PROJECT REPORT

Of

CLC Blocks and Bricks

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **CLC Blocks and Bricks**.

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.]

SAMADHAN
Nurturing Dreams - Innovative Solutions

Lucknow Office: Sidhivinayak Building , 27/1/B, Gokhlley Marg, Lucknow-226001

Delhi Office : Multi Disciplinary Training Centre, Gandhi Darshan Rajghat, New Delhi 110002

Email : info@udyami.org.in
Contact : +91 7526000333, 444, 555

PROJECT AT A GLANCE

1	Name of the Entreprenuer		xxxxxxxxxx	
2	Constitution (legal Status)	:	xxxxxxxxxx	
3	Father / Spouse Name		xxxxxxxxxxxx	
4	Unit Address	:	xxxxxxxxxxxxxxxxxxxxxxx	
			District : xxxxxxx	
			Pin: xxxxxxx	State: xxxxxxxxxx
			Mobile xxxxxxx	
5	Product and By Product	:	**CLC Blocks and Bricks**	
6	Name of the project / business activity proposed :		**CLC Blocks Manufacturing Unit**	
7	Cost of Project	:	Rs.21.11 Lakhs	
8	Means of Finance			
	Term Loan		Rs.15 Lakhs	
	Own Capital		Rs.2.11 Lakhs	
	Working Capital		Rs.4 Lakhs	
9	Debt Service Coverage Ratio	:	2.31	
10	Pay Back Period	:	5	Years
11	Project Implementation Period	:	5-6	Months
12	Break Even Point	:	40%	
13	Employment	:	13	Persons
14	Power Requirement	:	40	HP
15	Major Raw materials	:	Cement, Water, Fly Ash, Foam etc	
16	Estimated Annual Sales Turnover (Max Utilized Capacity)	:	91.64	Lakhs
17	Detailed Cost of Project & Means of Finance			

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 2000 Sq ft	Own/Rented
Plant & Machinery	15.50
Furniture & Fixtures	1.17
Working Capital	4.44
Total	**21.11**

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.11
Term Loan	15.00
Working Capital	4.00
Total	**21.11**

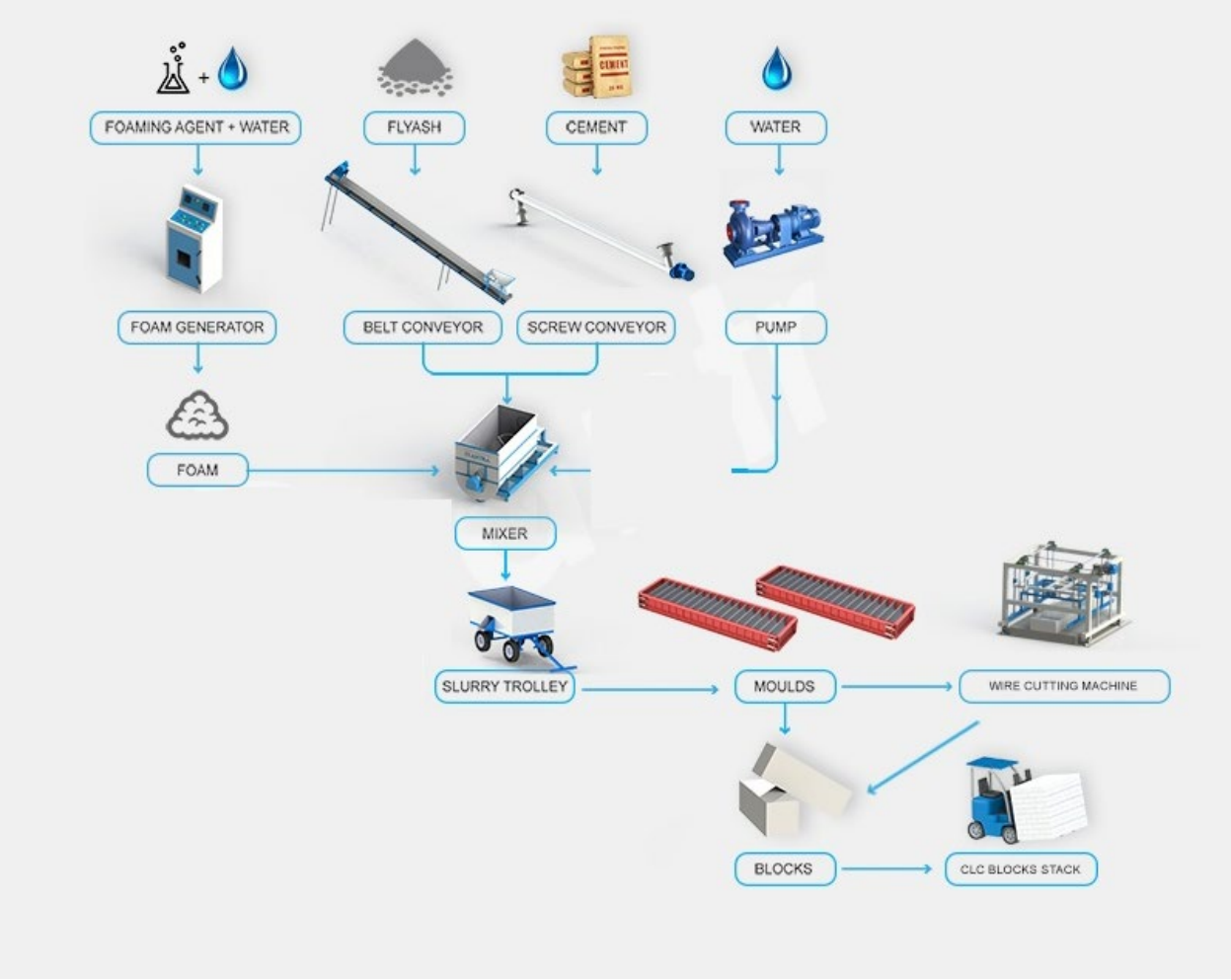
Cellular Lightweight Concrete Bricks (CLC)

