

# Domestic Pressure Cookers

PRODUCT CODE	: 345301005
QUALITY AND STANDARDS	: IS 2347:1995 for Domestic Pressure Cookers IS 1766:1994 on Rubber Gaskets for Cookers
PRODUCTION CAPACITY	: Qty. : 27,000 Nos. (Per annum) Value : Rs. 128.79 Lakhs
MONTH AND YEAR OF PREPARATION	: April, 2003
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## INTRODUCTION

The pressure cookers are extensively used in household for preparing food. The pressure cookers have preference over the conventional cooking utensils due to the advantage of retaining the nutritive value and flavour of the cooked food and less time required for cooking and thus effecting considerable savings in time and fuel. It is a closed cooking vessel for use with external heat source, capable of maintaining working steam pressure of 1.0 Kg.Sq. cm. The full liquid capacity of vessel i.e. total internal volume with lid in position, ranges from 2 to 10 litres capacity. But in market, the, Pressure Cookers of 3 and 5 litre capacity are mostly demanded by the customers. This project profile envisages the manufacturing of 5 ltrs. capacity cookers.

It is a well known fact that a pressure cooker cooks food at a pressure higher than that of ambient pressure, thus necessitating sufficient precaution required in designing, manufacturing and use of domestic pressure cooker to safeguard against accidents in the kitchen.

## MARKET POTENTIAL

It has been observed, keeping in view the average family, that medium size/capacity pressure cookers have greater market. With the rapid advancement in the general living standards of the people, the demand of pressure cookers is increasing day by day. Accordingly, there is great scope for setting up of the new units for manufacture of pressure cookers to standard specifications.

## BASIS AND PRESUMPTIONS

1. The Project Profile has been prepared on the basis of single shift of 8 hours each day, 25 days in a month and at 75% efficiency.
2. It is presumed that in the 1st year, the capacity utilisation will be 60% followed by 70% in the next year and 80% in the subsequent years.
3. The rates quoted in respect of salaries and wages for skilled workers and others are the minimum rates in the State/ neighbouring States.
4. Interest rate for fixed and working capital has been taken @ 16% on an average, whether financed by bankers or by Financial Corporation.
5. Margin money required is minimum 30% of the project investment.
6. The rental value of the workshed and other built up/ covered area has been taken at the rate of Rs. 25 per square meter.
7. The rates quoted in respect of machines, equipment and raw materials are those prevailing at the time of preparation of the Project Profile and are likely to vary from supplier to supplier and place to place. When a tailor made project profile is prepared necessary changes are to be made.

## IMPLEMENTATION SCHEDULE

Sl.No.	Activity	Period
1.	Preparation of Project Report:	
	a) Calling quotations	1 month
	b) Preparation	2 months
2.	Provisional Registration as SSI	1 week
3.	Financial Arrangement	2 months
4.	Purchase and procurement of machines and equipments	2 months
5.	Installation of Machinery	1 month
6.	Electrification	1 month
7.	Recruitment of Staff	1 month

## TECHNICAL ASPECTS

### Process of Manufacture

The pressure cooker consists of components like main body, lid, regulator, gasket, fusible plug, handles, lugs etc. The main body and lid of the pressure cooker are manufactured of aluminum alloy sheet/Circles of different thicknesses depending upon the size and specifications of the Cooker. The components i.e. pressure regulator, Bakelite Handles and Lugs, Rubber Gasket, Fusible Plugs, Screws, Rivets, Packing Boxes etc. are usually purchased from outside sources by the pressure cooker manufacturers. In the manufacturing of pressure cookers operations like circle cutting, deep drawing of body, drawing of lid, trimming of body and lid, notching of body, drilling of holes in body and lid, fixing of lugs, handles, vent pipe, buffing and polishing, testing, packing etc. are involved.

### Quality Control and Standards

The Indian Standard Specification No. IS 2347:1995 for domestic pressure cooker and IS 1766:1994 for Rubber

Gaskets for cookers and other relevant specifications prepared by the BIS should be followed for quality control and various tests. The manufacturer should have arrangement to carry out the important tests in the factory premises.

