

PROJECT REPORT

Of

OPERATION THEATRE TABLE

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Operation Theatre Table**.

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 : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxx
Pin: xxxxxxx
Mobile : xxxxxxx
- State: xxxxxxxxx
- 5 Product and By Product : **OPERATION THEATRE TABLE**
- 6 Name of the project / business activity proposed : **OPERATION THEATRE TABLE UNIT**
- 7 Cost of Project : Rs.18.56 Lakhs
- 8 Means of Finance
Term Loan Rs.11.7 Lakhs
Own Capital Rs.1.86 Lakhs
Working capital Rs.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.28
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 34%
- 13 Employment : 8 Persons
- 14 Power Requirement : 20.00 HP
- 15 Major Raw materials : Stainless steel,Anti static rubber nylon tread caster,Moulded plastic parts,Gear Box,Hydraulic pump,Other consumables
- 16 Estimated Annual Sales Turnover (Max Capacity) : 102.95 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

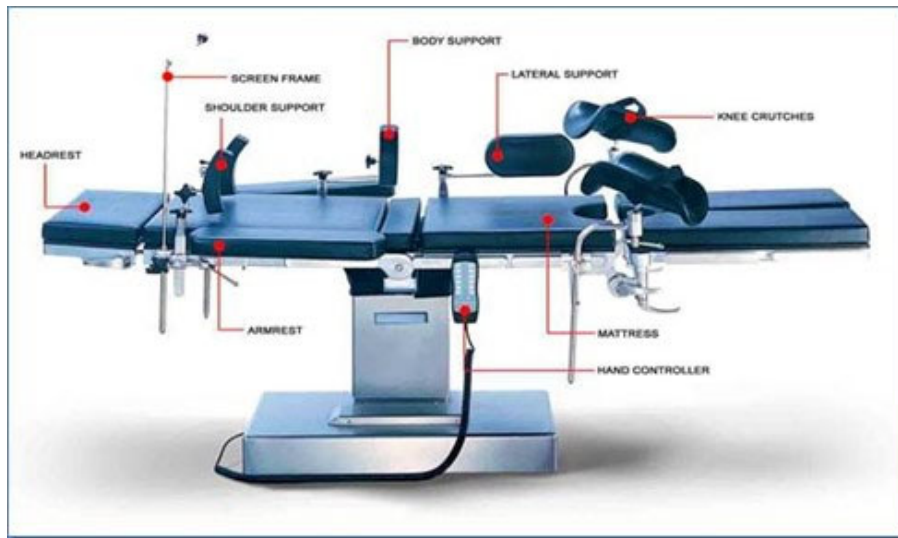
Particulars	Amount
Land	Own/Rented
Building / Shed 1000 Sq ft	5.00
Plant & Machinery	6.70
Furniture & Fixtures	1.30
Working Capital	5.56
Total	18.56

MEANS OF FINANCE

Particulars	Amount
Own Contribution	1.86
Working Capital(Finance)	5.00
Term Loan	11.70
Total	18.56

OPERATION THEATRE TABLE

Introduction: Operation Theater (OT) Tables are generally made from stainless steel and / or chrome plated sections and fitted with other required accessories OT table requires immense attention towards its designing. To make cleaning more effective and efficient, it is always suggested to make the OT tables easy to clean especially the places like seams and cracks, that propagate bacteria / germs, should not be there to keep bacteria / germ free. Operation theater tables used in the operation theaters of the Hospitals are of various types such as with or without hydraulic attachments for lifting / lowering / tilting etc., with or without ortho attachment, specially used as gynae / labour OT table, etc.



Uses & Market Potential: The uses of an operating table depend on its design and specifications. For example, some operating tables are designed to perform a wide range of procedures while others are designed specifically for orthopedic procedures. A patient lies on the operating table during a surgical procedure. The purpose of a surgical table is to keep the patient in place while the surgical team operates, and may move various parts of the body using surgical table accessories for easier access to the surgical site. Countless

procedures are performed on operating tables. These include cardiovascular, gynecology, pediatric, orthopedic, and pediatric surgeries. Because of the variety of procedures and types of surgical tables, weight and height restrictions are set to keep the patient safe during surgery.

With the increase in the population no. of new hospitals are coming up in Govt and private sector and also the existing hospitals are upgrading / extending their facilities. This is creating good market potential for OT Tables.