INTRODUCTION

Cellular Lightweight Concrete Bricks (CLC) is also called as Foam Concrete. It is a version of lightweight concrete which is produced in the same way as normal Concrete under ambient conditions.

CLC Blocks are Cement Bonded Material made by blending Slurry of Cement. Stable, pre-formed foam manufactured on site is injected into this slurry to form foam concrete. CLC blocks are made from cellular lightweight concrete or foam concrete. The blocks are easy to install, nail, drill and cut for pipes and conduits. The raw materials to manufacture the CLC blocks are fly ash/sand, cement and protein based foaming agent. These blocks are fire and pest resistant, Low Maintenance, Long- Life, Seismic Resistant blocks used for various applications across the world from last 6 decades.

CLC BLOCKS PRODUCTION FLOW CHART



ADVANTAGES OF CLC BRICKS

- Low thermal conductivity.
- Thermal Performances 5 times better than clay bricks & 10 times better than RCC
- Interiors remain cool in summer and warm in cold wintry days.
- Savings in recurring energy costs in air-conditioning.
- Ideal material for applications in cold storage rooms.
- It is possible to achieve even higher values depending upon the thickness and the plaster.
- Good Sound Insulation - Up to 37-42db sound reduction based on thickness.
- Savings in recurring energy costs in air-conditioning.
- Can fulfill required STC (Sound Transmission Class) rating.

Reduction of Dead Load

- 1/3rd the density of clay bricks.
- Economic design: savings in cement and steel.
- Enables faster construction.
- Suitable for low-soil bearing capacity & seismic zones.
- Facilitates construction of unplanned walls anywhere anytime.

Fire Protection

- CLC Bricks offer great fire protection. With a just 100mm. thickness of wall 1000 kg/m3, CLC block offers fire endurance for heat transmission for 4 hours without releasing any toxic fumes during.

