# PROJECT PROFILE ON CONTROL PIPES FOR TWO WHEELERS

NAME OF THE PRODUCT: CONTROL PIPES FOR TWO WHEELERS.

QUALITY & STANDARD : As per Specification of Two Wheelers Manufacturers.

PRODUCTION CAPACITY: The production capacity of the unit at 75% capacity

utilisation.

Item Quantity Value (Rs.)
Control Pipes of different 1,20,000 Nos. 28,80,000/-

designs.

MONTH & YEAR OF

PREPARATION

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# A) INTRODUCTION

A Throttle Control Pipe is essential part of any kind of two wheelers. The function of Throttle Control Pipe is to control the cleaning of the carburetor i.e. control of speed of the vehicle by controlling the flow rate of air fuel mixture into the engine.

The function of a Gear Control Pipe is to facilitate changing of gear in a geared two wheelers. These control pipes are fitted on either side of the handle bar (steering) of a two wheeler. Gear control pipes are not required for motor cycles/bikes where gear shifting is not done by hand.

The sizes and designs of these control pipes are different for different models of two wheelers. For some of the models of two wheelers diameter of control pipes is or the order of 25 mm thickness, 1.5 mm and length 150 to 250 mm. The control pipes are normally made of good quality ERW (Electric Resistance Welded) steel pipes.

#### **B) MARKET POTENTIAL**

The demand of the control pipes is closely linked with production of two wheelers in the country. These are required mainly as original equipment but these pipes have also replacement demand as a spare part.

India is second largest two wheelers market in the world.

The production figures for two wheelers for past years are as follows:

Two Wheelers	Financial Year 2001-02	Financial Year 2002-03	Financial Year 2003-04	Financial Year 2004-05	Financial Year 2005-06
Motor Cycles	2906323	3876175	4355168	5193894	6201214
Scooters	937506	848434	935279	987498	1020013
Mopeds	427498	351612	332294	348437	379574

- Total production in the year 2006-07 was approx. 90,00,000.
- In the year 2011-12 the market is forecasted to have a volume of 15.2 million units and increase of 79.5% since 2006-07.
- Two Wheelers export has grown by 20.65 since financial year 2006.

Per capita two wheeler possession (per thousand people)

 Taiwan
 590

 Thailand
 286

 Malaysia
 258

 China
 52

 India
 37

So there is a lot of scope for expansion of industries.

#### C) BASIS & PRESUMPTIONS

- 1. The basis for calculation of production capacity is on single shift basis, working of 25 days per month on 75% efficiency. The required for achieving envisaged capacity utilization is assumed as one year.
- 2. BEP for the scheme has been calculated on full capacity utilization.
- 3. Rate of interest has been taken as 13% on an average. This, however, is likely to vary depending upon the financial outlay and the location of the unit.
- 4. Labour wages have been taken on the basis of minimum applicable. These are likely to change depending upon the location of the project.
- 5. Rental charges of rs.25/- per sq. mtr. Per month has been taken on an average. This figure is likely to vary depending upon the location of the unit.
- 6. Margin money requirement differs from project to project and type of entrepreneurs such as women, SC/ST, physically handicapped etc. and the minimum margin money usually asked by the financial institutions and banks is 15%. Margin money upto 25% in some cases is also asked. The entrepreneurs may check the margin money requirement from financial institutions for the project.

- 7. Term of loan differs from one financial institution to another and in gestation minimum period is normally 6 months and it could be 2 years. Maximum period for repayment of loan is 7 years including gestation period. The exact terms and conditions may be found by the entrepreneurs from the concerned financial institutions.
- 8. The cost of machinery & equipments as indicated in the scheme are approximate those ruling at the time of preparation of the scheme. The entrepreneur may check the exact price for specific make and model of the machine selected.
- 9. Non-refundable deposits, cost of preparation of project report etc. may be considered under pre-operative expenses.
- 10. The provision made in other respect viz; raw materials, utilities, overheads etc. are drawn on the basis of standard variation and output. The cost indicated against each are approximate and based on local market condition and observations. The entrepreneur may find out the exact cost from the concerned sources.
- 11. The operative period of this project is estimated to be about 10 years considering technology obsolance.