Raw materials: Major raw materials are as follows:

1. Stainless steel
2. Anti static rubber nylon tread caster
3. Moulded Plastic parts
4. Gear Box
5. Hydraulic pump 50 mm thick
6. Electrically sealed mattress
7. Steel hardware & other misc consumables

Machinery Requirements: Basic machines & equipments are as follows:

S No.	Machine	Unit	Price
1.	Treadle Guillotine Shearing Machine 48" width	1	120000
2.	Lathe Machine 4' Size with standard accessories	1	100000
3.	Bench Drilling Machine 3/4" capacity	1	25000
4.	Sheet Bending Machine	1	125000
5.	TIG Welding Set 300 Amp	1	65000
6.	MIG Welding Set 300 Amp	1	65000
7.	Power Press 30 MT	1	90000
8.	Other machines & equipments	Ls	80000
	Total Amount		670000

Manufacturing Process: OT Tables are designed to prevent the germs to avoid infection to the patient and staff. Sweeping and curvy designs in OT tables are ideal, as they reduce the amount of seams that comes into the contact with atmosphere, to avoid bacteria to hide. For calculation purposes the OT Table without orthopedic attachments is considered in this project profile. OT table have following parts :-

1. Table Top
2. Base
3. Head & Leg Section
4. Hydraulic Lift & accessories

Steps are as follows:

- Cutting of sections/sheets
- Bending
- Drilling
- Welding
- Grinding
- Sub Assembling
- Final Assembling
- Final Packaging & dispatch

Major Head, Base, Top of the Frame, Slide Bars, Locks, Pump Lever etc. are made of stainless steel and standard accessories includes – Foot extension, side support, shoulder support, antistatic rubber pad, anesthetic screen, kidney elevator, leather wristlets, arm support anesthetic foam rubber mattress, arm woods etc.

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 2000 to 2500Sqft. Civil work will cost Rs 5 Lac. (Approx.)

Power Requirement: The power consumption required to run all the machinery could be approximated as 20hp

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 Machine 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 CASH FLOW STATEMENT					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Own Contribution	1.86	-			
Reserve & Surplus	2.53	3.53	5.56	8.79	12.12
Depriciation & Exp. W/off	1.64	1.42	1.24	1.08	0.94
Increase In Cash Credit	5.00				
Increase In Term Loan	11.70	-	-	-	-
Increase in Creditors	0.76	0.13	0.09	0.09	0.09
TOTAL :	23.48	5.08	6.89	9.95	13.15
APPLICATION OF FUND					
Increase in Fixed Assets	13.00	-	-	-	-
Increase in Stock	4.21	0.69	0.63	0.66	0.68
Increase in Debtors	2.89	0.62	0.52	0.55	0.58
Repayment of Term Loan	1.30	2.60	2.60	2.60	2.60
Taxation	-	-	1.11	2.64	3.64
Drawings	1.00	1.00	2.00	3.00	5.00
TOTAL :	22.40	4.91	6.86	9.44	12.49
Opening Cash & Bank Balance	-	1.08	1.26	1.28	1.80
Add : Surplus	1.08	0.17	0.03	0.52	0.65
Closing Cash & Bank Balance	1.08	1.26	1.28	1.80	2.45

PROJECTED BALANCE SHEET					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	3.38	5.92	8.37	11.52
Add: Additions	1.86	-	-	-	-
Add: Net Profit	2.53	3.53	4.45	6.15	8.48
Less: Drawings	1.00	1.00	2.00	3.00	5.00
Closing Balance	3.38	5.92	8.37	11.52	15.00
CC Limit	5.00	5.00	5.00	5.00	5.00
Term Loan	10.40	7.80	5.20	2.60	0.00
Sundry Creditors	0.76	0.89	0.98	1.06	1.15
TOTAL :	19.54	19.60	19.54	20.18	21.16
APPLICATION OF FUND					
Fixed Assets (Gross)	13.00	13.00	13.00	13.00	13.00
Gross Dep.	1.64	3.06	4.29	5.37	6.31
Net Fixed Assets	11.37	9.94	8.71	7.63	6.69
Current Assets					
Sundry Debtors	2.89	3.51	4.02	4.57	5.15
Stock in Hand	4.21	4.90	5.53	6.18	6.86
Cash and Bank	1.08	1.26	1.28	1.80	2.45
TOTAL :	19.54	19.60	19.54	20.18	21.16

