

PROJECT REPORT

Of

WINDSHIELD WIPER

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Windshield Wiper 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 : xxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
- Pin: xxxxxxxx State: xxxxx
- Mobile xxxxxxxx
- 5 Product and By Product : **WINDSHIELD WIPER**
- 6 Name of the project / business activity proposed : **WINDSHIELD WIPER MANUFACTURING UNIT**
- 7 Cost of Project : Rs.16.82 Lakhs
- 8 Means of Finance
- Term Loan Rs.10.73 Lakhs
- Own Capital Rs.1.68 Lakhs
- Working Capital Rs.4.41 Lakhs
- 9 Debt Service Coverage Ratio : 2.88
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 40%
- 13 Employment : 12 Persons
- 14 Power Requirement : 20.00 HP
- 15 Major Raw materials : Wiper Blade, Galvanized Steel, Pivot Socket, Spring
: Steel sheet, two end ferrules and rubber strip
- 16 Estimated Annual Sales Turnover (Max Capacity) : 94.16 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Plant & Machinery	11.12
Furniture & Fixtures	0.80
Working Capital	4.90
Total	16.82

MEANS OF FINANCE

Particulars	Amount
Own Contribution	1.68
Working Capital(Finance)	4.41
Term Loan	10.73
Total	16.82

WINDSHIELD WIPER MANUFACTURING UNIT

Introduction:

A vehicle's wiper system is an integrated system for removing rain, snow, ice, and debris from the glass or windshield. It has a significant impact on visibility and the safety of passengers and the vehicle. It is a legal necessity in every automobile. It's in nearly every vehicle, including cars, trucks, railroad engines, and cabin-equipped boats. Pivot - left or right-hand drive, sequential sweep, single blade arm, mono blade, pantograph system, and twin windscreen wiper arms are some of the types of wipers used in automobiles. The functioning of almost all present wiper mechanisms is powered by an electric motor. Pneumatic drives are also utilized to drive wiper arms in some situations.



Uses & Market Potential:

The following are the uses of the windshield wiper system:

1. The wiper cleans the front and rear windshields of the vehicle
2. Removal of water and snow
3. Removal of dirt

According to a recent research released by various researchers, the worldwide Automotive Windshield Wiper Systems market was valued at 7228.18 million USD in 2020 and would expand at a CAGR of 4.26 percent from 2020 to 2027. Automobile manufacturing is projected to increase, propelling the sector forward. Furthermore, the growing need for rear wiper systems in the low-end automobile market is driving up demand for these goods. Rain- sensing wiper systems are expected to boost industry development because they improve vehicle safety by eliminating driver distraction caused by manual wiper activation during inclement weather. Over the projected period, the launch of these goods is likely to significantly boost industry growth. Because of the existence of important automotive component manufacturers like as Robert Bosch GmbH and Trico, regions such as North America and Europe are contributing to the industry's growth. Blades, couplings, and motors are among the goods offered by the firms.

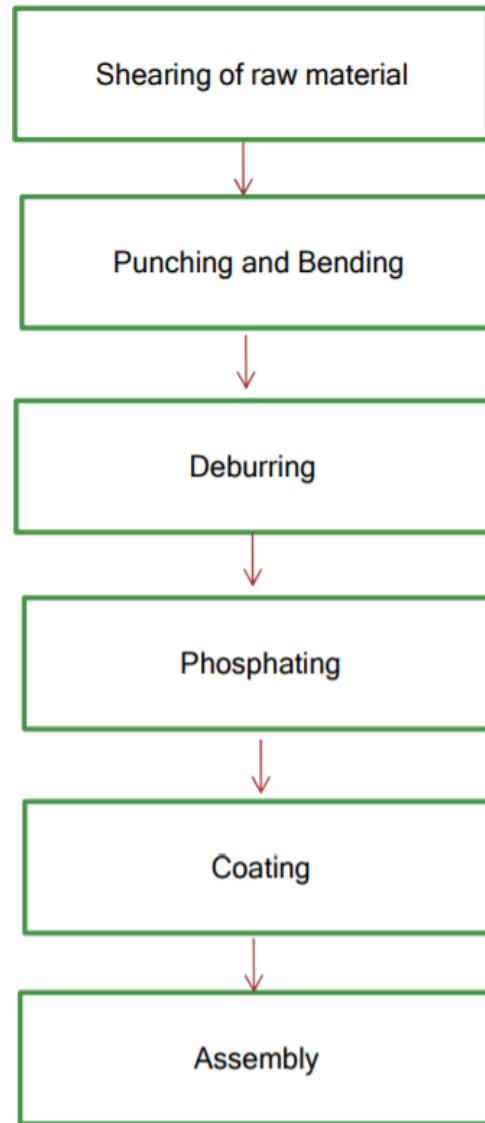
Product:

