerances for folding and bending operations.

After this, the aluminium sheets are fed into punching machine to form the desired holes and cavity as required in design. The punching machine has an assembly of punch and die of desired shape to cut the sheets as per requirement. In the next step, the sheets are fed into the bending machine to roll and bend the sheet with desired profile. The bending operation gives the sheets folded box structure that acts as heating space for the tandoor. After bending and folding of sheets, they are joined at the corners using arc welding machine. The arc of welding raises the temperature of the sheet to melt down which forms welded joint.

In the next step, excess materials, uneven weld surfaces are cleaned using portable hand grinder. After this, the mica heating element, circuit board are precisely mounted and assembled in the toaster using wires. After this, the plastic out casing body of electric toaster are manufactured in injection moulding machine. The PVC pellets are fed into the hopper of the machine. The profile dies are mounted precisely into the machine. The plastic cage is over-moulded in steel case.

After this, the barrel heater are started and brought up to the desired temperature. The plastics gets melt down and the screw presses the molten plastic into die. After cooling with suitable cycle time the solidified pieces are gets separated out using ejector pins. In the next step, the electric cord and thermostat are assembled into the toaster. Bakelite handles are mounted at the surfaces of sheets using riveted screws using stud welding machine.

In the next step, quality testing of the assembly unit is performed for satisfactory performance. After this, the Electric irons are packed and dispatched as per the required quantity.

Area: The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff

facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1500 to 2000Sqft.

Power Requirement: The power consumption required to run all the machinery could be approximated as 40 Hp

Manpower Requirement: There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 8 including 1 Supervisor, 1 Plant operator, 1 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

Approvals & Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.
- NOC from State Pollution Control Board

Implementation Schedule:

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

FINANCIALS

PROJECTED BALANCE SHEET					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	5.97	9.65	13.73	18.17
Add: Additions	3.23	-	-	-	-
Add: Net Profit	4.24	5.27	7.09	9.44	11.70
Less: Drawings	1.50	1.60	3.00	5.00	7.00
Closing Balance	5.97	9.65	13.73	18.17	22.87
CC Limit	7.50	7.50	7.50	7.50	7.50
Term Loan	19.20	14.40	9.60	4.80	-
Sundry Creditors	1.46	1.73	1.92	2.11	2.30
TOTAL :	34.14	33.27	32.75	32.58	32.67
APPLICATION OF FUND					
Fixed Assets (Gross)	24.00	24.00	24.00	24.00	24.00
Gross Dep.	3.51	6.51	9.06	11.24	13.09
Net Fixed Assets	20.49	17.49	14.94	12.76	10.91
Current Assets					
Sundry Debtors	4.41	5.38	6.16	6.97	7.90
Stock in Hand	5.72	6.76	7.62	8.49	9.43
Cash and Bank	3.52	3.64	4.04	4.35	4.44
TOTAL :	34.14	33.27	32.75	32.58	32.67

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PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	88.16	107.60	123.19	139.50	157.96
Total (A)	88.16	107.60	123.19	139.50	157.96
B) COST OF SALES					
Raw Material Consumed	62.72	74.09	82.32	90.55	98.78
Electricity Expenses	2.36	2.66	2.95	3.25	3.55
Repair & Maintenance	1.76	3.23	4.93	5.58	7.11
Labour & Wages	6.55	7.86	9.43	11.32	13.59
Depreciation	3.51	2.99	2.55	2.18	1.86
Cost of Production	76.91	90.83	102.19	112.88	124.88
Add: Opening Stock /WIP	-	2.58	3.06	3.50	3.96
Less: Closing Stock /WIP	2.58	3.06	3.50	3.96	4.49
Cost of Sales (B)	74.33	90.36	101.75	112.42	124.36
C) GROSS PROFIT (A-B)	13.83	17.24	21.44	27.08	33.60
	15.69%	16.03%	17.40%	19.41%	21.27%
D) Bank Interest (Term Loan)	2.34	1.91	1.39	0.86	0.33
ii) Interest On Working Capital	0.83	0.83	0.83	0.83	0.83
E) Salary to Staff	3.78	4.54	5.44	6.53	7.84
F) Selling & Adm Expenses Exp.	2.64	3.77	4.93	6.28	7.90
TOTAL (D+E)	9.59	11.04	12.58	14.49	16.89
H) NET PROFIT	4.24	6.20	8.86	12.59	16.71
	4.8%	5.8%	7.2%	9.0%	10.6%
I) Taxation	-	0.93	1.77	3.15	5.01
J) PROFIT (After Tax)	4.24	5.27	7.09	9.44	11.70