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PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	57.71	70.15	80.48	91.42	102.95
Total (A)	57.71	70.15	80.48	91.42	102.95
B) COST OF SALES					
Raw Material Consumed	32.58	38.01	41.81	45.61	49.41
Electricity Expenses	1.45	1.61	1.77	1.93	2.10
Repair & Maintenance	5.77	7.01	8.05	9.14	10.30
Labour & Wages	7.43	8.18	9.40	10.81	12.44
Depreciation	1.64	1.42	1.24	1.08	0.94
Cost of Production	48.87	56.24	62.27	68.58	75.18
Add: Opening Stock /WIP	-	2.58	3.00	3.44	3.90
Less: Closing Stock /WIP	2.58	3.00	3.44	3.90	4.39
Cost of Sales (B)	46.29	55.82	61.83	68.11	74.69
C) GROSS PROFIT (A-B)	11.42	14.33	18.65	23.30	28.26
	19.79%	20.42%	23.17%	25.49%	27.45%
D) Bank Interest (Term Loan)	1.27	1.04	0.75	0.46	0.18
ii) Interest On Working Capital	0.55	0.55	0.55	0.55	0.55
E) Salary to Staff	5.92	6.75	7.76	8.93	10.27
F) Selling & Adm Expenses Exp.	1.15	2.46	4.02	4.57	5.15
TOTAL (D+E)	8.90	10.79	13.09	14.51	16.14
H) NET PROFIT	2.53	3.53	5.56	8.79	12.12
	4.4%	5.0%	6.9%	9.6%	11.8%
I) Taxation	-	-	1.11	2.64	3.64
J) PROFIT (After Tax)	2.53	3.53	4.45	6.15	8.48

COMPUTATION OF MAKING OF OPERATION THEATRE TABLE			
Item to be Manufactured Operation Theatre Table			
Manufacturing Capacity per day		2	no.s
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		600	no.s
Total Production per Annum		600	no.s
Year		Capacity	OPERATION THEATRE
		Utilisation	
I		45%	270.00
II		50%	300.00
III		55%	330.00
IV		60%	360.00
V		65%	390.00

COMPUTATION OF RAW MATERIAL

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total CostPer Annum (100%)
Stainless steel	30.00	MT	30,000.00	9,00,000.00
Anti static rubber nylon tread caster	600.00	Sets	300.00	1,80,000.00
Moulded plastic parts	600.00	Sets	300.00	1,80,000.00
Gear Box	600.00	No.s	3,200.00	19,20,000.00
Hydraulic pump 50 mm thick	600.00	No.s	3,500.00	21,00,000.00
Electrically sealed mattress	600.00	No.s	2,600.00	15,60,000.00
Steel Hardware & other misc. consumables				4,00,000.00
Total				72,40,000.00
Total Raw material in Rs lacs				72.40

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)	
I	45%	32.58	
II	50%	38.01	5% Increase in Cost
III	55%	41.81	5% Increase in Cost
IV	60%	45.61	5% Increase in Cost
V	65%	49.41	5% Increase in Cost

COMPUTATION OF SALE					
Particulars	I	II	III	IV	V
Op Stock	-	13.50	15.00	16.50	18.00
Production	270.00	300.00	330.00	360.00	390.00
Less : Closing Stock(15 Days)	13.50	15.00	16.50	18.00	19.50
Net Sale	256.50	298.50	328.50	358.50	388.50
Sale Price per table	22,500.00	23,500.00	24,500.00	25,500.00	26,500.00
Sale (in Lacs)	57.71	70.15	80.48	91.42	102.95

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(15 Days requirement)	2.58	3.00	3.44	3.90	4.39
Raw Material					
(15 Days requirement)	1.63	1.90	2.09	2.28	2.47
Closing Stock	4.21	4.90	5.53	6.18	6.86

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	4.21		
Less:			
Sundry Creditors	0.76		
Paid Stock	3.45	0.35	3.11
Sundry Debtors	2.89	0.29	2.60
Working Capital Requirement			5.70
Margin			0.63
MPBF			5.70
Working Capital Demand			5.00

BREAK UP OF LABOUR				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Supervisor		20,000.00	1	20,000.00
Machine Operator		15,000.00	1	15,000.00
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
				59,000.00
Add: 5% Fringe Benefit				2,950.00
Total Labour Cost Per Month				61,950.00
Total Labour Cost for the year (In Rs. Lakhs)			5	7.43