#### D) IMPLEMENTATION SCHEDULE:

SI. No.	Activity				Period
1.	Quotation period	$\neg$			1 month
2.	Provisional Registration				
3.	Sanction of loan				2 months
4.	Delivery of machines	&	equipments,	installation,	4 months
	electrification, testing etc.				

# E) TECHNICAL ASPECTS:

## (i) Process of Manufacture:

The manufacturing process is as follows:

- i) Cutting of ERW pipes to desired length on power hacksaw or Adda Lathe.
- ii) D. D. Grinding of pipes on centreless grinder.
- iii) Making of slots /holes on milling machine/drilling machine.
- iv) Deburring by hand or on buffing machine.
- v) Inspection & packing.

## (ii) Quality Control and Standards

The control pipes should be manufactured strictly as per drawing of two wheelers manufacturer, because any deviation beyond the tolerance limits will definitely lead to fitment problem as these pipes are subjected to close assembling.

The zinc plating of pipes should be good and plating thickness should be order of 7-8 microns. Yellow passivation after zinc plating improves the corrosion resistance of pipes and adds to aesthetics of pipes.

## (iii) Production Capacity:

Item Quantity Value (Rs.)
Control Pipes of different 1,20,000 Nos. 28,80,000/designs.

## (iv) Approximate Power Requirement:

10 H.P.

# (v) Pollution Control:

Not required.

# F) FINANCIAL ASPECTS:

## A) Fixed Capital:

## (i) Land & Building:

Land 250 sq. mtr. 150 sq.mtr. covered area, remaining open area. Rs. 8,000/-Rented

Two months deposit Rs. 16,000/-

## (ii) Machinery & Equipment:

SI. No	Item	Qty. (Nos.)	Amount (In Rs.)
1.	Centre-less Grinding Machine, grinding capacity dia 50mm, length 500 mm	1	4,50,000/-
2.	Lathe (Adda) bed length 1000 mm, fitted with 2 HP motor	1	40,000/-
3.	Milling Machine (Adda) fitted with 1 HP motor	2	80,000/-
4.	Bench Grinder	1	8,000/-
5.	Buffing Machine 8" dia of wheel	1	6,000/-
6.	Bench Drilling Machine 13 mm cap.	1	8,000/-
	Total:		5,92,000/-

7.	Electro –Civil installation @ 10@ of the cost of machinery		59,200/-
8.	Dies, Punches, Jigs and fixtures, Hand Tools & Measuring	1	75,000/-
	Instruments etc.		
9.	Office Furniture, Computer with UPS and Printer and other		1,00,000/-
	appliances.		
	Total:		8,26,200/-

#### (iii) Pre-operative Expenses:

Rs. 25,000/-

Total Fixed Capital= (i+ii+iii)

Rs. 8,67,200/-

# B) Working Capital (Per Month):

# (i) Personnel:

SI. No.	Designation	No.	Salary	Total (Rs.)	
1.	Manager / Supervisor	1	10000/-	10,000/-	
2.	Skilled Workers	2	6000/-	12,000/-	
3.	Semi-Skilled Workers	3	5000/-	15,000/-	
4.	Contractual Workers	LS		15,000/-	
			Total:	52,000/-	
	Add Perquisites @ 15% of salary & wages.				
			Total:	59,800/-	

# (ii) Raw Materials Requirements:

SI.	Particulars	Ind/	Quantity	Rate	Amount
No.		Imp			(In Rs.)
1.	ERW Pipes	Ind	2000	36/mtr.	72,000/-
			Mtrs.		
2.	Zinc Plating from market			LS	25,000/-
3.	Packing material and other			LS	10,000/-
	consumables				
				Total:	1,07,000/-

#### (iii) Utilities:

1.	Power 1200 KWH @ Rs. 5/- per KWH	6,000/-
2.	Water	500/-
	Total:	6,500/-

#### (iv) Other Contingent Expenses (P.M.):

1	Rent	8,000/-
2	Telephone/Cell phone	1,000/-
3	Postage & Stationery	1,000/-
4	Repairs & Maintenance	1,000/-
5	Transportation charges	3,000/-
6	Insurance	1,000/-
7	Sales expenses	4,000/-
8	Misc. expenses	1,000/-
	Total:	20,000/-

