

PROJECT REPORT

Of

ELECTRICAL SWITCH

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Switch 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.]



**Lucknow Office: Sidhivinayak Building ,
27/1/B, Gokhley 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 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 : **ELECTRICAL SWITCH**
- 6 Name of the project / business activity proposed : **SWITCH MANUFACTURING UNIT**
- 7 Cost of Project : Rs.21.2 Lakhs
- 8 Means of Finance
- Term Loan Rs.13.5 Lakhs
- Own Capital Rs.2.12 Lakhs
- Working Capital Rs.5.58 Lakhs
- 9 Debt Service Coverage Ratio : 2.45
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 37%
- 13 Employment : 11 Persons
- 14 Power Requirement : 25.00 HP
- 15 Major Raw materials : Plastic & Metal Parts
- 16 Estimated Annual Sales Turnover (Max Capacity) : 120.44 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	14.00
Furniture & Fixtures	1.00
Working Capital	6.20
Total	21.20

MEANS OF FINANCE

Particulars	Amount
Own Contribution	2.12
Working Capital(Finance)	5.58
Term Loan	13.50
Total	21.20

SWITCH MANUFACTURING UNIT

Introduction:

Electrical switches are household consumables items. A switch is an electrical component that can break an electrical circuit, interrupting the current or diverting it from one conductor to another. When the switch is open, the electrical contacts do not touch and electricity cannot flow. When the switch is closed, however, the electrical contacts touch and electricity flows throughout the circuit. In almost every application, for residential, commercial or industrial use, switches are required to be installed. Electrical switches are used to perform all the electrical functions. From a fan to bulb, every electrical equipment we use in our day to day life is useless without a switch. Switch is an electrical component which can make or break electrical circuit automatically or manually. Switch is mainly works with ON (open) and OFF (closed) mechanism. Numerous circuits hold switches that control how the circuit works or actuate different characteristics of the circuit. The classification of switches depends on the connection they make. SPST (Single Pole Single throw), SPDT (single pole double throw), DPST (double pole, single throw), DPDT (double pole double throw). There are different types of electrical switches are available for different types of applications.



Uses & Market Potential:

Electrical switches are used in aerospace, chemical, marine, medical, communication, military, automotive, petrochemical, and transportation—as well as in the commercial and residential sectors. Switches are used in electrical and mechanical product.

Disengage Switch market is relied upon to develop from an expected USD 9.07 Billion of every 2015 to USD 12.66 Billion by 2020, at a CAGR of 6.9% from 2015 to 2020 across the globe. Regarding the arrangement section, Traditional Electrical Switches market represented more than 80.37% of the general offer in 2016, and Smart Electrical Switches represented more than 19.63%. It is normal that Smart Electrical Switches will represent more than 22.58% in 2021. According to WMJ the overall market for Electrical Switches is relied upon to develop at a CAGR of generally 1.0% throughout the following five years, will arrive at 3860 million USD in 2024, from 3630 million USD in 2019, as per another investigation. As indicated by an examination, non-melded separate switches to enlist the most noteworthy development in next five years. This high development is significantly determined by Asia-Pacific locale which has quick industrialization in two of the quickest developing economies, China, and India.

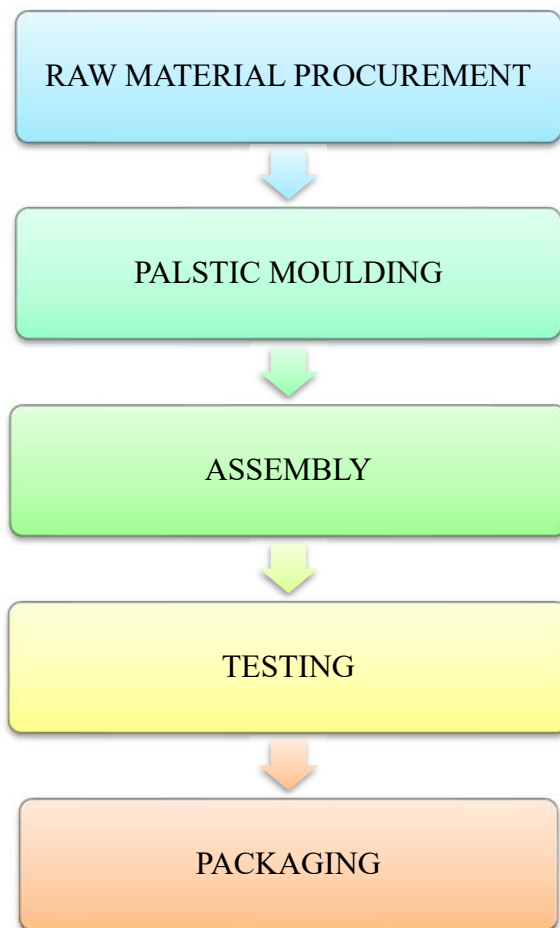
Product:

Electrical Switch

Raw Material:

Basic raw material are Plastic and metal parts.

Manufacturing Process:



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 1200-1800Sqft.

Cost of Machines:

Machine	Unit	Rate	Price
Injection Moulding Machine	1	1200000	1250000
Polishing or buffing machine	1	50000	50000
Moulds	-	50000	50000
Testing equipment's and other tools	-	50000	50000
Total Amount			1400000

Power Requirement- The estimated Power requirement is taken at 25 HP.

Manpower Requirement- Following manpower is required:

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

FINANCIALS

PROJECTED BALANCE SHEET

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
<u>Capital Account</u>					
Opening Balance	-	3.05	4.38	6.44	9.21
Add: Additions	2.12	-	-	-	-
Add: Net Profit	3.93	4.94	6.05	7.37	8.73
Less: Drawings	3.00	3.60	4.00	4.60	5.50
Closing Balance	3.05	4.38	6.44	9.21	12.44
CC Limit	5.58	5.58	5.58	5.58	5.58
Term Loan	12.00	9.00	6.00	3.00	-
Sundry Creditors	2.03	2.30	2.58	2.87	3.17
TOTAL :	22.65	21.26	20.59	20.65	21.18
<u>APPLICATION OF FUND</u>					
Fixed Assets (Gross)	15.00	15.00	15.00	15.00	15.00
Gross Dep.	2.20	4.08	5.67	7.04	8.20
Net Fixed Assets	12.80	10.93	9.33	7.96	6.80
Current Assets					
Sundry Debtors	3.23	3.90	4.45	5.02	5.62
Stock in Hand	4.99	5.70	6.41	7.16	7.93
Cash and Bank	1.63	0.73	0.40	0.51	0.83
TOTAL :	22.65	21.26	20.59	20.65	21.18
	-	-	-	-	-

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	69.26	83.58	95.27	107.55	120.44
Total (A)	69.26	83.58	95.27	107.55	120.44
<u>B) COST OF SALES</u>					
Raw Material Consumed	40.50	45.90	51.51	57.31	63.34
Electricity Expenses	2.52	2.80	3.08	3.36	3.64
Repair & Maintenance	1.73	2.09	2.38	2.69	3.01
Labour & Wages	12.35	15.44	18.21	21.13	24.09
Depreciation	2.20	1.88	1.60	1.36	1.16
Cost of Production	59.30	68.10	76.78	85.85	95.23
Add: Opening Stock /WIP	-	2.96	3.40	3.84	4.29
Less: Closing Stock /WIP	2.96	3.40	3.84	4.29	4.76
Cost of Sales (B)	56.33	67.66	76.35	85.39	94.76
C) GROSS PROFIT (A-B)	12.92	15.92	18.92	22.16	25.67
	18.66%	19.05%	19.86%	20.60%	21.32%
D) Bank Interest i) (Term Loan)	1.46	1.20	0.87	0.54	0.21
ii) Interest On Working Capital	0.61	0.61	0.61	0.61	0.61
E) Salary to Staff	5.67	6.69	7.89	9.08	10.17
F) Selling & Adm Expenses Exp.	1.25	2.34	3.05	3.76	4.82
G) TOTAL (D+E+F)	8.99	10.84	12.42	13.99	15.81
H) NET PROFIT	3.93	5.08	6.49	8.16	9.87
	5.7%	6.1%	6.8%	7.6%	8.2%
I) Taxation	-	0.15	0.44	0.79	1.14
J) PROFIT (After Tax)	3.93	4.94	6.05	7.37	8.73