#### Production Capacity (per annum)

Quantity(per annum)	Value (Rs.)
27,000 Nos.	1,28,79,000

Motive Power 38 KW.

#### Pollution Control

There will not be any pollution in the press shop and assembly shop. However, exhaust fans and dust collectors will be installed in the polishing and buffing section to control the air pollution.

#### Energy Conservation

All the machines are to be provided with separate electric motors to avoid idle running. Shunt capacitors will be installed to improve the power factor. Adequate day light provisions are to be made in the factory shed by providing transparent roof sheets.

### FINANCIAL ASPECTS

#### A. Fixed Capital

(i) Land and Building (per month)		(In Rs.)
Built up area/ covered area:		
Store and office	300 Sq. mtrs.	
Working shed	@ 25/ Sq.mtr.	
a) Machine shop		
b) Packing Section, etc.		
c) Buffing and Polishing section		
Total		7,500

#### (ii) Machinery and Equipments

Sl. No.	Description	No.	HP	Total (In Rs.)
1.	Guillotine shearing machine 1250mm × 8 S.W.G. capacity (aluminium) complete with standard accessories, electric motor, switch, starter etc.	1	5	1,50,000
2.	Heavy duty circle cutting machine, 600 mm dia capacity × 8 S.W.G. (aluminium) complete with standard accessories, electric motor, switch, starter etc.	1	2	25,000
3.	Deep Drawing double action toggle press No.5 complete with standard accessories, electric motor, switch, starter etc.	1	15	5,50,000
4.	Hydraulic Press 50 tonne cap. complete with standard accessories, electric motor, switch, starter etc.	1	3	2,00,000
5.	Power press 60 tonne cap. complete with electric motor, switch, starter etc.	1	5	1,50,000
6.	Lathe Machine 1820 mm bed length complete with standard accessories, electric motor, switch, starter etc.	1	2	1,00,000
7.	Drilling machine bench type 12 mm cap. complete with standard accessories, electric motor, switch, starter etc.	1	1	7,500
8.	Double ended bench grinder 200 mm wheel dia motorised	2	2	12,000
9.	Double ended Buffing and polishing Machine, motorised	2	4	20,000
10.	Testing equipments like Hydraulic pressure test, Air leakage test,	L.S.	—	30,000

Sl. No.	Description	No.	H.P.	Total (In Rs.)
	Testing of pressure regulating device etc.			
I I.	Workshop tools, Press Tools, Measuring tools, Work Benches etc.	L.S.	—	75,000
	Total			13,19,500
	Say			13,20,000
	<i>Electrification and Installation Charges including cost of power connection and security deposit @ 10% of cost of machinery and equipments.</i>			1,32,000
	<i>Cost of Office Equipment, Furniture etc.</i>			25,000
	<i>Total cost of machinery and equipment.</i>			14,77,000
(iii)	Pre-operative Expenses			25,000
	Total Fixed Capital (i + ii + iii)			Rs. 15,02,000

## B. Working Capital (per month)

### (i) Personnel

Sl. No.	Designation	No.	Salary (Rs.)	Total (In Rs.)
(1)	Engineer/Manager	1	4500	4,500
(2)	Accountant—cum-typist	1	3000	3,000
<i>Technical</i>				
(3)	Foreman/Supervisor	1	3500	3,500
(4)	Skilled Workers	5	2500	12,500
(5)	Semi-Skilled Workers	4	2000	8,000
(6)	Un-skilled Workers	3	1800	5,400
(7)	Peon/Chowkidar	1	1500	1,500
(8)	Part Timer Sweeper	1	800	800
	<i>Add Perquisites @ 15% of salary</i>			5,900
	Total			45,100

### (ii) Raw Materials (per month)

Sl. No.	Particulars	Qty. Kg.	Rate/ Kg.(Rs.)	Total (Rs.)
1.	Aluminium alloy sheet/circles of 8, 10, and 14 S.W.G.	5400	100	5,40,000

Sl. No.	Particulars	Qty. Kg.	Rate/ Kg.(Rs.)	Total (Rs.)
2.	Bought out components i.e. pressure regulator, bakelite handles and lugs, gaskets, fusible flugs, screws and rivets etc.	5400 sets	41.66/ set	2,25,000
3.	Packing Boxes, Carton tape, Printed Literature	2250 Nos.	20 each	45,000
	Total			8,10,000

