

# Automobile Control Cables

PRODUCT CODE	: 374846006
QUALITY AND STANDARDS	: IS 1978
PRODUCTION CAPACITY	: Qty. : 60,000 dozens (per annum) Value : Rs. 21.6 Lakhs
MONTH AND YEAR OF PREPARATION	: February, 2003
PREPARED BY	: Office of the Development Commissioner Small Scale Industries, Nirman Bhavan, New Delhi-110011

## INTRODUCTION

Auto control cables are widely used in various controls of two/three wheel vehicles. Twisting of desired/required number of S.S. wires, of standard wire gauge of different diameter into one cable makes these. The numbers of S.S. wires of standard gauge depends upon the end use of the auto control cables like brake wire, clutch wire, accelerator wire etc. Each type of cable is of different size depending upon the specific purpose of the cable. The S.S. standard gauge wires are twisted in the twisting machine and cut to the required length. One end of the cable is butted and dipped in the molten zinc to avoid ends opening and at the other end of the cable a Zinc stopper of required size/design is fixed by Die- casting process.

The Auto control cables are the fast moving spares used in two/three wheel vehicles and have very good replacement market. These cables enable the driver to control the various vehicle functions, and have a very wide

market all over the country. The machines, equipment and raw material for manufacturing these cables are easily available and the technology is fully indigenised. The Unit can be set up in all major cities or near the city area and requires very nominal investment in plant and machines.

## MARKET POTENTIAL

Auto control cables have a very wide and never ending replacement market, as the various control cables have to be replaced in any Scooter, Motorcycle, Auto Rickshaw, Moped etc. These are always required by Mechanics and Service stations. Different cables for different end use are packed in printed poly bags and marketed in dozen packing through the Auto part dealers/shops.

## BASIS AND PRESUMPTIONS

The project report has been prepared keeping in view the following basis and presumptions while calculating the cost of project and that of production:

1. Unit will run 8 hours per day for 300 working days in a year.
2. Unit will manufacture all types of Auto Control Cables for two/three Wheelers for brake, clutch, accelerator etc.
3. Poly bags are got printed as per the requirements from outside.
4. Rates in respect of Machines and Equipment are based upon the rates quoted by a particular manufacturer.
5. Rates of Raw material and other inputs are based upon those prevailing in local market.
6. Unit will be running on single phase power motors.

## TECHNICAL ASPECTS

### Process of Manufacture

S.S. wire of required standard wire gauge are reeled into the bobbins on the reel winder and loaded onto the bobbins holder of the wire twisting machine. Now with the help of wire twisting machine the required number of S.S. wires are twisted and converted into a single stranded wire of continuous length. The number of S.S. wires and gauge depend upon the type and use of Auto control cable to be made.

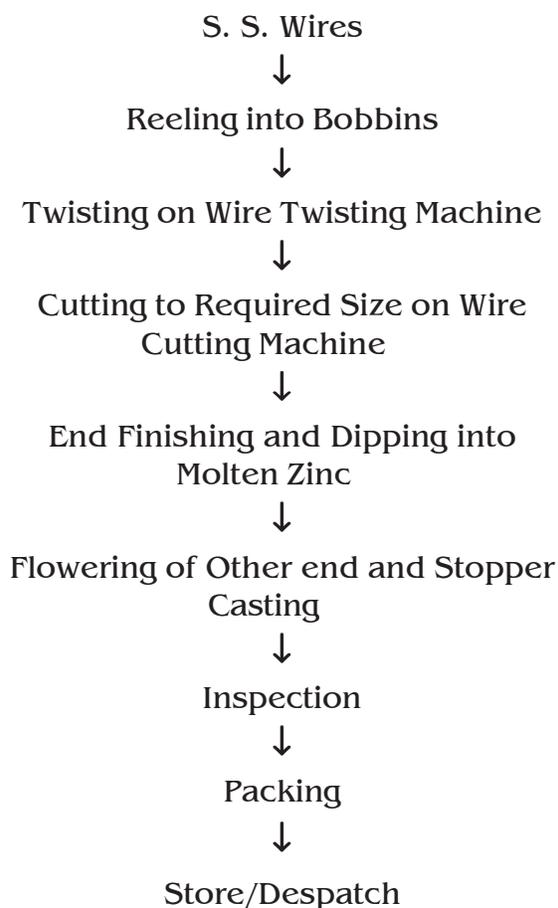
The stranded/twisted cable thus made is cut with the help of wire cutting machine into the required size. One end of this wire is butted and dipped into molten Zinc to avoid opening of strands of the cable. At the other end of the cable a zinc stopper of required design/size is fixed with help of a die on a die-casting Machine. The cables thus made are checked/inspected and packed in printed poly bags for marketing.

## IMPLEMENTATION SCHEDULE

The implementation schedule for the project will be as under:

- i) Preparation of project report after getting current rates for Machines and Raw material.
- ii) Arrangement for shade (rented) and electricity connection.
- iii) Provisional Registration.
- iv) Arrangement of Finance and placement of orders for Machinery and Equipment.
- v) Procurement and Installation of Machinery & Equipment.
- vi) Procurement of Raw material.
- vii) Commencement of production.

### Process Flow Chart



### Quality Control and Standards

The Bureau of Indian Standards has laid down following Indian Standard for Auto Control Cables IS 1978.

