

PROJECT PROFILE

ON

ALUMINIUM VESSELS AND UTENSILS

Month & Year
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**PREPARED BY
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ALUMINIUM VESSELS AND UTENSILS

A. INTRODUCTION

Aluminium Vessels are widely used by common population in India. With the growth of population in the country the usage of Aluminium vessels is increasing. Aluminium is a versatile metal, it has properties of high strength light weight, and it is fast replacing stainless steel, bronze, brass, etc. It is strong, elegant, durable and non-rustic in nature. The Aluminium vessels are cheaper compared to stainless steel vessels and in country where people with low and middle income are more the consumption of aluminium vessels are increasing. The aluminium vessels are also replaced frequently at cheaper cost.

B. PRODUCT USES AND SPECIFICATIONS

The products cover all types of aluminium utensils used in households, hotels, hospitals, canteens and other places for cooking the products are manufactured in different shapes and designs which are popular in the market. Bureau of Indian Standards has prescribed IS: 1660(part I) for Wrought Aluminium Utensils.

C. MARKET POTENTIAL

Global production of primary aluminium rose continuously from 32 million tonnes (MT) in 2005 to 38 MT in 2007, registering a CAGR of 9%. However,

during 2008 the production remained flattish at around 38 MT (2007 levels) on account of significant fall in demand in the second half of the year due to the global credit crisis. This created a large amount of demand supply gap, thus making the inventory levels at LME reach their multi year highs. China accounted for around 30% of the total global aluminium production. Asia, once again showed the largest annual increase in consumption of primary aluminum, driven largely by increased industrial consumption in China, which has emerged as the largest aluminum consuming nation, accounting for 35% of global primary aluminum consumption in 2008. As far as the global consumption goes, it declined by around 3%YoY to 37 MT in 2008.

The Indian aluminium industry registered a growth of around 9% in FY09. Strong growth in industrial, infrastructure, automobile, transportation and power sectors during the first half of the fiscal were the key drivers for the demand. However, realizations for the fiscal fell significantly on account of fall in LME prices due to the global credit crisis, thus causing a dent in margins. On the other hand, the steep depreciation of Indian rupee against the US dollar impacted the industry positively. The total aluminium production in the country stood at around 1.35 m tonnes in FY09.

The number of lower-middle income groups to high income groups in the country has been increasing over a period of time.

The per capita consumption of aluminium in India is 0.7 kgs as against over 20 kgs in most of the developed and developing world economies. The metal has a long working life due to its propensity for recycling. Recycled metal requires significantly less amounts of energy for manufacturing of primary aluminium. The circles used for aluminium vessels are recycled materials.

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D. TECHNICAL ASPECTS

1. Installed Capacity

The installed capacity of the unit is 120 kgs of aluminium vessels per day on single shift basis. On this basis the annual capacity will be 36 tonnes per annum.

2. Plant and Machinery

The following items of equipment are required.

Machine name	Quantity Nos	Value (Rs.lakhs)
Spinning Lathes	6	5.80
Bench Polishers	4	1.80
Hand press	1	0.60
Single Body Hand Press	1	0.10
Swaging & Beading Machine	1	0.60
Gas Welding Set	1	0.30
Other miscellaneous		0.80
Total		10.00

3. Manufacturing Process

Aluminium circles are placed in the ties attached with the exterior of the spinning lathe. Then this circle is held tightly with the help of the centre and drawn into the tie shape with the help of the tools by manual operation. Then releasing the centre, the vessel is taken out. This process is continued for eight hours by one skilled labourer. Then this vessel is brightened by polishing the vessel by means of polish motor. For this purpose the soap and cotton wheels are used. Then the brightened vessels are packed in polyethene papers and sent to market after the vessels are fitted with handles.

4. Raw Material

The main raw material required is Aluminium circles which are available from aluminium manufacturers and dealers. The consumables are soap and cotton which are available locally.

5. Land & Building

A rented place with 2000 sq.ft area is required. The monthly rent is estimated at Rs.20,000 and also an advance of Rs.2,00,000.

6. Utilities

Power:

The total power requirement of the unit will be 10 HP

Water:

Water is required only for human consumption.

Man power.

Category	Nos	Monthly salary	Total Salary
Supervisors	1	8000	8000
Skilled	3	6000	18000
Polishers	3	6000	18000
Unskilled	3	4000	12000
Assist	1	5000	5000
Security	2	4000	8000
	Total		69000
Add 20%benefits			13800
Total			82800
Annually → Rs.9.94 lakhs			

7. Implementation Schedule

If financing arrangements is made available the project can be implemented with in one month's period.