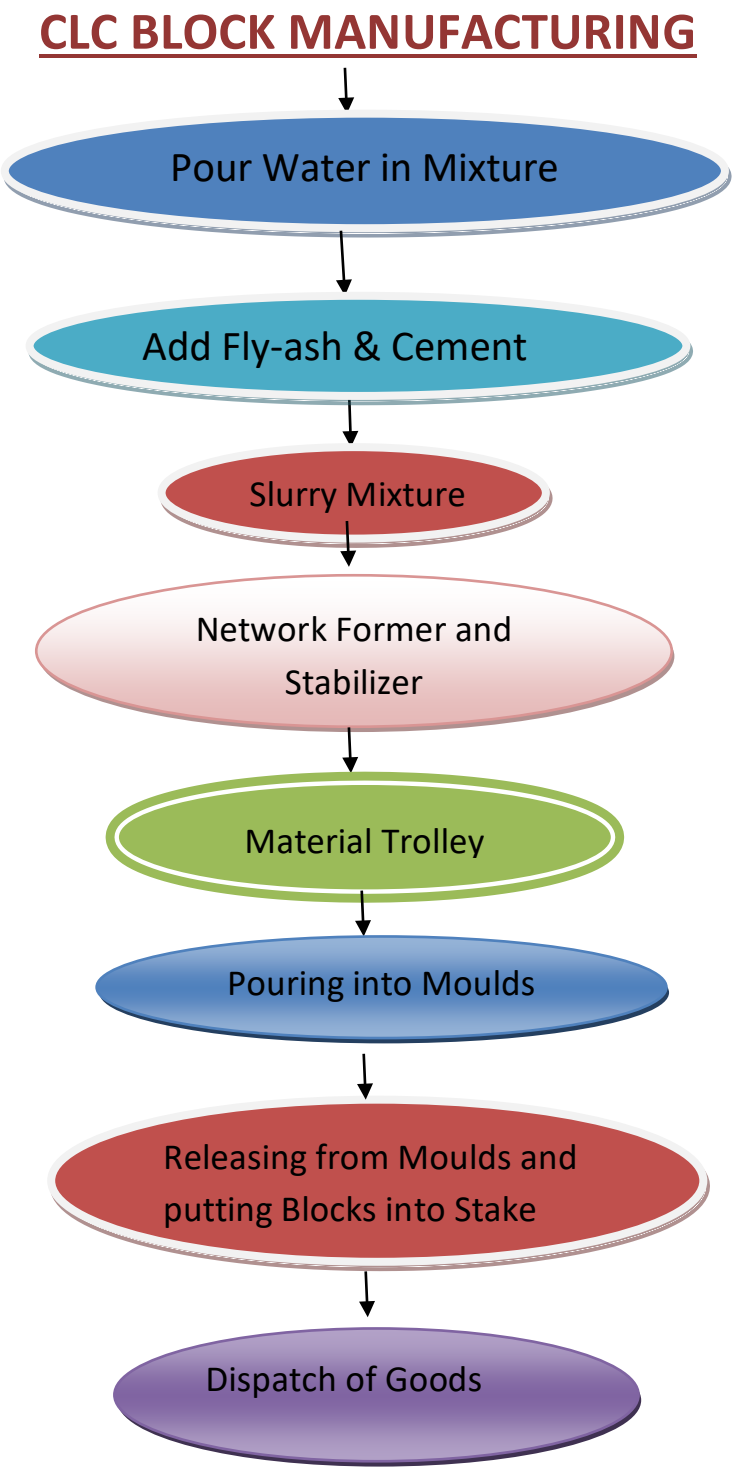
Enhances Carpet Area

An engineered block, it can be offered in any thickness as per the construction design. By using 150 mm thick Bricks in place of 9-inch brick, the customer gets an additional 2% to 3% carpet area. The savings on account of additional carpet area gained is more than the cost of Bricks.

Other Advantages of CLC Bricks: -

- CLC offers economical POP or putty finish in internal partition walls.
- Accurate size and shapes help in reducing plastering costs.
- Better finishing of walls offers good amount of reduction in paints.
- Eco-friendly
- Speedier Constructions.
- Ease of Work ability
- Universal Acceptability
- Low Water Absorption.

