

AUTOMATIC CARTRIDGE FUSES

1. INTRODUCTION

Automatic cartridge fuses commonly called glass fuses, are protective devices against short circuit used in automobile circuits. Now a days these fuses have extensive use in Electrical / electronic application circuits. Because of the low cost, reliability and less spaces as compared to other types of fuses / protective devices, these fuses are extremely used as back up protection in Electrical / electronic fields.

2. RAW MATERIALS

Glass tubes, Borax / copper sheets, Fuse wire, Solar metal, Packing covers etc.

3. MANUFACTURING PROCESS

The glass tubes (borax, neutral or soda depending upon the application) is procured from reputed manufactures. It is cut to required sizes. The end caps are made in a small fly press from out of 0.3 mm bars / copper sheet. The fuse wire is inserted in one of the caps. The glass tube is fitted on the cap and the other cap is fitted on the tube after passing the wire. The ends of wire are soldered and the fuse assembly is now tested and packed.

4. MANPOWER REQUIREMENT : 3

5. PROJECT COST

A. Fixed Capital	Rs.
Land & Building	Rental
Plant & Machinery	40,000
Miscellaneous fixed assets	5,000
Pre-operative expenses	5,000
	50,000
B. Working Capital (per month)	
Raw Material & Packing	5,000
Utilities	2,000
Wages and salaries	7,500

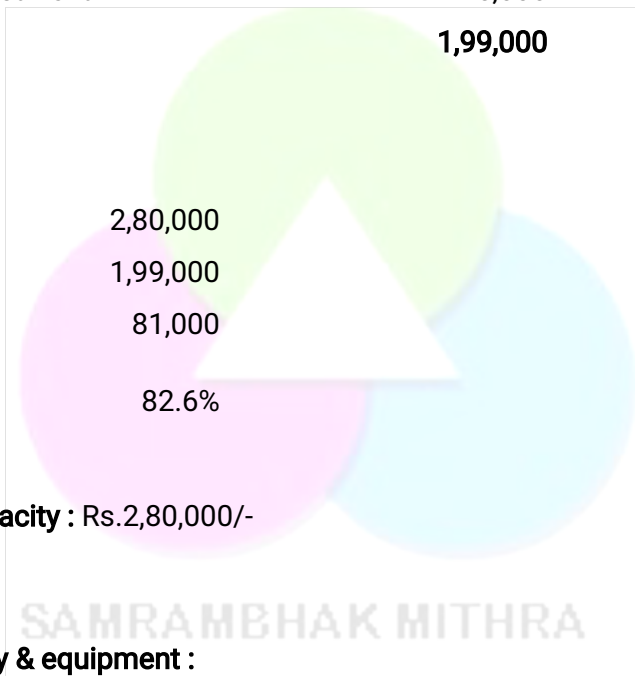
Other expenses	1,500
Sub Total	16,000
Working capital for 3 months	48,000
Total (A+B)	98,000

6. COST OF PRODUCTION / ANNUM

Annual recurring expenditure	1,92,000
Depreciation on machinery	2,000
Interest on investment	5,000

7. PROFITABILITY

Sales turnover	2,80,000
Operating expenses	1,99,000
Annual profit	81,000
Percentage of profit on investment / sales	82.6%



Annual Production capacity : Rs.2,80,000/-

List of Plant, Machinery & equipment :

- 1 Fly press
- 2 Dies for caps
- 3 Solder guns & other hand tools
- 4 Multimeter / Ammeter
- 5 Ohm meter
- 6 Test panel with meters