Project Profile

PRODUCT	**:**	**COOLANT PUMP**
PRODUCT CODE	**:**	**NIC-29229** **AISCC- 75128**
QUALITY & STANDARDS	**:**	**IS-2161-1962**
PRODUCTION CAPACITY	**:**	**9000 NOS.**
VALUE	**:**	**RS. 1,62,00,000/-**
MONTH & YEAR OF PREPARATION	**:**	**SEPTEMBER, 2011**
PREPARED BY	**:**	**MECHANICAL DIVISION** MSME-DEVELOPMENT INSTITUTE 10-Industrial Estate, Pologround, Indore (MP) – 452 015 PH : 0731-2421540/2421659/2421037 Fax: 0731-2420723 Email:dcdi-indore@dcmsme.gov.in

INTRODUCTION :

Coolant pumps are used in various machine tools, coolant pumps circulate coolant to the desired places where heat is generated due to manufacturing processes like cutting, machining, forming, drilling, etc. Due to constant growth of machine tool industry, the demand for coolant pump is also increasing. Reserved list S.No. 524.

MARKET POTENTIAL :

With the increasing number of machine tools required the coolant pumps would be needed in large numbers.

BASIS & PRESUMPTION :

1. The project profile has been prepared on the basis of single shift of 8 hours each day and at 75% efficiently.

2. It is presumed that in the 1st year, the capacity utilization will be 70% followed by 85% in the next year and 100% in the subsequent years.

3. Labour wages has been considered as per prevailing market rates, which may vary from place to place and the minimum wages fixed by concerned authorities.

4. Interest on fixed capital and working capital has been calculated at an average rate of 14% per annum.

5. A provision of 30% project cost/investment has to be made by the entrepreneur for margin money.

6. The cost lf land and other constructed/built up shed and office has been taken as per prevailing market rates. However, this may vary from place to place. In this profile, land & building is considered on rented……

7. The rates quoted in respect of machinery, equipments and raw material are those prevailing market rates at the time of preparation of this project profile and are likely to vary from supplier to supplier, place to place and time to time.

IMPLEMENTATION SCHEDULE

01.	Preparation of the project report	6 weeks
02.	Provisional registration as SSI	1 month
03.	Financial arrangements	8 months
04.	Purchase and procurement of machinery	8-10 months
05.	Installation of machine 2-3 months	
06.	Electrification	2-3 months
07.	Recruitment of stall and workers	2-3 months
08.	Total run	12-14 months

TECHNICAL ASPECTS :