Windshield Wiper

Raw Material:

Basic raw material is Wiper Blade, Galvanized Steel, Pivot socket, spring steel sheet, two end ferrules and rubber strip.

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
Centre Lathe Machine	1	118000	118000
Power Press Machine	1	98000	98000
Cylindrical Grinder Machine	1	158000	158000
Guillotine Shearing Machine	1	265000	265000
Hydraulic Press Brake Machine	1	250000	250000
Metal Cutting Bandsaw Machine	1	60000	60000
Scroll Bender Machine	1	28000	28000
Pillar Drilling Machine	1	35000	35000
Material handling and other equipment's	-	100000	100000
Total Amount			1112000

Power Requirement- The estimated Power requirement is taken at 20 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 PROFITABILITY STATEMENT

PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	57.00	67.67	76.00	84.69	94.16
Total (A)	57.00	67.67	76.00	84.69	94.16
<u>B) COST OF SALES</u>					
Raw Material Consumed	27.00	30.29	33.71	37.25	40.92
Electricity Expenses	2.24	2.46	2.69	2.91	3.13
Repair & Maintenance	1.43	1.69	1.90	2.12	2.35
Labour & Wages	12.35	14.57	16.76	18.77	21.02
Depreciation	1.75	1.49	1.27	1.08	0.92
Cost of Production	44.76	50.51	56.32	62.13	68.35
Add: Opening Stock /WIP	-	2.24	2.53	2.82	3.11
Less: Closing Stock /WIP	2.24	2.53	2.82	3.11	3.42
Cost of Sales (B)	42.52	50.22	56.03	61.84	68.03
C) GROSS PROFIT (A-B)	14.48	17.45	19.97	22.86	26.13
	25.40%	25.79%	26.28%	26.99%	27.75%
D) Bank Interest i) (Term Loan)	1.16	0.95	0.69	0.43	0.16
ii) Interest On Working Capital	0.48	0.48	0.48	0.48	0.48
E) Salary to Staff	7.31	8.62	9.92	11.31	12.66
F) Selling & Adm Expenses Exp.	1.14	1.89	2.43	2.96	3.77
G) TOTAL (D+E+F)	10.10	11.95	13.52	15.18	17.08
H) NET PROFIT	4.38	5.50	6.45	7.68	9.05
	7.7%	8.1%	8.5%	9.1%	9.6%
I) Taxation	-	0.23	0.43	0.69	0.97
J) PROFIT (After Tax)	4.38	5.26	6.02	6.99	8.08

PROJECTED CASH FLOW STATEMENT

PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	1.68	-	-	-	-
Reserve & Surplus	4.38	5.50	6.45	7.68	9.05
Depreciation & Exp. W/off	1.75	1.49	1.27	1.08	0.92
Increase In Cash Credit	4.41	-	-	-	-
Increase In Term Loan	10.73	-	-	-	-
Increase in Creditors	1.35	0.16	0.17	0.18	0.18
TOTAL :	24.30	7.15	7.89	8.94	10.16
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	11.92	-	-	-	-
Increase in Stock	3.59	0.45	0.46	0.47	0.49
Increase in Debtors	2.66	0.50	0.39	0.41	0.44
Repayment of Term Loan	1.19	2.38	2.38	2.38	2.38
Taxation	-	0.23	0.43	0.69	0.97
Drawings	3.50	4.20	4.80	5.00	5.50
TOTAL :	22.86	7.77	8.47	8.94	9.79
Opening Cash & Bank Balance	-	1.44	0.82	0.25	0.24
Add : Surplus	1.44	- 0.62	- 0.58	- 0.01	0.36
Closing Cash & Bank Balance	1.44	0.82	0.25	0.24	0.60

