

**NAME OF PRODUCT:**

**AUTO CLUTCH PLATE**

**PRODUCT CODE NO.**

**NIL**

**QUALITY CONTROL**

**NIL**

**PRODUCTION  
CAPACITY  
(Per Annum)**

**6000 Nos. @ 640/- Each  
Value: Rs. 38,40,000/-**

**MONTH & YEAR OF  
PREPARATION OF  
PROJECT PROFILE**

**JUNE, 2012**

**MSME-Development Institute  
107, Industrial Estate,  
Kalpi Road, Kanpur--208012**

## PROJECT PROFILE ON 'ASSEMBLY OF AUTO CLUTCH PLATE '

### **1. PRODUCT AND ITS USES:**

Clutch is most important part of any Automobile vehicle. The function of this part is to engage or disengage the engine from the transmission line at the will of its Driver. The clutch plate is placed in-between the engine and transmission line and operates on the principle of friction.

### **2. MARKET POTENTIALITY:**

Now a day the automobile vehicles have become an important means of transport due to liberalization of economy, increase in purchase power of people & easily availability of car loans & other transport loans on lower rate of Interest. Almost all vehicles require auto clutch plates which workout after a lapse of time and requires replacement. All the districts of Uttar Pradesh are well connected by road transport and transportation of goods as well as public are totally dependent on auto vehicles. Hence the vehicles requirement is increasing day by day, which intern will require auto clutch plates for repair/replacement, so the demand of this item is expected to be of high order in near future. The proposed unit may also contact big automobile manufacturing units to fetch their requirement as per their demand.

### **3. BASIS AND PRESUMPTIONS:**

- i) The basis for calculation of production capacity on maximum capacity utilization has been taken on single shift basis for 300 days a year. During first year, second year and third year of operations the capacity utilization is 70%, 80% and 90% respectively. The unit is expected to achieve full capacity utilization from the fourth year onward.
- ii) The salaries and wages, cost of raw materials, utilities, rents etc. are based on the prevailing rates in and around Allahabad. These cost factors are likely to vary with time and location.
- iii) Interest on term loan and working capital loan has been taken 14% per Annum.

- iv) The cost of machinery and equipment as indicated in the scheme are approximate of these ruling at the time of preparation of scheme. Entrepreneur may check up the latest and exact price for specific make and model of the machine selected.
- v) It is presumed that unit will get full capacity within four years.
- vi) It is presumed that operative period of unit will be 10 years.

#### **4. IMPLEMENTATION SCHEDULE:**

The major activities in the implementation of the project have been listed below and the average time for implementation of the project is estimated at 12 months:

	<b>Work schedule</b>	<b>Period (in months)</b>
1.	Preparation of project report	1
2.	Registration and other formalities	1
3.	Sanction of loan by financial institutions	3
4.	Plant & Machinery	
	a) Placement of orders	1
	b) Procurement	2
	c) Power connection/Electrification	2
	d) Installation/Erection of machinery/ Test equipment	2
5.	Procurements of raw material	2
6.	Recruitment of Technical Staff etc.	2
7.	Trial Production	in 11 <sup>th</sup> month
8.	Commercial Production	in 12 <sup>th</sup> month

**Note:**

- 1. Many of the above activities shall be initiated concurrently
- 2. Procurement of raw materials commences from the 8<sup>th</sup> month onwards.

#### **5. TECHNICAL ASPECTS:**

##### **1. PROCESS OF MANUFACTURE:**

Clutch plate assembly consists of following components:

- 1. main drive plates
- 2. Liner shoe.

3. Shoe holder
4. Spring holder plate
5. Rivets of required size.
6. Spring.

The above-mentioned items are procured from actual manufacturers or suppliers and are assembled as required then they are painted and suitably packed for dispatch.

**2. QUALITY CONTROL AND STANDARD:**

The quality of the spare parts purchased for assembly purposes should be ascertained and after assembly, the performance of each part is checked manually.