8. ASSUMPTIONS

Installed capacity per annum	Aluminium Vessels-36 MT
Capacity utilization-Year -1	60%
Year-2	70%
Year-3	80%
Selling price per unit	Aluminium Vessels-Rs.175 000/per MT

Material cost at 100%	Qty(inclgd . wastage)	Rate/MT	Value (Rs.lakhs)
Aluminium Circles	36.72 MT	100000	36.72

Consumables per annum-at 100% (Rs. lakhs)	Rs.0.24 lakhs
Power and Fuel-100% (Rs. lakhs)	Rs.0.95 lakhs
Wages & salaries -100% (Rs.)	Rs.9.94 lakhs
Repairs & Maintenance- p.m.	Rs.2000/-
Depreciation	WDV method - 15%
General & administration Expenses per month	Rs.10000/-
Selling expenses	3% on Sales
Interest on term loan and Working capital finance	13% p.a.
Income tax provision	34% on profit

LIST OF MACHINERY SUPPLIERS

1. Orient Machine Tools
New No.269 (old No.130) Linghi Chetty Street
Chennai-600 001
2. Quality Machine Tools
New No.238, Linghi Chetty Strret
Chennai 600 001

3. Gujrat Machine Tools
New No.279, Linghi Chetty Street
Chennai 600 001
4. Premier Machine Tools
New No.103, Armenian Street
Chennai 600 001
5. Machine Centre
New 214 linghi chetty Street
Chennai 600 001

LIST OF RAW MATERIAL SUPPLIERS

1. Premier Metal engineering Corporation
JVL Towers
117, Nelson Manikem Road
Chennai-600 029
2. Southern Aluminium Company
New No.22, Mooker Nallamuthu Street
Chennai-600 001
3. Zenith Traders
New No.62, Nynuyappa naicken street
Chennai-600 003
4. Tamilnadu Aluminium Company
44, basin Bridge Road
Mint
Chennai-600 025

ALUMINIUM VESSELS

1. COST OF PROJECT	[Rs.lakhs]
Land & Building (Advance)	1.00
Plant & Machinery	10.00
Other Misc. assets	0.50
Pre-Operative expenses	1.00
Margin for WC	1.19
	<u>13.69</u>
2. MEANS OF FINANCE	
Capital	6.19
Term Loan	7.50
	<u>13.69</u>

3. COST OF PRODUCTION & PROFITABILITY STATEMENTS

Years	1	2	3
Installed Capacity p.a. (MT)	36	36	36
Utilisation	60%	70%	80%
Production/Sales p.a. (MT)	22	25	29
Selling Price/ MT (in Rupee)	175,000		
Sales Value	38.50	43.75	50.75
Raw Materials	22.03	25.70	29.38
Consumables	0.14	0.17	0.19
Power	0.57	0.67	0.76
Wages & Salaries	9.94	10.44	10.96
Repairs & Maintenance	0.24	0.25	0.26
Depreciation	1.50	1.28	1.08
Cost of Production	<u>34.42</u>	<u>38.51</u>	<u>42.63</u>
Admin, & General expenses	1.20	1.26	1.32
Selling expenses	1.16	1.31	1.52
Interest on Term Loan	0.98	0.85	0.61

Interest on Working Capital	0.39	0.39	0.39
Total	38.15	42.32	46.47
Profit Before Tax	0.35	1.44	4.28
Provision for tax	0.12	0.49	1.45
Profit After Tax	0.23	0.94	2.83
Add: Depreciation	1.50	1.28	1.08
Cash Accruals	1.73	2.22	3.91

4. WORKING CAPITAL:

	Months Consumption	Values	%	Margin Amount	Bank Finance
Raw Materials	0.75	1.38	25%	0.35	1.03
Consumables	1.00	0.01	25%	0.00	0.01
Finished goods	0.25	0.72	25%	0.18	0.54
Debtors	0.50	1.60	10%	0.16	1.44
Expenses	1.00	0.50	100%	0.50	0.00
		<u>4.21</u>		<u>1.19</u>	<u>3.02</u>

5. PROFITABILITY RATIOS BASED ON 80% UTILISATION

<u>Profit after Tax</u>	<u>2.83</u>	
Sales	50.75	6%
<u>Profit before Interest and Tax</u>	<u>5.28</u>	
Total Investment	16.71	32%
<u>Profit after Tax</u>	<u>2.83</u>	
Promoters' Capital	6.19	46%

6. BREAK EVEN LEVEL

Fixed Cost (FC):

	[Rs.lakhs]		
Wages & Salaries	10.96		
Repairs & Maintenance	0.26		
Depreciation	1.08		
Admin. & General expenses	1.32		
Interest on TL	<u>0.61</u>		
	<u>14.23</u>		
Profit Before Tax (P)	4.28		
BEL = $\frac{FC \times 100}{FC + P}$	$\frac{14.23}{18.51}$	x	$\frac{80}{100} \times 100$
			62% of installed capacity