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	I	II	III	IV	V
<u>Finished Goods</u>					
(15 Days requirement)	2.24	2.53	2.82	3.11	3.42
<u>Raw Material</u>					
(15 Days requirement)	1.35	1.51	1.69	1.86	2.05
Closing Stock	3.59	4.04	4.50	4.97	5.46

COMPUTATION OF WORKING CAPITAL REQUIREMENT

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	3.59		
Less:			
Sundry Creditors	1.35		
Paid Stock	2.24	0.22	2.01
Sundry Debtors	2.66	0.27	2.39
Working Capital Requirement			4.41
Margin			0.49
MPBF			4.41
Working Capital Demand			4.41

REPAYMENT SCHEDULE OF TERM LOAN

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	10.73	10.73	0.30	-	10.73
	Iind Quarter	10.73	-	10.73	0.30	-	10.73
	IIIrd Quarter	10.73	-	10.73	0.30	0.60	10.13
	Ivth Quarter	10.13	-	10.13	0.28	0.60	9.54
					1.16	1.19	
II	Opening Balance						
	Ist Quarter	9.54	-	9.54	0.26	0.60	8.94
	Iind Quarter	8.94	-	8.94	0.25	0.60	8.34
	IIIrd Quarter	8.34	-	8.34	0.23	0.60	7.75
	Ivth Quarter	7.75		7.75	0.21	0.60	7.15
					0.95	2.38	
III	Opening Balance						
	Ist Quarter	7.15	-	7.15	0.20	0.60	6.56
	Iind Quarter	6.56	-	6.56	0.18	0.60	5.96
	IIIrd Quarter	5.96	-	5.96	0.16	0.60	5.36
	Ivth Quarter	5.36		5.36	0.15	0.60	4.77
					0.69	2.38	
IV	Opening Balance						
	Ist Quarter	4.77	-	4.77	0.13	0.60	4.17
	Iind Quarter	4.17	-	4.17	0.11	0.60	3.58
	IIIrd Quarter	3.58	-	3.58	0.10	0.60	2.98
	Ivth Quarter	2.98		2.98	0.08	0.60	2.38
					0.43	2.38	
V	Opening Balance						
	Ist Quarter	2.38	-	2.38	0.07	0.60	1.79
	Iind Quarter	1.79	-	1.79	0.05	0.60	1.19
	IIIrd Quarter	1.19	-	1.19	0.03	0.60	0.60
	Ivth Quarter	0.60		0.60	0.02	0.60	- 0.00
					0.16	2.38	

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	6.75	7.29	8.07	9.00
Interest on Term Loan	1.16	0.95	0.69	0.43	0.16
Total	7.29	7.70	7.98	8.50	9.16
<u>REPAYMENT</u>					
Repayment of Term Loan	1.19	2.38	2.38	2.38	2.38
Interest on Term Loan	1.16	0.95	0.69	0.43	0.16
Total	2.36	3.33	3.07	2.81	2.55
DEBT SERVICE COVERAGE RATIO	3.10	2.31	2.60	3.02	3.60
AVERAGE D.S.C.R.			2.88		

Assumptions:

1. Production Capacity of Windshield Wiper Manufacturing unit is taken at 200 Units per day. First year, Capacity has been taken @ 50%.
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 15 days.
5. Credit period by the Sundry Creditors has been provided for 14 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 20 HP.
10. Selling Prices & Raw material costing has been increased by 3% & 2% respectively in the subsequent years.

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