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	3.23	-			
Reserve & Surplus	4.24	6.20	8.86	12.59	16.71
Depriciation & Exp. W/ off	3.51	2.99	2.55	2.18	1.86
Increase In Cash Credit	7.50				
Increase In Term Loan	21.60	-	-	-	-
Increase in Creditors	1.46	0.27	0.19	0.19	0.19
TOTAL :	41.55	9.46	11.60	14.95	18.76
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	24.00	-	-	-	-
Increase in Stock	5.72	1.04	0.85	0.87	0.94
Increase in Debtors	4.41	0.97	0.78	0.82	0.92
Repayment of Term Loan	2.40	4.80	4.80	4.80	4.80
Taxation	-	0.93	1.77	3.15	5.01
Drawings	1.50	1.60	3.00	5.00	7.00
TOTAL :	38.03	9.35	11.20	14.64	18.67
Opening Cash & Bank Balance	-	3.52	3.64	4.04	4.35
Add : Surplus	3.52	0.12	0.40	0.32	0.09
Closing Cash & Bank Balance	3.52	3.64	4.04	4.35	4.44

COMPUTATION OF MAKING OF ELECTRIC TOASTER			
Item to be Manufactured Electric Toaster			
Manufacturing Capacity per day		80	Pcs
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		24,000	Pcs
Total Production per Annum		24,000	Pcs
Year		Capacity	ELECTRIC TOASTER
		Utilisation	
I		40%	9,600.00
II		45%	10,800.00
III		50%	12,000.00
IV		55%	13,200.00
V		60%	14,400.00

COMPUTATION OF RAW MATERIAL					
Item Name	Quantity of Raw Material	Unit	Unit Rate	Total CostPer Annum (100%)	
Aluminium Sheets	36,000.00	Kg	185.00	66,60,000.00	
PVC Pellets	6,000.00		45.00	2,70,000.00	
Electric Cord	25,000.00	Pcs	25.00	6,25,000.00	
Mica Heating Element	25,000.00	Pcs	50.00	12,50,000.00	
Thermostat	25,000.00	Pcs	75.00	18,75,000.00	
Toaster Circuit Board	25,000.00	Pcs	150.00	37,50,000.00	
Bakelite Handles	25,000.00	Pcs	50.00	12,50,000.00	
Total				1,56,80,000.00	
Total Raw material in Rs lacs					156.80

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)		
I	40%	62.72		
II	45%	74.09	5% Increase in Cost	
III	50%	82.32	5% Increase in Cost	
IV	55%	90.55	5% Increase in Cost	
V	60%	98.78	5% Increase in Cost	

COMPUTATION OF SALE					
Particulars	I	II	III	IV	V
Op Stock	-	320.00	360.00	400.00	440.00
Production	9,600.00	10,800.00	12,000.00	13,200.00	14,400.00
	9,600.00	11,120.00	12,360.00	13,600.00	14,840.00
Less : Closing Stock(10 Days)	320.00	360.00	400.00	440.00	480.00
Net Sale	9,280.00	10,760.00	11,960.00	13,160.00	14,360.00
Sale Price per Pc	950.00	1,000.00	1,030.00	1,060.00	1,100.00
Sale (in Lacs)	88.16	107.60	123.19	139.50	157.96

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	2.58	3.06	3.50	3.96	4.49
Raw Material					
(15 Days requirement)	3.14	3.70	4.12	4.53	4.94
Closing Stock	5.72	6.76	7.62	8.49	9.43

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	5.72		
Less:			
Sundry Creditors	1.46		
Paid Stock	4.26	0.43	3.83
Sundry Debtors	4.41	0.44	3.97
Working Capital Requirement			7.80
Margin			0.87
MPBF			7.80
Working Capital Demand			7.50

BREAK UP OF LABOUR				
Particulars	Wages Per Month	No of Employees	Total Salary	
Supervisor	16,000.00	1	16,000.00	
Plant Operator	12,000.00	1	12,000.00	
Unskilled Worker	10,000.00	1	10,000.00	
Helper	8,000.00	1	8,000.00	
Security Guard	6,000.00	1	6,000.00	
				52,000.00
Add: 5% Fringe Benefit				2,600.00
Total Labour Cost Per Month				54,600.00
Total Labour Cost for the year (In Rs. Lakhs)		5		6.55