Technical Process Flow Chart



PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	1.52	2.63	4.85	9.26
Add: Additions	2.11	-	-	-	-
Add: Net Profit	0.91	3.61	6.22	9.41	11.64
Less: Drawings	1.50	2.50	4.00	5.00	8.00
Closing Balance	1.52	2.63	4.85	9.26	12.91
CC Limit	4.00	4.00	4.00	4.00	4.00
Term Loan	13.34	10.00	6.67	3.33	-
Sundry Creditors	0.43	0.50	0.58	0.65	0.74
TOTAL :	**19.29**	**17.13**	**16.09**	**17.25**	**17.64**
APPLICATION OF FUND					
Fixed Assets (Gross)	16.67	16.67	16.67	16.67	16.67
Gross Dep.	2.44	4.52	6.30	7.81	9.10
Net Fixed Assets	14.23	12.15	10.37	8.86	7.57
Current Assets					
Sundry Debtors	2.61	3.11	3.56	4.05	4.58
Stock in Hand	2.32	2.58	2.91	3.26	3.64
Cash and Bank	0.13	- 0.71	- 0.75	1.07	1.85
TOTAL :	**19.29**	**17.13**	**16.09**	**17.25**	**17.64**
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	52.20	62.18	71.24	81.05	91.64
Total (A)	**52.20**	**62.18**	**71.24**	**81.05**	**91.64**
B) COST OF SALES					
Raw Mateiral Consumed	26.06	30.20	34.56	39.20	44.10
Electricity Expenses	3.13	3.45	3.76	4.07	4.39
Repair & Maintenance	0.26	0.31	0.36	0.41	0.46
Labour & Wages	11.55	12.71	13.98	15.37	16.91
Depreciation	2.44	2.08	1.77	1.51	1.29
Cost of Production	43.44	48.74	54.43	60.56	67.15
Add: Opening Stock /WIP	-	1.45	1.58	1.76	1.96
Less: Closing Stock /WIP	1.45	1.58	1.76	1.96	2.17
Cost of Sales (B)	41.99	48.61	54.24	60.36	66.93
C) GROSS PROFIT (A-B)	10.21	13.57	17.00	20.69	24.70
	19.55%	**21.82%**	**23.86%**	**25.52%**	**26.96%**
D) Bank Interest (Term Loan)	1.63	1.33	0.96	0.60	0.23
ii) Interest On Working Capital	0.44	0.44	0.44	0.44	0.44
E) Salary to Staff	4.62	5.08	5.59	6.15	6.76
F) Selling & Adm Expenses Exp.	2.61	3.11	3.56	4.05	4.58
TOTAL (D+E)	**9.30**	**9.96**	**10.55**	**11.24**	**12.01**
H) NET PROFIT	0.91	3.61	6.45	9.45	12.69
	1.7%	**5.8%**	**9.0%**	**11.7%**	**13.8%**
I) Taxation	-	-	0.22	0.04	1.04
J) PROFIT (After Tax)	0.91	3.61	6.22	9.41	11.64

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Own Contribution	2.11	-			
Net Profit	0.91	3.61	6.45	9.45	12.69
Depreciation & Exp. W/off	2.44	2.08	1.77	1.51	1.29
Increase In Cash Credit	4.00				
Increase In Term Loan	15.00	-	-	-	-
Increase in Creditors	0.43	0.07	0.07	0.08	0.08
TOTAL :	**24.90**	**5.76**	**8.29**	**11.04**	**14.06**
APPLICATION OF FUND					
Increase in Fixed Assets	16.67	-	-	-	-
Increase in Stock	2.32	0.27	0.33	0.35	0.38
Increase in Debtors	2.61	0.50	0.45	0.49	0.53
Repayment of Term Loan	1.67	3.33	3.33	3.33	3.33
Taxation	-	-	0.22	0.04	1.04
Drawings	1.50	2.50	4.00	5.00	8.00
TOTAL :	**24.76**	**6.60**	**8.34**	**9.22**	**13.28**
Opening Cash & Bank Balance	-	0.13	- 0.71	- 0.75	1.07
Add : Surplus	0.13	- 0.84	- 0.05	1.82	0.78
Closing Cash & Bank Balance	**0.13**	**- 0.71**	**- 0.75**	**1.07**	**1.85**

COMPUTATION OF CLC BLOCKS MANUFACTURING UNIT

Items to be Manufactured CLC Blocks and Bricks

Manufacturing Capacity per Day		3,000.00	Blocks
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		900,000	Blocks
Year		Capacity	CLC Blocks and Bricks
		Utilisation	
I		50%	450,000
II		55%	495,000
III		60%	540,000
IV		65%	585,000
V		70%	630,000