**3. PRODUCTION CAPACITY:**

It is proposed that 6000 Nos. of clutch plates of assorted size for Rs. 38, 40,000/- will be assembled / manufactured per annum

**4. Motive Power: 8 HP Power will be required.**

**5. POLLUTION CONTROL:**

No pollution is involved in the manufacturing process of Auto Clutch plates because it is only an assembly unit.

**6. FINANCIAL ASPECTS:**

**1. FIXED CAPITAL:**

**A) Land and Building** (on rent per month):

Rent for covered shed of size 150 Sq. Meter  
@ Rs. 50/- per Sq. meter

7500/-

**B) Machinery & Equipments:**

Sl. No.	Description	Quantity	Amount Rs.
1.	Special purpose riveting Machine with One HP Motor along with electrical fittings.	Two	80,000/-
2	Bench Drilling M/c 13 mm Capacity, 0.75 HP Motor	Two	40,000/-
3.	Double ended pedestal grinder 300 mm wheel Dia, 2HP Motor	One	20,000/-

4.	Hand fly press double column, type No. 6	Two	80,000/-
<b>TOTAL</b>			<b>2,20,000/-</b>
<b>Other fixed assets</b>			
5	Dies, Tools and Accessories	L.S.	40,000/-
6.	Installation & Electrification	L.S.	22,000/-
7.	Office Equipments, furniture and working Table etc.	L.S.	50,000/-
8.	Preoperative expenses	L.S.	11,000/-
<b>TOTAL</b>			<b>123,000/-</b>

**TOTAL FIXED CAPITAL      3,43,000/-**

### **C) Working Capital (Per Month):**

#### **(i) Staff & labour:**

<b>Sl. No.</b>	<b>Designation</b>	<b>No. Of Persons</b>	<b>Salary/ Month Rs.</b>	<b>Total Salary per month Rs.</b>
<b>1</b>	Manager	1	10,000/-	10,000/-
<b>2.</b>	Forman/Supervisor	1	5,000/-	5,000/-
<b>3.</b>	Peon/Watchman	1	2,000/-	2,000/-
<b>4.</b>	Skilled Worker	2	4,000/-	8,000/-
<b>5.</b>	Semi Skilled Worker	4	3,000/-	12,000/-
<b>6.</b>	Helper	4	2,000/-	8,000/-
<b>7.</b>	Perquisites 15% of salary			6,750/-
<b>TOTAL</b>			<b>51,750/-</b>	

#### **(ii) Raw material requirement (per month):**

<b>S. No.</b>	<b>Description</b>	<b>Quantity</b>	<b>Rate</b>	<b>Value (Rs.)</b>
<b>1</b>	Main drive plate with shoe holder	500 No.	100/-	50,000/-
<b>2</b>	Liner Shoe	3000 No.	15/-	45,000/-
<b>3</b>	Spring Holder plate	500 Set	40/-	20,000/-
<b>4</b>	Plain/lock Washer	50 gms	100/-	5,000/-
<b>5</b>	Rivet of different sizes & sorts	500 Set	40/-	20,000/-

<b>6</b>	Liner	500Set	180/-	90,000/-
<b>7</b>	Spring	500Set	80/-	40,000/-
<b>TOTAL</b>				<b>2,70,000/-</b>

**(iii) Utilities (Per month):**

<b>S. No.</b>	<b>Description</b>	<b>Amount Rs.</b>
<b>1</b>	Power 8HP	4000/-
<b>2</b>	Water	1000/-
<b>TOTAL</b>		<b>5000/-</b>

**(iv) Other contingent expenses (per month):**

<b>S. No.</b>	<b>Description</b>	<b>Amount Rs.</b>
<b>1</b>	Rent	7500/-
<b>2</b>	Postage and stationery	2000/-
<b>3</b>	Telephone/Fax Charges	2000/-
<b>4</b>	Repair & maintenance	3000/-
<b>5</b>	Transport & conveyance charges	4000/-
<b>6</b>	Advt. & publicity	2000/-
<b>7</b>	Consumables tools, oils & lubricants etc.	3500/-
<b>8</b>	Miscellaneous expenditure	2000/-
<b>TOTAL</b>		<b>26000/-</b>

