#### PROJECT REPORT

## ON ROLLING SHUTTERS

#### PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding 'Rolling Shutters.

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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# A PROJECT PROFILE ON ROLLING SHUTTERS



#### INTRODUCTION

Rolling shutters are made of steel sheets & strips and are used as a flexible door panel in shops, godowns, workshop sheds. As the rolling shutters are wound over an overhead winding mandrill, the shutter will not give any problem for movement of people or vehicles through the door. The shutters roll upwards parallel to front wall not occupying any space of the floor and therefore, they are preferred for use in shops. Further, as these are made of steel sheets, they are strong, long lasting and safe.

#### PRODUCT & ITS APPLICATION:

In shops, go downs, workshop, sheds, and even in office and residential buildings, rolling shutters are used. These are made of carbon steel sheets and therefore, they provide strong, long lasting protection. The shutter does not hinder as it is rolled up and wound over an overhead mandrel shaft. It does not hinder movement of people or vehicles through the doors. In view of these advantages, they are preferred protection.

Generally these are made of 24 and 26 gauge steel strip and the formed slats may have 50, 75 or 100 mm width. Now a days these shutters provide aesthetic value to

establishment and hence they are made from extruded Aluminum sections for slats, stainless steel rods and tube or perforated painted steel or stainless steel strips. Other items are torsion spring, guide rails, overhead box, gear, chain or motorized drive system coupled to winding shaft and sprocket wheel.

#### MARKET POTENTIAL AND MARKETING ISSUES. IF ANY

Roller Shutters have become widely used protective door system for variety of applications. They are also used in trucks, other special goods carriers, ambulances, etc. vehicles due to compact design and non-obtrusive designs.

Demand for roller shutters is from new commercial and office building construction. The construction industry is growing at a rapid rate in the country. Therefore there is scope for these items. It is recommended to develop and produce aesthetic and modular design of slat profiles and other components with precision and good.

## **BASIS AND PRESUMPTION**

The basis and presumptions for the project will be as under:

- 1. The production of the unit has been worked out on the basis of single shift of 08 hours a day and 300 working days in a year.
- 2. It has been presumed that the capacity utilization of the unit will be 60% in the first year followed by 70% in the second year and 80% in the subsequent years.
- 3. The quoted salaries and wages have been taken as per the prevailing rate in state at the time of preparation of the project profile
- 4. The interest rate has been considered as 11.50% on capital investment on an average weather financed by any bank or financial institutions.
- 5. The payback period has been considered as 5 years after loan disbursement.
- 6. The quoted cost of machinery, equipments and raw materials has been taken as per the rates prevailing in the market at the time of preparation of the project profile and likely to vary from place to place and supplier to supplier. When a tailor made project profile is prepared, necessary changes are to be made.

#### IMPLEMENTATION SCHEDULE

The detail of activities with duration for implementation schedule of project will be as under:

1.	Procurement of technical know how / transfer of technology	- 15 days
2.	Market survey, tie-ups and obtaining quotations	- 15 days
3.	Selection of site	- 07 days
4.	Preparation of project report	- 07 days
5.	Registration and financing	- 70 days
6.	Procurement of machines	- 45 days
7.	Recruitment of staff and training	- 30 days
8.	Addition / alteration in rental premises	- 30 days
9.	Procurement of raw material / bought out components	- 15 days
10.	Erection, electrification and commissioning of machines	- 30 days
11.	Trail production	- 30 days
12.	Commercial Production	- 15 days

In order to efficient and successful implementation of the project in the shortest period the slack period is curtailed to maximum possible extent and as far as possible simultaneous activities are carried out. According to critical path method, the approximate time required to commence production may be considered as about 08 to 09 months

#### TECHNICAL ASPECT

#### **Manufacturing Process**

M.S. Strips of desired width are taken in coil form and fed to roller type sheet forming machine in which the rolling shutter profiles are formed. The spring steel wires are formed into springs shape in the spring coiling machine. The hand shearing machine and the press brake are used to frame fabrication. All the components are assembled and painted with red oxide primer.

## **Alternate Technology**

No alternative technology is suggestive in small-scale sector for this project. The use of proper tools and fixtures will not only increase rate of production but will also ensure quality of product.

## **Production Targets**

The unit will have the capacity to produce 6000 Sq. Mtrs. of rolling shutters per annum.