### (iii) Utilities

	(Rs.)
1. Power	13,300
2. Water	200
Total	13,500

### (iv) Other Contingent Expenses

	(Rs.)
1. Rent	7,500
2. Postage and Stationery	1,000
3. Consumable Stores like tools lubricants etc.	1,500
4. Telephone Charges	700
5. Repair and Maintenance	2,500
6. Transportation Charges	4,000
7. Advertisement and Publicity	2,000
8. Insurance	1,500
9. Miscellaneous Expenses	1,000
10. Sales Expenses	5,000
Total	26,700
Say	27,000

### (v) Total Recurring Expenses

	(Rs.)
1. Raw Material	810000
2. Personnel	45100
3. Utilities	13500
4. Other contingent expenses	27000
Total	895600
Say	896000

## C. Total Capital Investment

(i) Fixed Capital	Rs. 15,02,000
(ii) Working capital (for 3 Months) (896000 × 3)	Rs. 26,88,000
Total	Rs. 41,90,000

## MACHINERY UTILISATION

All the machines will be fully utilized.  
There won't be any idle capacity.

## FINANCIAL ANALYSIS

(1) Cost of Production (per year)	(In Rs.)
1. Total recurring cost	1,07,52,000
2. Depreciation on machinery and equipments @ 10% (Including pre-operative expenses)	1,38,000
3. Depreciation on tools, instruments and laboratory equipment @ 20%	21,000
4. Depreciation on office equipment @ 20%	5,000
5. Interest on total investment @ 16%	6,70,400
Total	1,15,86,400
Say	1,15,87,000

### (2) Turnover (per year)

Sl. Item No.	Qty. Nos.	Rate (Rs.)	Total (In Rs.)
1. Pressure Cookers	27000	449	12123000
2. Sale of aluminium scrap	10800 Kg.	70/Kg.	756000
Total			12879000

### (3) Net Profit (per year) (Before Income Tax)

Turnover - Production Cost

Rs. 128.79 - 115.87

= Rs. 12.92 Lakhs

### (4) Net Profit Ratio

=  $\frac{\text{Net Profit} \times 100}{\text{Turnover per year}}$

=  $\frac{12.92 \times 100}{128.79}$

= 10.03%

### (5) Rate of Return

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

=  $\frac{12.92 \times 100}{41.90}$

= 30.83%

### (6) Break-even Point

Fixed Cost (per year)	(In Rs.)
1. Total Depreciation	1,64,000
2. Rent	90,000

Fixed Cost (per year)	(In Rs.)
3. Total interest	6,70,400
4. Insurance	18,000
5. 40% of salary and wages	2,16,480
6. 40% of other contingent expenses (Excluding rent and insurance)	86,400
Total	12,45,280
Say	12,45,000

$$\begin{aligned} \text{B.E.P.} &= \frac{\text{Fixed Cost} \times 100}{\text{Fixed Cost} + \text{Profit}} \\ &= \frac{12.45 \times 100}{12.45 + 12.92} \\ &= 49.07\% \end{aligned}$$

## Addresses of Machinery and Equipment Suppliers

1. M/s. Sant Machine Tools Corporation  
2nd Street, Kalsi Nagar,  
G.T. Road, Ludhiana.
2. M/s. Basant Mechanical Works (Regd.)  
720-722, Industrial Area-B,  
Ludhiana.
3. M/s. Birdi Mechanical Works  
G.T. Road, Miller Ganj,  
Ludhiana.
4. M/s. Katbro Machine Tools  
G.T. Road, Miller Ganj,  
Ludhiana.
5. M/s. Surinder Machinery Works (Regd.)  
Nirankari St. No. 2, G.T. Road,  
Miller Ganj,  
Ludhiana.
6. M/s. Sargodha Machinery Corporation  
Near Manju Cinema, G.T. Road,  
Ludhiana.
7. M/s. Pal Mechanical Works  
Street No. 2, Partap Nagar,  
Ludhiana.

## Raw Material Suppliers

Raw materials are easily available in the local market.