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	2.12	-	-	-	-
Reserve & Surplus	3.93	5.08	6.49	8.16	9.87
Depreciation & Exp. W/off	2.20	1.88	1.60	1.36	1.16
Increase In Cash Credit	5.58	-	-	-	-
Increase In Term Loan	13.50	-	-	-	-
Increase in Creditors	2.03	0.27	0.28	0.29	0.30
TOTAL :	29.35	7.23	8.37	9.81	11.33
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	15.00	-	-	-	-
Increase in Stock	4.99	0.71	0.71	0.74	0.77
Increase in Debtors	3.23	0.67	0.55	0.57	0.60
Repayment of Term Loan	1.50	3.00	3.00	3.00	3.00
Taxation	-	0.15	0.44	0.79	1.14
Drawings	3.00	3.60	4.00	4.60	5.50
TOTAL :	27.72	8.13	8.70	9.70	11.01
Opening Cash & Bank Balance	-	1.63	0.73	0.40	0.51
Add : Surplus	1.63	- 0.90	- 0.33	0.11	0.32
Closing Cash & Bank Balance	1.63	0.73	0.40	0.51	0.83

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
<u>Finished Goods</u>					
(15 Days requirement)	2.96	3.40	3.84	4.29	4.76
<u>Raw Material</u>					
(15 Days requirement)	2.03	2.30	2.58	2.87	3.17
Closing Stock	4.99	5.70	6.41	7.16	7.93

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	4.99		
Less:			
Sundry Creditors	2.03		
Paid Stock	2.96	0.30	2.67
Sundry Debtors	3.23	0.32	2.91
Working Capital Requirement			5.58
Margin			0.62
MPBF			5.58
Working Capital Demand			5.58

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	13.50	13.50	0.37	-	13.50
	Iind Quarter	13.50	-	13.50	0.37	-	13.50
	IIIrd Quarter	13.50	-	13.50	0.37	0.75	12.75
	Ivth Quarter	12.75	-	12.75	0.35	0.75	12.00
					1.46	1.50	
II	Opening Balance						
	Ist Quarter	12.00	-	12.00	0.33	0.75	11.25
	Iind Quarter	11.25	-	11.25	0.31	0.75	10.50
	IIIrd Quarter	10.50	-	10.50	0.29	0.75	9.75
	Ivth Quarter	9.75	-	9.75	0.27	0.75	9.00
					1.20	3.00	
III	Opening Balance						
	Ist Quarter	9.00	-	9.00	0.25	0.75	8.25
	Iind Quarter	8.25	-	8.25	0.23	0.75	7.50
	IIIrd Quarter	7.50	-	7.50	0.21	0.75	6.75
	Ivth Quarter	6.75	-	6.75	0.19	0.75	6.00
					0.87	3.00	
IV	Opening Balance						
	Ist Quarter	6.00	-	6.00	0.17	0.75	5.25
	Iind Quarter	5.25	-	5.25	0.14	0.75	4.50
	IIIrd Quarter	4.50	-	4.50	0.12	0.75	3.75
	Ivth Quarter	3.75	-	3.75	0.10	0.75	3.00
					0.54	3.00	
V	Opening Balance						
	Ist Quarter	3.00	-	3.00	0.08	0.75	2.25
	Iind Quarter	2.25	-	2.25	0.06	0.75	1.50
	IIIrd Quarter	1.50	-	1.50	0.04	0.75	0.75
	Ivth Quarter	0.75	-	0.75	0.02	0.75	-
					0.21	3.00	

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>	6.13	6.81	7.65	8.74	9.89
Interest on Term Loan	1.46	1.20	0.87	0.54	0.21
Total	7.59	8.01	8.52	9.27	10.09
<u>REPAYMENT</u>					
Repayment of Term Loan	1.50	3.00	3.00	3.00	3.00
Interest on Term Loan	1.46	1.20	0.87	0.54	0.21
Total	2.96	4.20	3.87	3.54	3.21
DEBT SERVICE COVERAGE RATIO	2.56	1.91	2.20	2.62	3.15
AVERAGE D.S.C.R.			2.45		

Assumptions:

1. Production Capacity of Switch Manufacturing unit is taken at 2000 Units per day. First year, Capacity has been taken @ 45%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 14 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 25 HP.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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