BREAK UP OF SALARY				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		20,000.00	1	20,000.00
Accountant cum store keeper		15,000.00	1	15,000.00
Sales		12,000.00	1	12,000.00
Total Salary Per Month				47,000.00
Add: 5% Fringe Benefit				2,350.00
Total Salary for the month				49,350.00
Total Salary for the year (In Rs. Lakhs)			3	5.92

COMPUTATION OF DEPRECIATION					
Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased		-	-	-
Addition	-	5.00	6.70	1.30	13.00
	-	5.00	6.70	1.30	13.00
		-	-	-	
TOTAL		5.00	6.70	1.30	13.00
Less : Depreciation	-	0.50	1.01	0.13	1.64
WDV at end of Ist year	-	4.50	5.70	1.17	11.37
Additions During The Year	-	-	-	-	-
	-	4.50	5.70	1.17	11.37
Less : Depreciation	-	0.45	0.85	0.12	1.42
WDV at end of IInd Year	-	4.05	4.84	1.05	9.94
Additions During The Year	-	-	-	-	-
	-	4.05	4.84	1.05	9.94
Less : Depreciation	-	0.41	0.73	0.11	1.24
WDV at end of IIIrd year	-	3.65	4.11	0.95	8.71
Additions During The Year	-	-	-	-	-
	-	3.65	4.11	0.95	8.71
Less : Depreciation	-	0.36	0.62	0.09	1.08
WDV at end of IV year	-	3.28	3.50	0.85	7.63
Additions During The Year	-	-	-	-	-
	-	3.28	3.50	0.85	7.63
Less : Depreciation	-	0.33	0.52	0.09	0.94
WDV at end of Vth year	-	2.95	2.97	0.77	6.69

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	11.70	11.70	0.32	-	11.70
	IInd Quarter	11.70	-	11.70	0.32	-	11.70
	IIIRD Quarter	11.70	-	11.70	0.32	0.65	11.05
	Ivth Quarter	11.05	-	11.05	0.30	0.65	10.40
					1.27	1.30	
II	Opening Balance						
	Ist Quarter	10.40	-	10.40	0.29	0.65	9.75
	IInd Quarter	9.75	-	9.75	0.27	0.65	9.10
	IIIRD Quarter	9.10	-	9.10	0.25	0.65	8.45
	Ivth Quarter	8.45		8.45	0.23	0.65	7.80
					1.04	2.60	
III	Opening Balance						
	Ist Quarter	7.80	-	7.80	0.21	0.65	7.15
	IInd Quarter	7.15	-	7.15	0.20	0.65	6.50
	IIIRD Quarter	6.50	-	6.50	0.18	0.65	5.85
	Ivth Quarter	5.85		5.85	0.16	0.65	5.20
					0.75	2.60	
IV	Opening Balance						
	Ist Quarter	5.20	-	5.20	0.14	0.65	4.55
	IInd Quarter	4.55	-	4.55	0.13	0.65	3.90
	IIIRD Quarter	3.90	-	3.90	0.11	0.65	3.25
	Ivth Quarter	3.25		3.25	0.09	0.65	2.60
					0.46	2.60	
V	Opening Balance						
	Ist Quarter	2.60	-	2.60	0.07	0.65	1.95
	IInd Quarter	1.95	-	1.95	0.05	0.65	1.30
	IIIRD Quarter	1.30	-	1.30	0.04	0.65	0.65
	Ivth Quarter	0.65		0.65	0.02	0.65	-
					0.18	2.60	

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
<u>CASH ACCRUALS</u>	4.16	4.95	5.69	7.23	9.42
Interest on Term Loan	1.27	1.04	0.75	0.46	0.18
Total	5.43	5.99	6.44	7.69	9.60
<u>REPAYMENT</u>					
Repayment of Term Loan	1.30	2.60	2.60	2.60	2.60
Interest on Term Loan	1.27	1.04	0.75	0.46	0.18
Total	2.57	3.64	3.35	3.06	2.78
DEBT SERVICE COVERAGE RATIO	2.11	1.65	1.92	2.51	3.46
AVERAGE D.S.C.R.			2.28		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	20	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				2,68,560.00
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%				3.22
Year		Capacity		Amount (in Lacs)
I		45%		1.45
II		50%		1.61
III		55%		1.77
IV		60%		1.93
V		65%		2.10

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