

I. Product & its uses

Feders, Spoons and hammers popularly known as Fender Kit in the automobile trade comprises a set of hand tools used for removing of dents on the bodies of light and heavy vehicles. The set of tools are made of steel, in different sizes and shapes to suit the different types of denting work.

II. Market Potential

With the increase in the number of vehicles on the road, the number of automobile service shops are steadily increasing. Painting and finishing of bodies has become part of the activity of such workshops where the above tools are used. It is felt that there is scope for manufacture of above tools for the open market. The machinery required for the manufacture of the above item can also be used for the manufacture of allied items.

III. Production Targets (per month)

Quantity 3000 sets

IV. Basis & Assumptions

The scheme has been calculated on the basis of 75% efficiency on single shift considering 25 working days in a month.

One set of fender spoons are hammers kit consists of 12 to 16 pieces.

Kit boxes and wooden handles will be purchased from the local market.

Heat treatment facilities will be availed of from other industries.

The above item can also be manufactured manually thus eliminating installation of spring hammer. However, the production will be less.

The cost of machinery and equipment as indicated refers to a particular machine and the prices are approximate.

The provisions made in other respects viz., raw material, personnel, utilities, overhead etc. are drawn on the basis of standard operations and average outputs. The costs indicated against each are approximate and based on local market conditions and observations.

V. Production Details & Process of Manufacture

The following operations are carried out for manufacture of this product.

1. Cutting of pieces.

2. Heating.
3. Forging of tools.
4. Heat treating of tools.
5. Grinding/finishing of faces of tools.
6. Painting of rough portion of tools.
7. Fitting of wooden handles.
8. Packing of tools.

VI. Quality Control & Standards

The tools will be manufactured as per the market requirements. There is no I.S.I. Specification for the above items.

VII. Land & Building

Covered area 150 sq. mtrs. Rented Rs. 1,500

VIII. Machinery & Equipments

	Nos.	Rs.
1. Spring hammer 65 kg. capacity for forging motorised with 3 HP motor	1	35,000
2. Bench Drilling machine 12 mm capacity	1	3,500
3. Grinding machine cum belt grinder (200 mm wheels, 100 mm belt)	1	4,500
4. Bench model Power Hacksaw Machine 100 mm cap. with 0.5 HP motor	1	3,500
5. Blacksmithy hearth complete with motorside blower—1 HP	1	4,500
6. Blacksmithy tools, hand tools equipments, etc.		7,000
7. Installation and electrification charges		5,000
8. Office furniture and equipment		5,000
		68,000

IX. Staff & Labour

1. Manager	1	1,500
2. Foreman/Supervisor	1	1,200
3. Office Assistant	1	600
4. Watchman	1	400
5. Skilled workers @ Rs. 600	3	1,800
6. Semi-skilled workers @ Rs. 500	3	1,300
7. Helpers @ Rs. 400	2	800
		7,800
+ Employees benefit @ 20%		1,500
		9,300

X. Raw Materials and Outside Purchase (Per Month)

	Rs.
1. Medium Carbon Steel 4.5 tons @ Rs. 12,000 per ton	54,000
2. Coal—2 tons	3,000
3. Kit box 250 nos. @ Rs. 60	15,000
4. Wooden handles, 4 handles per set @ Rs. 6 per set	1,500
5. Packing materials, paint etc.	1,500
6. Heat treatment charges @ Rs. 80 per set	20,000
	95,000

XI. Utilities (Per month)

Power and Water	700
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XII. Other Expenses (Per month)

1. Maintenance and repairs	200
2. Postage and stationery	400
3. Advertisement	1,000
4. Transportation charges	800
5. Consumable stores	300
6. Miscellaneous expenses	800
	3,500

XIII. Working Capital (Per month)

1. Salaries and wages	9,300
2. Raw Materials	95,000
3. Other expenditure	3,500
4. Utilities	700
5. Rent	1,500
	1,10,000

XIV. Total Capital Investment

1. Machinery and equipment	68,000
2. Working Capital for 3 months	3,33,000
	3,98,000

XV. Cost of Production (Per annum)

1. Rent	18,000
2. Salaries and wages	1,11,600
3. Raw materials	11,40,000
4. Other expenses	42,000
5. Utilities	8,400
6. Depreciation on machinery and equipment @ 10%	6,800
7. Interest on capital investment @ 15%	59,700
	13,86,500

XVI. Total Sales (Per annum)

By sale of 3,000 sets of fenders Spcons and hammers @ Rs. 500 each set . 15,00,000

XVII. Profitability (Per annum)

15,00,000 — 13,86,500 = 1,13,500
 % of profit on sales = 7.5%
 % of profit on capital investment = 28.5%

XVIII. Break Even Point

$$\frac{\text{Annual fixed cost} \times 100}{\text{Annual fixed cost} + \text{Annual Profit}}$$

Annual fixed cost

	Rs.
1. Rent	18,000
2. 40% other expenses & utilities	20,160
3. 40% of salary	44,640
4. Depreciation	6,800
5. Interest	59,700
	1,49,300
	1,49,300

$$\text{Break even point} = \frac{1,49,300}{1,49,300 + 1,13,500} = 56.8\%$$

XIX. Addresses of Machinery & Equipment Suppliers

1. M/s. National Small Industries Corpn., Okhla, New Delhi.
2. M/s. Industrial Equipment Co., Marar Road, Trichur-1.
3. M/s. Punjab Machinery Mart, G.B Road, Delhi-6.
4. M/s. International Machine Tools, Corpn., 5, Bank Street, P.O. Box No. 799, Bombay-23.

XX. Addresses of Raw Material Suppliers

1. M/s. Associated Steel Corporation, 2/19, Moti Mansion, 5th Khethwadi Lane, Bombay-4.
2. M/s. Sunrise Metal Corpn., 3, Ramnik Bhavan, 2nd Carpenter St., Bombay-4.
3. M/s. Nearest Branch of Steel Authority of India.
4. M/s. Steel Yard, 180-86, Dadachanji Bldg., Nesbit Road, Mazagon, Bombay-10.