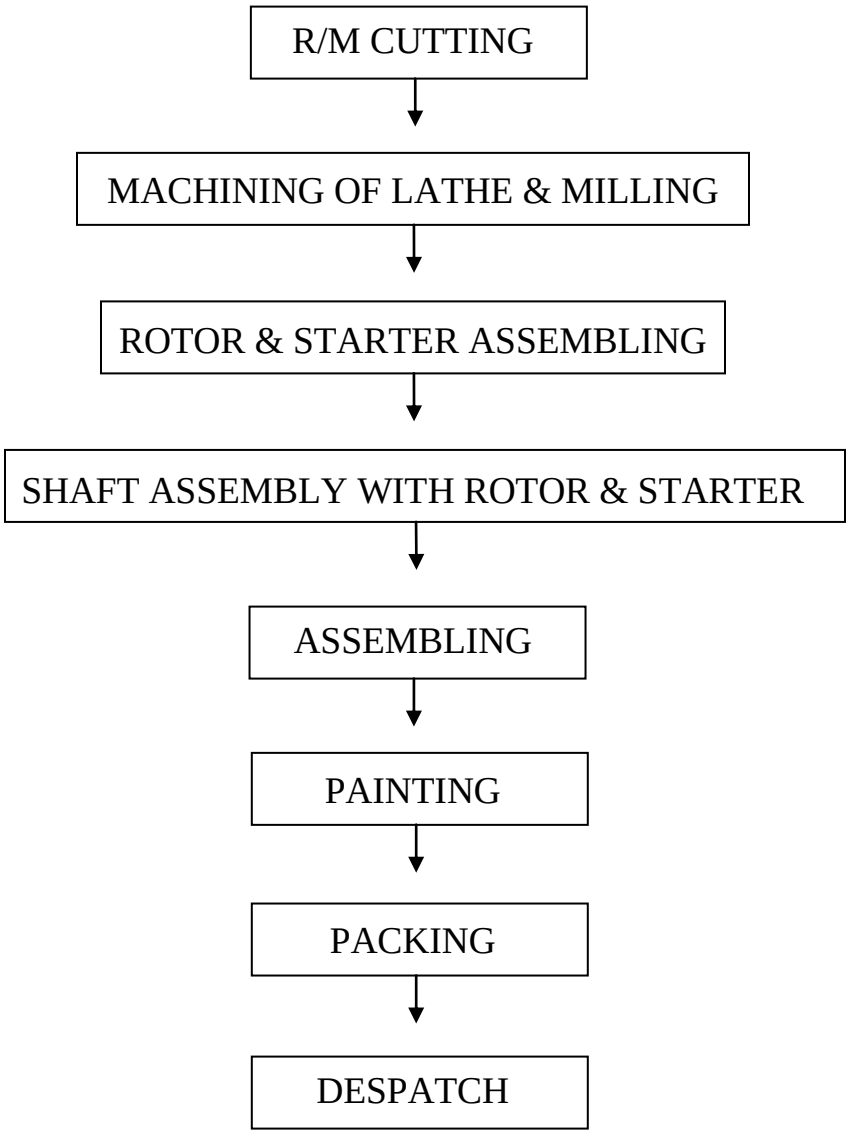
PROCESS OF MANUFACTURING :

It is proposed to purchase all casted part of coolant pumps from outside and machine them in the factory. The manufacturing processes proposed to be done in the factory are machining, assembly and testing mainly.

QUALITY CONTROL AND STANDARD :

Coolant pumps are proposed to be manufactured as per IS: 2161-1962.

PROCESS FLOW CHART



PRODUCTION CAPACITY (Per Annum)

Quantity : 9000 nos. P.A.
Value : Rs. 1,62,00,000/-

MOTIVE POWER REQUIREMENT :

Approximate power requirement - 20 K.W.

POLLUTION CONTROL

Making is not a pollution creating industry. As such no special type of pollution control equipments need to be installed.

ENERGY CONSERVATION :

Suitable energy efficient motor is to be used on proposed machines with provision of recommended shunt capacitor.

TECHNICAL ASPECTS :

1. Fixed Capital :
Land and Building - Building / covered area (rented)
5000 sft. @ 5/- sft. - Rs. 25,000/-

2. Machinery and equipment

S.No.	Description of Machine	No.	HP	Value
01.	Coil winding machine with complete accessory & electricals.	01	1/2	35,000/-
02.	Lathe machine 6' with complete accessory & electricals.	01	03	2,00,000/-
03.	Drilling machine 3/4" capacity with complete accessories &			

	electricals.	01	01	40,000/-
04.	Shaper machine 24" stroke with accessories & electricals	03	01	1,50,000/-
05.	Fly press no. 3	01	-	20,000/-
06.	Universal Milling machine with all accessories.	01	3 HP	2,00,000/-
07.	Bench grinder 10" size	01	1 HP	30,000/-
08.	Spray painting equipments with compressors	01	1 HP	35,000/-
09.	Dynamic balancing machine	01	1/2 HP	40,000/-
	Total		**-**	**7,50,000/-**
	Installation & electrification @10%	-	-	75,000/-
	Office equipments and furniture	L.S.	-	50,000/-
	Total			**9,00,000/-**

WORKING CAPITAL (Per month)

i. Personnel :

S.No.	Designation	No.	Salary	Total (Rs.)
01.	Manager	01	15000	15,000
02.	Foreman	01	8000	8,000
03.	Accountant/Clerk	01	6000	6,000
04.	Skilled worker	05	5000	25,000
05.	Semi Skilled worker	04	4000	16,000
06.	Helper	02	3000	6,000
07.	Painter	01	5000	5,000
08.	Peon/Chowkidar	01	2500	2,500
	Total			**85,200**
	Add : Perquisites @ 15% of salary			12,780
	Total			**97,980**

ii. Raw Material (Per month) :