## **Quality Control And Standards**

The product is to be fabricated and inspected as per ISI specifications i.e. IS: 6248. Beside, IS specification; there are customer's specifications, which may be strictly followed too.

## **Utilities**

Power requirement - 10 HP

Water requirement - 250 K.Lt. per month

## **Energy Conservation**

The revolving / reciprocating parts of plant and machinery should be properly lubricated every time to avoid extra energy consumption. Layout of the unit should be in such manner to avoid backtracking of material. All electric switches may be kept off, when not required. Fluorescent tube with electronic chokes / Compact Fluorescent Tube (CFT) for general lighting may be used for energy saving. As far as possible, motor of correct inductive load should be used with improved power factor. Power factor may be improved by using the capacitors of appropriate rating.

#### **Pollution Control**

The unit does not come under the category of polluting industries. Although, the minimum height of shed may be maintained with exhaust fans for removing decongestion, fumes, dust, etc. and to provide proper ventilation.

## **Labour Requirement:**

7-8Manpower is required for shuttle cock manufacturing Includes:

- 4 Skilled Labour
- 4 Unskilled Labour

#### **BANK LOAN**

Rate of Interest is assumed to be at 10.00%

## **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
- Udyam Registration(Optional)
- NOC from State Pollution Control Board

# **FINANCIAL ASPECTS**

Product and By Product	:	Rolling Shutters	
Name of the project / business			
activity proposed :		Rolling Shutters	
Cost of Project	:	Rs.11.65 Lacs	
Means of Finance			
Term Loan		Rs.3.91 Lacs	
KVIC Margin Money	-	As per Project Eligibility	
Own Capital		Rs.1.16 Lacs	
Working Capital		Rs.6.58 Lacs	
Debt Service Coverage Ratio	:	6.81	
Pay Back Period	:	5	Years
Project Implementation Period	:	6	Months
Break Even Point	:	26%	
Employment	:	7	Persons
Power Requirement	:	10.00	HP
Major Raw materials	:	M.S. Strip 18-22G Spring Steel Wire 3-6 mm dia M.S. Tube sheets & flats Bolts, nuts, rivets, etc	
Estimated Annual Sales Turnover	:	42.75	Lacs

# **COST OF PROJECT**

(Rs. In Lacs)

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Particulars	Amount
Land	Rented/Owned
Building & Civil Work (2000 Sq Ft)	1.75
Plant & Machinery	2.04
Furniture & Fixtures	0.35
Pre-operative Expenses	0.20
Working Capital Requirement	7.31
Total	11.65

# **MEANS OF FINANCE**

Particulars	Amount
Own Contribution @10%	1.16
Term Loan	3.91
Workign Capital Finance	6.58
Total	11.65

Beneficiary's Margin Money (% of Project Cost)

Special General 5% 10%

# **PLANT & MACHINERY**

	PARTICULARS	QTY.	AMOUNT IN RS.
1	Hand shearing machine, 300 mm length of blade, capacity to cut 6 mm plate	1	70,000.00
2	Hand operated screw press No. 10,double pillar type	1	30,000.00
3	Spring coiling machine	1	8,000.00
4	Hand shearing machine, 300 mm length of blade, capacity to cut 6 mm plate	1	6,000.00
5	Hand operated screw press No. 10,double pillar type	1	10,000.00
6	Pillar drilling machine 3/4" capacity 02 HP	1	12,000.00
7	10" wheel capacity bench grinder 02 HP	1	6,000.00
8	300 amp. Capacity welding transformer	1	12,000.00
9	Electrification and installation charges		20,000.00
10	- Testing and measuring equipments		15,000.00
11	- Other tools and fixtures		15,000.00
	Total		2,04,000.00

# COMPUTATION OF MANUFACTURING OF ROLLING SHUTTERS

Manufacturing Capacity per day	20.00	Sq Mt
No. of Working Hour	8	
No of Working Days per month	25	
No. of Working Day per annum	300	
Total Production per Annum	6,000.00	Sq Mt
Year	Capacity	Sq Mt
	Utilisation	
IST YEAR	60%	3,600
IIND YEAR	70%	4,200
IIIRD YEAR	80%	4,800
IVTH YEAR	90%	5,400
VTH YEAR	100%	6,000