**D) Total recurring expenditure per month:**

**(I + ii + iii + iv) Rs. 3, 52,750/-**

**Working Capital for 3 months: Rs.10,58,250/-**

**E) Total Capital Investment:**

<b>S.No.</b>	<b>Description</b>	<b>Amount Rs.</b>
<b>1</b>	Fixed Capital	3,43,000/-
<b>2</b>	Working capital for 3 months	10,58,250/-
<b>TOTAL</b>		<b>14,01,250/-</b>

## **RESOURCES FOR FINANCE:**

<b>S. No.</b>	<b>Description</b>	<b>Proposed Investment Rs.</b>
<b>1</b>	Term loan from Financial Institutions (80% of Fixed Capital) at 14% p.a. rate of interest	2,74,400/-
<b>2</b>	Bank loan for 3 months (75% of working capital) at 14% p.a. rate of interest	7,93,700/-
<b>3</b>	Self raised capital from even funds & loan to meet the margin money needs at 18% p.a. rate of interest	3,33,150/-
<b>TOTAL</b>		<b>14,01,250/-</b>

### **F) Financial Analysis:**

#### **1. Cost of production per annum:**

<b>S. No.</b>	<b>Description</b>	<b>Amount Rs.</b>
<b>1</b>	Total recurring expenditure	42,33,000/-
<b>2</b>	Depreciation on Machinery and Equipment @ 10%	22,000/-
<b>3</b>	Depreciation on tools, Dies and fixtures @ 25%	10,000/-
<b>4</b>	Depreciation on office Equipment, furniture @ 20%	10,000/-
<b>5</b>	Interest on total capital investment @ 14%	1,96,175/-
<b>TOTAL</b>		<b>44,71,175/-</b>

#### **2. Turn over per annum:**

<b>S. No.</b>	<b>Item</b>	<b>Quantity</b>	<b>Rate/unit Rs.</b>	<b>Total Sales Rs.</b>
<b>1</b>	<b>Assembled auto clutch plates of assorted sizes</b>	<b>6000 No.</b>	<b>850/-</b>	<b>51,00,000/-</b>

### 3. Profit per annum (before taxes):

Turnover per annum-Cost of production per annum= **Rs. 6,28,825/-**

$$4. \text{ Net profit Ratio} = \frac{6,28,825 \times 100}{51,00,000} = 12.33\%$$

$$5. \text{ Rate of Return} = \frac{6,28,825 \times 100}{14,01,250} = 44.88\%$$

### 6. Break Even Point: Fixed Cost per annum:

S. No.	Description	Amount Rs.
1	Rent	90,000/-
2.	Depreciation on Machinery & Equipment @ 10%	22,000/-
3	Depreciation on tools, dies & fixtures @ 25%	10,000/-
4	Depreciation on office equipment, furniture @ 20%	10,000/-
5	Interest on total Capital Investment @ 16%	1,96,175/-
6	40% of Salary & wages	2,48,400/-
7	40% of Other Contingent (excluding rent)	88,800/-
8	40% of Utilities	24,000/-
Total Fixed Cost		6,89,375/-

$$\text{Break Even Point} = \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}}$$

$$= \frac{6,89,375 \times 100}{6,89,375 + 6,28,825} = 52.30\%$$



## **Name & Addresses of Machinery suppliers:**

1. M/s International Machine Tools Corporation, Bank Street, behind State Bank Of India, Fort, Mumbai (M.S.)
2. M/s machine /Tools traders, 25, Ganesh Chandra Avenue, Calcutta.
3. M/s R.D. Nanda & Sons, 56, Shrudhanand Marg, G.T. Road, New Delhi

## **Name & Addresses of Raw Material Suppliers:**

1. M/s Don Brake Liners, Madras
2. M/s Precision Gears Pvt. Ltd., Industrial Estate, Polo ground, Indore.
3. M/s yunus Spring Factory, Faridabad
4. M/s Tara Steel Industries, 6, Kanti Mansion, Kide Compound, Indore.