S.No.	Particulars	Qty.	Rate	Value (Rs.)
01.	Super enameled Copper wire	40 Kg.	350/- kg.	14,000
02.	Steel Stampings	70 Kgs.	150/- kg.	10,500
03.	MS Rod for sheltering	50 Kgs.	60/- kg.	3,000
04.	Casted components	300 Kgs.	70/- kgs.	21,000
05.	Ball Bearing	200 Nos.	80/- piece	16,000
06.	Hardware	L.S.	-	25,000
	Total			**8,95,000**

Power	400 KwH	@ Rs. 5/- Kwh	20,000/-
Water	L.S.		1,000/-
			21,000/-

iv. Other contingent Expenses (Per month)

01.	Rent	25,000/-
02.	Transport	5,000/-
03.	Repair & maintenance	3,000/-
04.	Office expenses	5,000/-
05.	Consumable store	5,000/-
06.	Sales & other expenses	15,000/-
07.	Insurance @ 0.5%	400/-
08.	Telephone and postage	8,000/-
09.	Misc.	2,000/-
	Total	**68,400/-**

TOTAL RECURRING EXPENDITURE (Per month)

01.	Personnel	97,980/-
02.	Raw material	8,95,000/-
03.	Utilities	21,000/-
04.	Other contingencies expenses	68,400/-
	Total	**10,82,380/-**

Working Capital for 3 months - 10,82,380/- x 3 32,47,140/-

TOTAL CAPITAL INVESTMENT :

Fixed Capital	9,00,000/-
Working Capital for 3 months	32,47,140/-
Total Capital investment	41,47,140/-

FINANCIAL ANALYSIS

1. Cost of Production (per year)

i.	Total recurring cost	1,29,88,560/-
ii.	Depreciation on machinery & equipments @ 10%	75,000/-
iii.	Depreciation on Office equipments	10,000/-
iv.	Depreciation on tools & die @ 25%	25,000/-
v.	Interest on total investment @ 14% per annum	5,80,599/-
	Total	1,36,79,159/-

2. Turn Over (Per year)

Item	**Qty.**	**Rate**	**Value (Rs.)**
By Selling	9000 nos.	1800/- piece	1,62,00,000/-

3. Net Profit (Per year)

Total turn over – cost of production =
1,62,00,000/- - 1,36,79,159/- = Rs. 25,20,841/-

Net Profit Ratio :

$$\frac{\text{Net profit}}{\text{Turn over}} \times 100 = \frac{25,20,840/-}{1,62,00,000/-} \times 100 = 15.56\%$$

4. Rate of Return :

$$\frac{\text{Net profit}}{\text{Total Investment}} \times 100 = \frac{25,20,840}{41,47,140} \times 100 = 60.78\%$$

Break Even Point :

Fixed Cost :		**(Rs.)**
01.	Rent	3,00,000/-
02.	Depreciation on Machinery & equipments	75,000/-
03.	Depreciation on Office equipments	10,000/-
04.	Depreciation on Tools & dies	25,000/-
05.	Interest on total investment @ 14% per annum	5,80,599/-
06.	40% of salary and wages	4,70,304/-
07.	40% of utilities and other contingent expenses (excluding rent)	7,72,800/-
	Total Fixed	**22,33,703/-**

B.E.P. =

$$\frac{\text{Fixed cost}}{\text{Fixed cost + Profit}} \times 100$$

$$\frac{22,33,703}{22,33,703 + 25,20,841} \times 100 = 46.98\%$$

<u>Machinery Suppliers :</u>

1. Machinery Imper Coprn. 27, Nagdevi Street, Bombay - 3
2. New Sardar Foundary, Cinema Road, Batala (Punjab)
3. Leading Engg. Works, 31, Rohtak Road, New Delhi
4. Machinery & Spares, Appollo Street, Fort, Mumbai - 1
5. Machinery Manufacturing Corporation, Medows Street, Fort, Mumbai-1

- - - - - - - -