

PROJECT REPORT

Of

OXIMETER

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Oximeter Manufacturing 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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PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
- Pin: xxxxxxxx State: xxxxx
- Mobile xxxxxxxx
- 5 Product and By Product : **OXIMETER**
- 6 Name of the project / business activity proposed : **OXIMETER MANUFACTURING UNIT**
- 7 Cost of Project : Rs.24.46 Lakhs
- 8 Means of Finance
- Term Loan Rs.16.21 Lakhs
- Own Capital Rs.2.45 Lakhs
- Working Capital Rs.5.81 Lakhs
- 9 Debt Service Coverage Ratio : 2.89
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 24%
- 13 Employment : 12 Persons
- 14 Power Requirement : 30.00 HP
- 15 Major Raw materials : Plastic, Electrical components and other material
- 16 Estimated Annual Sales Turnover (Max Capacity) : 185.09 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	17.31
Furniture & Fixtures	0.70
Working Capital	6.45
Total	24.46

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.45
Working Capital(Finance)	5.81
Term Loan	16.21
Total	24.46

OXIMETER MANUFACTURING UNIT

Introduction:

A pulse oximeter is a small, lightweight device used to monitor the amount of oxygen carried in the body. It is a non-invasive tool for the measurement of oxygen saturation (SpO₂). This non-invasive tool attaches painlessly to your fingertip, sending two wavelengths of light through the finger to measure your pulse rate and how much oxygen is in your system. Once the oximeter finishes its assessment, its screen will display the percent of oxygen in your blood coming from your heart—as well as your current pulse rate. Oxygen saturation is defined as the amount of oxygen dissolved in the blood, based on the detection of Hemoglobin, Hb, and Deoxyhemoglobin, HbO₂. The oximeter contains sensors such as a SpO₂ sensor and pulse rate sensor.



Uses & Market Potential:

Oximeters are used to monitor oxygen levels in the blood. Those with respiratory and heart conditions benefit most from using these devices, as well as those with COVID-19. Worldwide pulse oximeters market size to reach USD 2.8 billion by 2025, growing at a CGPR of 9% during the forecast period. The global pulse oximeters industry is

expected to grow at an absolute growth of over 70% during the forecast period. The market is developing because of the increase in the old populace, which is inclined to the danger of respiratory illnesses, hypertension, CVD, diabetes, and different sicknesses that could influence oxygen levels (SpO₂). The expanding accentuation on patient safety during treatment in medical care settings and the demand for consistent vital signs monitoring is expected to drive the pulse oximeters market development. The growing awareness of patient monitoring and an increase in target disease commonness is further liable to support industry development during the forecast period. Strong demand for pulse oximetry and increased end-users spending sentiments on home multiparameter patient monitoring devices overall is adding to market growth. The purchase of at-home pulse oximeters has spiked over 500% since the detection of COVID-19 cases. Several physicians observe pulse oximetry as a significant device to distinguish declining lung function early and address the cause, including COVID-19. Henceforth, the rising adoption of these gadgets has boosted the pulse oximetry demand on the worldwide level, which is further expected to contribute to the market growth in forthcoming years.

Product:

Oximeter

Raw Material:

The raw materials required are:

- **Plastic**-PP or PVC Granules
- **Electrical components:** Controller IC, Transistors, Sensors, Resistors, Capacitors, LED, etc.
- **Others:** Screws, springs, soldering flux, solder wire, battery, connectors, wires, etc.

Manufacturing Process:

The steps are:

- ✓ Raw material procurement
- ✓ Injection Molding
- ✓ PCB Assembly
- ✓ Assembly
- ✓ Testing

Area:

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and polishing area. Also, some of the area of building is required for office staff facilities, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 2000-2500Sqft.

Cost of Machines:

Machine	Quantity	Rate
Injection Molding Machine	1	600000
Solder Paste Printer	1	100000
Pick and Place Machine	1	150000
Single Reflow Oven	1	90000
SPI Machine	1	165000
AOI Machine	1	400000
Temperature-controlled soldering station	1	26000

Printing Machine	1	150000
Testing & other equipment's	-	50000
Total Amount		1731000

Power Requirement- The estimated Power requirement is taken at 30 HP.

Manpower Requirement- Following manpower is required:

- Machine operator-2
- Skilled/unskilled worker-3
- Helper-4
- Manager cum Accountant-1
- Sales Personnel-2

FINANCIALS

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	3.46	5.82	9.51	13.72
Add: Additions	2.45	-	-	-	-
Add: Net Profit	5.51	7.36	9.19	11.20	13.38
Less: Drawings	4.50	5.00	5.50	7.00	9.00
Closing Balance	3.46	5.82	9.51	13.72	18.10
CC Limit	5.81	5.81	5.81	5.81	5.81
Term Loan	14.41	10.81	7.20	3.60	-
Sundry Creditors	3.06	3.64	4.24	4.87	5.52
TOTAL :	26.73	26.08	26.77	28.00	29.43
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	18.01	18.01	18.01	18.01	18.01
Gross Dep.	2.67	4.94	6.87	8.51	9.92
Net Fixed Assets	15.34	13.07	11.14	9.50	8.09
Current Assets					
Sundry Debtors	4.79	5.92	6.97	8.08	9.25
Stock in Hand	4.73	6.84	7.96	9.14	10.35
Cash and Bank	1.88	0.24	0.69	1.28	1.72
TOTAL :	26.73	26.08	26.77	28.00	29.43