### Production Capacity

Based upon the single shift working of 8 hours per day and taking 25 working days in a month, the production of the unit will be as under:-

Production (per year)	60,000 Dozens
Value	Rs. 21.60 Lakhs

### Motive Power

Power requirement for the unit will be 5 HP (approx.) with single phase supply.

### Pollution Control

The production activities are very simple in nature and there is no pollution involved. However, while melting zinc provision for exhaust of gases be made through a small chimney and exhaust muffler.

## FINANCIAL ASPECTS

### A. Fixed Capital

#### (i) Land and Building Amt. (In Rs.)

It is proposed to have rented Building of about 700 Sq. fts. covered area @ Rs. 2000 (per month)	2000.00
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#### (ii) Machinery and equipments (proposed)

Sl. Particulars No.	Qty.	Amount (In Rs.)
1) Wire twisting machine (19 bobbins-1 hp motor)	4	72000
2) Pressure Die Casting machine	1	35000
3) Compressor (1 HP motor)	1	12000
4) Size Cutter	1	1000
5) Flower Machine	1	3500
6) Hand Press	1	2000

Sl. Particulars No.	Qty.	Amount (In Rs.)
7) Reel Winder	1	3000
8) Grinder	1	3200
9) Hand Cutter	2	1000
10) Dies (For Die-casting)	6	27000
11) Shearing Machine	1	600
12) Small Bobbins	100	1000
13) Big Bobbins	20	1800
14) Poly Bags sealing machine	2	1000
15) Jigs Fixture and other tools etc.	L.S.	10000
	Total	1,74,100
	<i>Installation and transportation charges @ 15%</i>	26115
	Total	200215
	<i>Office Equipment and Furnitures</i>	18785
	Total	2,19,000

### B. Working Capital (per month)

#### (i) Salary and Wages

Sl. Particulars No.	Nos.	Amount (In Rs.)
1 Production supervisor cum-Inspector	1	Self
2 Skilled Workers	2	6000
3 Semi-skilled Workers	3	6000
4 Un-skilled Worker-cum-Helper	1	1500
	Total	13500

#### (ii) Raw Material

Sl. Particulars No.	Qty.	Amount (In Rs.)
1. SS Wire @ Rs. 40/ kg.	1800 kg.	72000
2. Zinc Alloy @ Rs. 50/Kg.	150 kg.	7500
3. L.P.G. cylinders	5 Nos.	2000
4. Packing Material (poly bags printed)	L.S.	6000
	Total	87500

(iii) Utilities (per month)

Sl. Particulars No.	Nos.	Amount (In Rs.)
1 Power requirement- 5 HP single phase supply Electricity Charges (5× 0.746×8×25×4.50)		3357
2 Other Misc. Expenses	L.S.	1000
Total		4357

(iv) Other Contingent Expenses

Sl. Particulars No.	Nos.	Amount (Rs.)
1 Maintenance/Repair	L.S	1000
2 Postage and Stationery	L.S	500
3 Travelling and Conveyance	L.S	2000
4 Misc. and Insurance	L.S	500
Total		4000

(v) Working Capital (per month)

Sl. Particulars No.	Amount (In Rs.)	
1 Rent	2000	
2 Raw Material	87500	
3 Salary/Wages	13500	
4 Utilities	4357	
5 Other Contingent Expenditure	4000	
Total		111357

C. Total Capital Investment

(i) Fixed Capital	Rs. 2,19,000
(ii) Working capital for 3 Months	Rs. 3,34,071
Total	Rs. 5,53,071
Say	Rs. 5,53,000

FINANCIAL ANALYSIS

(1) Cost of Production (per year)

Sl. Particulars No.	Amount (In Rs.)
1 Total Recurring expenditure	13,36,284
2 Depreciation on Machines @ 10%	20,000
3 Depreciation on Office Equipment @ 20%	3,800
4 Interest on capital @ 16%	88,500
Total	14,48,584
or Say	14,48,500

(2) Turn-over (per year)

Sl. Particulars No.	Amount (In Rs.)
1 By sale of 60000 Dozens of auto control cables of various types at an average rate of Rs. 30 per dozen	1800000
<i>Less sale expenses @ 5%</i>	90000
Total	1710000

(3) Profit (per year) Rs. 17,10,000–14,48,500  
= Rs. 2,61,500

(4) Profit on Sales 15.29%

(5) Rate of Return 47.28%

(6) Break-even Point

Fixed Cost	(In Rs.)
Rent building	24,000
Depreciation	23,800
Interest on Capital	88,500
40% of staff and labour	64,800
40% of Other Contingent Exp. and Utilities	34,900
Total	2,36,000

$$\begin{aligned} \text{B.E.P.} &= \frac{2,36,000 \times 100}{2,36,000 + 2,61,500} \\ &= 48\% \end{aligned}$$

Addresses of Machinery Suppliers

1. M/s. Lolita Manufacturing Works (Regd.)  
9340, Katra Ganga Vishan, Gaushala Road, Kishanganj, New Delhi-110006
2. M/s. Ajit Wire Products  
Gokul Da Bagh, Near 100 Ft. Road, Amritsar-143006
3. M/s. S. S. Sabharwal and Sons  
664, Military Road, Anand Parbat, Industrial Area, New Delhi-110005

Raw Material  
Local Market.