

Aluminium Seal For LPG Cylinder

PRODUCT CODE	: 335902006
QUALITY AND STANDARDS	: Buyer's Specifications
PRODUCTION CAPACITY	: Qty. : 180 lakhs (per annum) Value : Rs. 40.20 Lakhs
MONTH AND YEAR OF PREPARATION	: February, 2003
PREPARED BY	: Small Industries Service Institute 111-112, B. T. Road, Kolkata - 700035

INTRODUCTION

The Aluminium Seal is used in the LPG Cylinder as a security measure i.e. before delivery to the customers. So no body can tamper with it and use the gas partly, so as to avoid customer being cheated.

Working Hours	-	8 Hrs./day
No. of Shifts	-	1/ day.
Working days	-	300/year
Labour Charges	-	As per the Minimum Wages Act.

MARKET POTENTIAL

This type of product is required by all the manufacturers of LPG Bottles, i.e. I.O.L., HPCL, BPCL etc. The product has got increasing and steady demand as the production of LPG cylinders is increasing day by day.

BASIS AND PRESUMPTIONS

The basis of calculation of production capacity is based on present local market rates on single shift per day and efficiency at 70% of installed capacity. The cost of machinery and equipments as indicated in this profile refer to a particular make and prices are approximate.

IMPLEMENTATION SCHEDULE

This project will take its time of 7 to 8 months from the date of approval. Break up of activities with expected time and schedule is given below:

Sl.No.	Activity	Period
1.	Market Survey and Scheme Preparation	2 Months
2.	SSI approval and registration	1 Month
3.	Sanction of Loan and Disbursement	2 to 5 Months
4.	Placement of Order and Procurement of machines	5 to 6 Months
5.	Installation of machines and power connection	6 to 7 Months
6.	Trial run and Commencement of production	7 to 8 Months

TECHNICAL ASPECTS

Process of Manufacture

Al-Sheets (0.2/0.3 mm or 36 SWG) of size 20" × 30" cutted from the continuous coil, will be used as the raw material. The above raw material will be fed into high speed power press for blanking and drawing. After the operation of power press, the material will be processed in the knotching press for keeping gap. Finally, the trimming operation is done, for removal of extra material and polishing, the seals are polished in the polishing barrel. The finished Al-sheets are inspected, properly packed and despatched.

Quality Control and Standards

There is no Indian Standard Specification for this item. All the parameters are covered by I.O.L./H.P. Specification vide Ref. No. RD 15G 214.

FINANCIAL ASPECTS

A. Fixed Capital

(i) Land and Building (Rented) Amount (In Rs.)

Covered Area 400 Sq.Ft.	2,500/ month
-------------------------	--------------

(ii) Machinery and Equipments

Sl. No.	Description	Qty.	Rate (Rs.)	Amount (In Rs.)
1.	High Speed Power Press-10 Ton Cap. Motorised	4	25000	1,00,000
2.	Trimming Machine Motorised	2	12,000	24,000
3.	Knotching Machine-Hand operated	2	5,000	10,000
4.	Treadle Shearing Machine	1	20,000	20,000
5.	Polishing Barrel	2	10,000	20,000
6.	Composite	L.S.	-	30,000

Sl. No.	Description	Qty.	Rate (Rs.)	Amount (In Rs.)
	Tools and Dies, Work Bench etc.			
7.	Installation and Electrification Charge		-	20,000
8.	Office Furniture	L.S.	-	5,000
	Total			2,29,000

B. Working Capital (per month)

(i) Staff and Labour (per month)

Sl. No.	Designation	No.	Amount (In Rs.)
1.	Manager/Supervisor	1	3,500
2.	Machine Operator	4	10,000
3.	Skilled Worker	4	8,000
4.	Helper/Peon	2	3,000
	Total		24,500

(ii) Raw Material (per month)

Item	Qty.	Rate (Rs.)	Amount (In Rs.)
Al-Sheet 0.2 mm thick in the form of roll.	3 Ton	84/ Kg.	2,52,000
Total			2,52,000

(iii) Other Contingent Expenses (per month) (In Rs.)

1.	Rent	2,500
2.	Power and Water	3,000
3.	Consumable Stores	2,000
4.	Packaging, Grease, Kerosene Oil etc.	10,000
5.	Office Expenses	1,500
	Total	19,000

(iv) Total Working Capital (per month) (In Rs.)

1.	Raw Material	2,52,000
2.	Staff and Labour	24,500
3.	Other Contingent Expenses	19,000
	Total	2,95,500.00

C. Total Capital Investment

1.	Machinery and Equipment	Rs. 2,29,000
2.	Working Capital (for 3 months) 2,95,500 × 3	Rs. 8,86,500
	Total	Rs. 11,15,500

FINANCIAL ANALYSIS

(1) Cost of Production (per annum) Amt. (In Rs.)		
1. Recurring Expenditure	35,46,000	
2. Depreciation on Machinery and Office Equipment @ 15%	34,350	
3. Interest on total capital investment @ 16%	1,78,500	
Total	37,58,850	
Say	37,59,000	

(2) Turn-over (per year) Amt. (In Rs.)		
By sale of 180 Lakhs pieces of Aluminium Seal @ Re. 0.21 each	37,80,000	
By sale of scrap @ Rs 40 per Kg. for 6000 Kgs.	2,40,000	
Total	40,20,000	

(3) Net Profit

$$\text{Rs. } 40,20,000 - 37,59,000 = \text{Rs. } 2,61,000$$

(4) Net Profit Ratio

$$= \frac{\text{Profit} \times 100}{\text{Sales}}$$

$$= \frac{2,61,000 \times 100}{40,20,000}$$

$$= 6.5\%$$

(5) Rate of Return

$$= \frac{\text{Net Profit} \times 100}{\text{Total Capital Investment}}$$

$$= \frac{2,61,000 \times 100}{11,15,500}$$

$$= 23.4\%$$

(6) Break-even Point

Fixed Cost	Amt. (In Rs.)
Rent	30,000
Interest	1,78,500
Depreciation	34,350
40% of Salary	1,17,600
40% of Other Contingent Expenses	91,200
Total	4,51,650

$$\text{B.E.P.} = \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}}$$

$$= \frac{4,51,650 \times 100}{4,51,650 + 2,61,000}$$

$$= 63.3\%$$

Addresses of Machinery Suppliers

1. M/s. Batliboi and Co.
190-A, Forbes Street,
Fort, Mumbai-1.
2. M/s. H.P. Singh
75, Ganesh Ch. Avenue,
Kolkata-13.
3. M/s. Oriental Machinery Works
23, R.N. Mukherjee Road,
Kolkata-13.