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PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	95.70	118.40	139.46	161.67	185.09
Total (A)	95.70	118.40	139.46	161.67	185.09
<u>B) COST OF SALES</u>					
Raw Material Consumed	61.20	72.83	84.90	97.42	110.41
Electricity Expenses	2.01	2.35	2.69	3.02	3.36
Repair & Maintenance	1.91	2.37	2.79	3.23	3.70
Labour & Wages	12.85	16.07	19.28	22.75	26.16
Depreciation	2.67	2.27	1.93	1.65	1.40
Cost of Production	80.65	95.88	111.58	128.07	145.03
Add: Opening Stock /WIP	-	2.69	3.20	3.72	4.27
Less: Closing Stock /WIP	2.69	3.20	3.72	4.27	4.83
Cost of Sales (B)	77.96	95.37	111.06	127.52	144.46
C) GROSS PROFIT (A-B)	17.74	23.03	28.40	34.15	40.63
	18.54%	19.45%	20.36%	21.12%	21.95%
D) Bank Interest i) (Term Loan)	1.76	1.44	1.04	0.64	0.25
ii) Interest On Working Capital	0.64	0.64	0.64	0.64	0.64
E) Salary to Staff	7.81	9.84	12.01	14.89	17.57
F) Selling & Adm Expenses Exp.	1.72	2.96	4.18	4.53	5.55
G) TOTAL (D+E+F)	11.93	14.88	17.87	20.70	24.01
H) NET PROFIT	5.81	8.15	10.53	13.45	16.62
	6.1%	6.9%	7.5%	8.3%	9.0%
I) Taxation	0.30	0.78	1.33	2.25	3.23
J) PROFIT (After Tax)	5.51	7.36	9.19	11.20	13.38

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	2.45	-	-	-	-
Reserve & Surplus	5.81	8.15	10.53	13.45	16.62
Depreciation & Exp. W/off	2.67	2.27	1.93	1.65	1.40
Increase In Cash Credit	5.81	-	-	-	-
Increase In Term Loan	16.21	-	-	-	-
Increase in Creditors	3.06	0.58	0.60	0.63	0.65
TOTAL :	36.00	11.00	13.06	15.72	18.67
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	18.01	-	-	-	-
Increase in Stock	4.73	2.11	1.13	1.18	1.21
Increase in Debtors	4.79	1.13	1.05	1.11	1.17
Repayment of Term Loan	1.80	3.60	3.60	3.60	3.60
Taxation	0.30	0.78	1.33	2.25	3.23
Drawings	4.50	5.00	5.50	7.00	9.00
TOTAL :	34.12	12.63	12.62	15.14	18.22
Opening Cash & Bank Balance	-	1.88	0.24	0.69	1.28
Add : Surplus	1.88	- 1.63	0.45	0.59	0.45
Closing Cash & Bank Balance	1.88	0.24	0.69	1.28	1.72

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
<u>Finished Goods</u>					
(10 Days requirement)	2.69	3.20	3.72	4.27	4.83
<u>Raw Material</u>					
(10 Days requirement)	2.04	3.64	4.24	4.87	5.52
Closing Stock	4.73	6.84	7.96	9.14	10.35

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	4.73		
Less:			
Sundry Creditors	3.06		
Paid Stock	1.67	0.17	1.50
Sundry Debtors	4.79	0.48	4.31
Working Capital Requirement			5.81
Margin			0.65
MPBF			5.81
Working Capital Demand			5.81

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	16.21	16.21	0.45	-	16.21
	Iind Quarter	16.21	-	16.21	0.45	-	16.21
	IIIrd Quarter	16.21	-	16.21	0.45	0.90	15.31
	Ivth Quarter	15.31	-	15.31	0.42	0.90	14.41
					1.76	1.80	
II	Opening Balance						
	Ist Quarter	14.41	-	14.41	0.40	0.90	13.51
	Iind Quarter	13.51	-	13.51	0.37	0.90	12.61
	IIIrd Quarter	12.61	-	12.61	0.35	0.90	11.71
	Ivth Quarter	11.71		11.71	0.32	0.90	10.81
					1.44	3.60	
III	Opening Balance						
	Ist Quarter	10.81	-	10.81	0.30	0.90	9.91
	Iind Quarter	9.91	-	9.91	0.27	0.90	9.01
	IIIrd Quarter	9.01	-	9.01	0.25	0.90	8.10
	Ivth Quarter	8.10		8.10	0.22	0.90	7.20
					1.04	3.60	
IV	Opening Balance						
	Ist Quarter	7.20	-	7.20	0.20	0.90	6.30
	Iind Quarter	6.30	-	6.30	0.17	0.90	5.40
	IIIrd Quarter	5.40	-	5.40	0.15	0.90	4.50
	Ivth Quarter	4.50		4.50	0.12	0.90	3.60
					0.64	3.60	
V	Opening Balance						
	Ist Quarter	3.60	-	3.60	0.10	0.90	2.70
	Iind Quarter	2.70	-	2.70	0.07	0.90	1.80
	IIIrd Quarter	1.80	-	1.80	0.05	0.90	0.90
	Ivth Quarter	0.90		0.90	0.02	0.90	0.00
					0.25	3.60	

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>	8.18	9.63	11.12	12.85	14.78
Interest on Term Loan	1.76	1.44	1.04	0.64	0.25
Total	9.94	11.07	12.16	13.49	15.03
<u>REPAYMENT</u>					
Repayment of Term Loan	1.80	3.60	3.60	3.60	3.60
Interest on Term Loan	1.76	1.44	1.04	0.64	0.25
Total	3.56	5.04	4.64	4.25	3.85
DEBT SERVICE COVERAGE RATIO	2.79	2.20	2.62	3.18	3.90
AVERAGE D.S.C.R.			2.89		

Assumptions:

1. Production Capacity of Oximeter Manufacturing unit is taken at 100 Pcs per day. First year, Capacity has been taken @ 30%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 10 days.
4. Credit period to Sundry Debtors has been given for 15 days.
5. Credit period by the Sundry Creditors has been provided for 15 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 30 HP.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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