COMPUTATION OF RAW MATERIAL

Item Name		**Quantity of Raw Material**	**Unit**	**Unit Rate of**	**Total CostPer Annum (100%)**
Cement		60.00	tonne	5,000.00	300,000.00
Sand		90.00	tonne	3,500.00	315,000.00
Fly Ash		75.00	tonne	1,200.00	90,000.00
Water		60.00	tonne	36.00	2,160.00
Foam Generator		30.00	tonne	150,000.00	4,500,000.00
Total		**315.00**			**5,207,160.00**

Total Raw material in Rs lacs	at 100% Capacity		52.07
Cost per CLC Blocks		(In Rs)	**5.79**

Raw Material Consumed	**Capacity Utilisation**	**Rate**	**Amount (Rs.)**
I	50%	5.79	26.06
II	55%	6.10	30.20
III	60%	6.40	34.56
IV	65%	6.70	39.20
V	70%	7.00	44.10

COMPUTATION OF SALE

Particulars	I	II	III	IV	V
Op Stock	-	15,000.00	16,500.00	18,000.00	19,500.00
Production	450,000.00	495,000.00	540,000.00	585,000.00	630,000.00
	450,000.00	510,000.00	556,500.00	603,000.00	649,500.00
Less : Closing Stock(10 Days)	15,000.00	16,500.00	18,000.00	19,500.00	21,000.00
Net Sale	435,000.00	493,500.00	538,500.00	583,500.00	628,500.00
Avg Sale Price per Block	12.00	12.60	13.23	13.89	14.58
Sale (in Lacs)	**52.20**	**62.18**	**71.24**	**81.05**	**91.64**

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	1.45	1.58	1.76	1.96	2.17
Raw Material					
(10 Days requirement)	0.87	1.01	1.15	1.31	1.47
Closing Stock	**2.32**	**2.58**	**2.91**	**3.26**	**3.64**

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	2.32		
Less:			
Sundry Creditors	0.43		
Paid Stock	**1.88**	**0.19**	**1.69**
Sundry Debtors	2.61	0.26	2.35
Working Capital Requirement			**4.04**
Margin			0.45
MPBF			**4.04**
Working Capital Demand			**4.00**

BREAK UP OF LABOUR

Particulars		Wages Per Month	No of Employees	Total Salary
Plant Operator		15,000.00	1	15,000.00
Skilled Worker		12,500.00	2	25,000.00
Unskilled Worker		7,500.00	4	30,000.00
Helper		5,000.00	2	10,000.00
Security Guard		7,500.00	1	7,500.00
				87,500.00
Add: 10% Fringe Benefit				8,750.00
Total Labour Cost Per Month				96,250.00
Total Labour Cost for the year (In Rs. Lakhs)			10	11.55

BREAK UP OF SALARY

Particulars		Salary Per Month	No of Employees	Total Salary
Accountant cum store keeper		10,000.00	1	10,000.00
Administrative Staffs		12,500.00	2	25,000.00
Total Salary Per Month				35,000.00
Add: 10% Fringe Benefit				3,500.00
Total Salary for the month				38,500.00
Total Salary for the year (In Rs. Lakhs)			3	4.62

COMPUTATION OF DEPRECIATION

Description	Land	Building/shed	Plant & Machinery	Furniture	**TOTAL**
Rate of Depreciation			**15.00%**	**10.00%**	
Opening Balance	Own/Rented		-	-	-
Addition	-		15.50	1.17	16.67
	-		15.50	1.17	16.67
TOTAL		-	15.50	1.17	16.67
Less : Depreciation	-	-	2.33	0.12	2.44
WDV at end of Ist year	-	-	13.18	1.05	14.23
Additions During The Year	-	-	-	-	-
	-	-	13.18	1.05	14.23
Less : Depreciation	-	-	1.98	0.11	2.08
WDV at end of IInd Year	-	-	11.20	0.95	12.15
Additions During The Year	-	-	-	-	-
	-	-	11.20	0.95	12.15
Less : Depreciation	-	-	1.68	0.09	1.77
WDV at end of IIIrd year	-	-	9.52	0.85	10.37
Additions During The Year	-	-	-	-	-
	-	-	9.52	0.85	10.37
Less : Depreciation	-	-	1.43	0.09	1.51
WDV at end of IV year	-	-	8.09	0.77	8.86
Additions During The Year	-	-	-	-	-
	-	-	8.09	0.77	8.86
Less : Depreciation	-	-	1.21	0.08	1.29
WDV at end of Vth year	-	-	6.88	0.69	7.57