# (v) Working Capital / Total Recurring Expenditure (P.M.):

1.	Personnel	59,800/-
2.	Raw Materials	1,07,000/-
3.	Utilities	6,500/-
4.	Other Contingent Expenses	20,000/-
	Total:	1,93,300/-

(vi) Total working capital for  $1\frac{1}{2}$  months = Rs.2,89,950/- Say: Rs. 2,90,000/-

#### C) TOTAL CAPITAL INVESTMENT:

il.	Fixed Capital Working Capital for 1½ months	8,67,200/- 2,90,000/-
	Total	: 11,57,200/-

# **G) FINANCIAL ANALYSIS:**

# i) Cost of Production (Per annum)

SI. No.	Particulars	Value(Rs.)
1.	Total recurring expenditure	23,19,600/-
2.	Depreciation on machinery and equipment @ 10%	59,200/-
3.	Depreciation on Dies, Tools, Fixtures, Office Equipment &	35,000/-
	appliances etc. @ 20%	
4.	Interest on Total Capital Investment @ 13%	1,50,436/-
	Total: -	25,64,236/-

#### ii) Sales/Turnover (Per Annum)

SI.	Item	Quantity (Nos.)	Rate (Rs.)	Value (Rs.)
No.				
1.	By sale of Control Pipes	1,20,000 Nos.	24/-per pipe	28,80,000/-
2.	By sale of Scrap/misc. job work			60,000/-
			Total:	29,40,000/-

#### iii) NET PROFIT (Per annum) Before Taxation:

Turn Over	(-)	Cost of Production		3,75,764/-
29,40,000/-	(-)	25,64,236/-	=	3,75,764/-

#### iv) PROFIT RATIO ON SALES (Per Annum):

 $\frac{\text{Profit/annum X 100}}{\text{Turnover/Annum}} \qquad \frac{3,75,764/-\text{ X 100}}{29,40,000/-} = 12.78\%$ 

# v) RATE OF RETURN (Per Annum):

 $\frac{\text{Net Profit/annum X 100}}{\text{Total Capital Investment}} \qquad \frac{3,75,764/\text{- X 100}}{11,57,200/\text{-}} \qquad = \qquad \qquad \textbf{32.47\%}$ 

#### **BREAK EVEN POINT**

#### **Fixed Cost:**

1.	Rent	Rs.	96,000/-
2.	Total Depreciation	Rs.	94,200/-
3.	Interest on Investment @ 13%	Rs.	1,50,436/-
4.	40% of Salary & Wages	Rs.	23,920/-
5.	40% of other contingent expenses (excluding rent &	Rs.	57,600/-
	insurance)		
	Total:-	Rs.	4,22,156/-

#### B.E.P.

 $\frac{\text{Fixed Cost X 100}}{\text{Fixed Cost + Profit}} \qquad \frac{4,22,156/\text{- X 100}}{4,22,156/\text{- + 3,75,764/\text{-}}} = 52.9\%$ 

#### Names & Address of Machinery & Equipment Suppliers:

- M/s Chhabra Industrial Corporation,
   B-8, Jindal Trust Bldg., Asif Ali Road, New Delhi 110001.
- 2. M/s United Machine Tools corporation, GT Road, Bholewal, Ludhiana -3.
- M/s Pioneer Engg. Works,
   5-B, Textile Colony, Industrial Area, Ludhiana 141003.
- 4. M/s Chawla Mechanical Works, 1727, Dashmush Nagar, Street No.12, Gill Road, Ludhiana 141003.
- 5. M/s Ashok Machine Tools, Madvi Plot Rajkot – 360002.
- 6. M/s HMT Ltd., Byawara Road, Ajmer, Rajasthan.
- M/s Darshan Machine Tools,
   Gali No. 1, Guru Nanak Colony, Opp. Guru Nanak Engg. College, Gill Road,
   Ludhiana 141003.

#### **Address of Raw Material Suppliers:**

- M/s Quality Steel Tubes, Bindki Road, Chaudagra, Fatehpur.
- 2. M/s Rajendra Steel Tubes, Rania, Kanpur.
- 3. Local Market.