BREAK UP OF SALARY				
Particulars	Salary Per Month	No of Employees	Total Salary	
Manager	12,000.00	1	12,000.00	
Accountant cum store keeper	10,000.00	1	10,000.00	
Sales	8,000.00	1	8,000.00	
Total Salary Per Month				30,000.00
Add: 5% Fringe Benefit				1,500.00
Total Salary for the month				31,500.00
Total Salary for the year (In Rs. Lakhs)		3		3.78

COMPUTATION OF DEPRECIATION				
Description	Land	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		15.00%	10.00%	
Opening Balance	Leased	-	-	-
Addition	-	22.25	1.75	24.00
	-	22.25	1.75	24.00
		-	-	
TOTAL		22.25	1.75	24.00
Less : Depreciation	-	3.34	0.18	3.51
WDV at end of Ist year	-	18.91	1.58	20.49
Additions During The Year	-	-	-	-
	-	18.91	1.58	20.49
Less : Depreciation	-	2.84	0.16	2.99
WDV at end of IIInd Year	-	16.08	1.42	17.49
Additions During The Year	-	-	-	-
	-	16.08	1.42	17.49
Less : Depreciation	-	2.41	0.14	2.55
WDV at end of IIIrd year	-	13.66	1.28	14.94
Additions During The Year	-	-	-	-
	-	13.66	1.28	14.94
Less : Depreciation	-	2.05	0.13	2.18
WDV at end of IV year	-	11.61	1.15	12.76
Additions During The Year	-	-	-	-
	-	11.61	1.15	12.76
Less : Depreciation	-	1.74	0.11	1.86
WDV at end of Vth year	-	9.87	1.03	10.91

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	21.60	21.60	0.59	-	21.60
	IInd Quarter	21.60	-	21.60	0.59	-	21.60
	IIIRD Quarter	21.60	-	21.60	0.59	1.20	20.40
	Ivth Quarter	20.40	-	20.40	0.56	1.20	19.20
					2.34	2.40	
II	Opening Balance						
	Ist Quarter	19.20	-	19.20	0.53	1.20	18.00
	IInd Quarter	18.00	-	18.00	0.50	1.20	16.80
	IIIRD Quarter	16.80	-	16.80	0.46	1.20	15.60
	Ivth Quarter	15.60		15.60	0.43	1.20	14.40
					1.91	4.80	
III	Opening Balance						
	Ist Quarter	14.40	-	14.40	0.40	1.20	13.20
	IInd Quarter	13.20	-	13.20	0.36	1.20	12.00
	IIIRD Quarter	12.00	-	12.00	0.33	1.20	10.80
	Ivth Quarter	10.80		10.80	0.30	1.20	9.60
					1.39	4.80	
IV	Opening Balance						
	Ist Quarter	9.60	-	9.60	0.26	1.20	8.40
	IInd Quarter	8.40	-	8.40	0.23	1.20	7.20
	IIIRD Quarter	7.20	-	7.20	0.20	1.20	6.00
	Ivth Quarter	6.00		6.00	0.17	1.20	4.80
					0.86	4.80	
V	Opening Balance						
	Ist Quarter	4.80	-	4.80	0.13	1.20	3.60
	IInd Quarter	3.60	-	3.60	0.10	1.20	2.40
	IIIRD Quarter	2.40	-	2.40	0.07	1.20	1.20
	Ivth Quarter	1.20		1.20	0.03	1.20	0.00
					0.33	4.80	

Door to Door Period 60 Months
Moratorium Period 6 Months
Repayment Period 54 Months

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	7.75	8.27	9.64	11.62	13.55
Interest on Term Loan	2.34	1.91	1.39	0.86	0.33
Total	10.10	10.18	11.03	12.47	13.88
<u>REPAYMENT</u>					
Repayment of Term Loan	2.40	4.80	4.80	4.80	4.80
Interest on Term Loan	2.34	1.91	1.39	0.86	0.33
Total	4.74	6.71	6.19	5.66	5.13
DEBT SERVICE COVERAGE RATIO	2.13	1.52	1.78	2.20	2.71
AVERAGE D.S.C.R.			2.03		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	40	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				5,37,120.00
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			0.54	
Total cost of Power & Fuel at 100%				5.91
Year		Capacity		Amount
				(in Lacs)
I		40%		2.36
II		45%		2.66
III		50%		2.95
IV		55%		3.25
V		60%		3.55

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