# **COMPUTATION OF RAW MATERIAL**

Item Name		Quantity of	Unit Rate of	Total Cost
				Per Annum
		Raw Material MT	Per MT	(100%)
M.S. Strip 18-22G	MT	66.00	45,000.00	29,70,000.00
Spring Steel Wire 3-6 mm dia	MT	9.00	90,000.00	8,10,000.00
M.S. Tube sheets & flats	MT	1.80	85,000.00	1,53,000.00
Bolts, nuts, rivets, etc	LS			1,80,000.00
Total				41,13,000.00
Annual Consumption cost		(In Lacs)		41.13

Raw Material Consumed	Capacity	Amount (Rs.)
	Utilisation	
IST YEAR	60%	24.68
IIND YEAR	70%	28.79
IIIRD YEAR	80%	32.90
IVTH YEAR	90%	37.02
VTH YEAR	100%	41.13

# COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Finished Goods					
(15 Days requirement)	1.80	2.10	2.40	2.70	3.00
Raw Material					
(30 Days requirement)	2.47	2.88	3.29	3.70	4.11
Closing Stock	4.27	4.98	5.69	6.40	7.11

# **COMPUTATION OF WORKING CAPITAL REQUIREMENT**

Particulars	Total
	Amount
Stock in Hand	4.27
Sundry Debtors	4.28
Total	8.54
Sundry Creditors	1.23
Working Capital Requirement	7.31
Margin	0.73
Working Capital Finance	6.58

# PROJECTED PROFITABILITY STATEMENT

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
A) SALES	ILAN	ILAN	ILAN	ILAN	ILAK
Gross Sale	42.75	52.13	59.63	67.13	74.63
Total (A)	42.75	52.13	59.63	67.13	74.63
B) COST OF SALES					
Raw Mateiral Consumed	24.68	28.79	32.90	37.02	41.13
Elecricity Expenses	0.86	1.00	1.15	1.29	1.43
Repair & Maintenance	-	0.52	0.60	0.67	0.75
Labour & Wages	3.43	3.78	4.15	4.57	5.02
Depriciation	0.50	0.45	0.39	0.34	0.30
Consumables and Other Expenses	2.14	2.61	2.98	3.36	3.73
Cost of Production	31.61	37.15	42.17	47.24	52.36
Add: Opening Stock /WIP		1.80	2.10	2.40	2.70
Less: Closing Stock /WIP	1.80	2.10	2.40	2.70	3.00
Cost of Sales (B)	29.81	36.85	41.87	46.94	52.06
C) GROSS PROFIT (A-B)	12.94	15.28	17.75	20.18	22.56
	30%	29%	30%	30%	30%
D) Bank Interest (Term Loan	0.34	0.41	0.29	0.18	0.06
Bank Interest ( C.C. Limit )	0.66	0.66	0.66	0.66	0.66
E) Salary to Staff	3.70	4.07	4.47	4.92	5.41
F) Selling & Adm Expenses Exp.	0.86	1.04	1.19	1.34	1.49
TOTAL (D+E)	5.55	6.17	6.62	7.10	7.62
H) NET PROFIT	7.40	9.10	11.13	13.08	14.94
I) Taxation	-	0.91	2.23	2.62	2.99
J) PROFIT (After Tax)	7.40	8.19	8.91	10.46	11.95

# PROJECTED BALANCE SHEET

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
SOURCES OF FUND					
Capital Account	1.16	1.16	1.16	1.16	1.16
Retained Profit	7.40	15.59	24.50	34.96	46.92
Term Loan	3.91	2.93	1.95	0.98	- 0.61
Cash Credit	6.58	6.58	6.58	6.58	6.58
Sundry Creditors	1.23	1.44	1.65	1.85	2.06
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
TOTAL:	20.64	28.10	36.28	46.01	56.63
APPLICATION OF FUND					
Fixed Assets ( Gross)	4.14	4.14	4.14	4.14	4.14
Gross Dep.	0.50	0.95	1.34	1.68	1.98
Net Fixed Assets	3.64	3.19	2.80	2.46	2.16
<b>Current Assets</b>					
Sundry Debtors	4.28	5.21	5.96	6.71	7.46
Stock in Hand	4.27	4.98	5.69	6.40	7.11
Cash and Bank	5.96	11.97	18.80	27.12	36.24
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
TOTAL:	20.64	28.10	36.28	46.01	56.63



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