REPAYMENT SCHEDULE OF TERM LOAN 11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Cl Balance
I	Opening Balance						
	Ist Quarter	-	15.00	15.00	0.41	-	15.00
	Iind Quarter	15.00	-	15.00	0.41	-	15.00
	IIIrd Quarter	15.00	-	15.00	0.41	0.83	14.17
	Ivth Quarter	14.17	-	14.17	0.39	0.83	13.34
					1.63	1.67	
II	Opening Balance						
	Ist Quarter	13.34	-	13.34	0.37	0.83	12.50
	Iind Quarter	12.50	-	12.50	0.34	0.83	11.67
	IIIrd Quarter	11.67	-	11.67	0.32	0.83	10.84
	Ivth Quarter	10.84		10.84	0.30	0.83	10.00
					1.33	3.33	
III	Opening Balance						
	Ist Quarter	10.00	-	10.00	0.28	0.83	9.17
	Iind Quarter	9.17	-	9.17	0.25	0.83	8.34
	IIIrd Quarter	8.34	-	8.34	0.23	0.83	7.50
	Ivth Quarter	7.50		7.50	0.21	0.83	6.67
					0.96	3.33	
IV	Opening Balance						
	Ist Quarter	6.67	-	6.67	0.18	0.83	5.83
	Iind Quarter	5.83	-	5.83	0.16	0.83	5.00
	IIIrd Quarter	5.00	-	5.00	0.14	0.83	4.17
	Ivth Quarter	4.17		4.17	0.11	0.83	3.33
					0.60	3.33	
V	Opening Balance						
	Ist Quarter	3.33	-	3.33	0.09	0.83	2.50
	Iind Quarter	2.50	-	2.50	0.07	0.83	1.67
	IIIrd Quarter	1.67	-	1.67	0.05	0.83	0.83
	Ivth Quarter	0.83		0.83	0.02	0.83	- 0.00
					0.23	3.33	

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

CALCULATION OF D.S.C.R

PARTICULARS	I	II	III	IV	V
CASH ACCRUALS	3.35	5.69	8.00	10.92	12.93
Interest on Term Loan	1.63	1.33	0.96	0.60	0.23
Total	4.98	7.02	8.96	11.52	13.16
REPAYMENT					
Repayment of Term Loan	1.67	3.33	3.33	3.33	3.33
Interest on Term Loan	1.63	1.33	0.96	0.60	0.23
Total	3.29	4.66	4.30	3.93	3.56
DEBT SERVICE COVERAGE RATIO	**1.51**	**1.51**	**2.09**	**2.93**	**3.69**
AVERAGE D.S.C.R.			**2.31**		

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
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			0.5	Hour per day
Total no of Hour			150	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			1,200	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.78	
Add : Lube Cost @15%			0.12	
Total			**0.90**	
Total cost of Power & Fuel at 100%				6.27
Year		**Capacity**		**Amount**
				(in Lacs)
I		50%		3.13
II		55%		3.45
III		60%		3.76
IV		65%		4.07
V		70%		4.39

SAMADHAN
Nurturing Dreams - Innovative Solutions

DISCLAIMER

The views expressed in this Project Report are advisory in nature. SAMADHAN assume no financial liability to anyone using the content for any purpose. All the materials and content contained in Project report is for educational purpose and reflect the views of the industry which are drawn from various research material sources from internet, experts, suppliers and various other sources. The actual cost of the project or industry will have to be taken on case to case basis considering specific requirement of the project, capacity and type of plant and other specific factors/cost directly related to the implementation of project. It is intended for general guidance only and must not be considered a substitute for a competent legal advice provided by a licensed industry professional. SAMADHAN hereby disclaims any and all liability to any party for any direct, indirect, implied, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of the Project Report Content, which is provided as is, and without warranties.