PROJECT PROFILE

ON

ALUMINIUM CANS

Month & Year
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PREPARED BY

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ALUMINIUM CANS

INTRODUCTION:

Packing is not merely a container, it is part of the total system which processes the raw material into a product and delivers through distribution and marketing network to the customer. The needs of the market place today have changed with the ground rules of the packaging design. Packaging adds value to the product by transporting them, by withstanding, by processing, by preserving, by conserving them and by generally protecting products from the time they are made until they are consumed in full.

Aluminium containers are ideal packaging media for delicate and perishable food products as well as other liquid and semi-liquid items like edible oils, paints, lubricants, pesticides etc. Despite increase in production of plastic and other flexible packaging, the demand for tin containers is ever increasing. Aluminium containers have the following advantages: strength, durability, no bad effects on the product, ease in handling without physical damage like breakage, compactness, lightness, no damage by light to contents. The above factors have stimulated the growth of the Aluminium container industry which continues to occupy a place of its own in the total packaging.

PRODUCT USES & SPECIFICATIONS:

These types of Aluminium bottle cans are ideally suited for pesticide packing

- This type bottle is used for sampling, for launching various Industrial products and for sale to the consumer.
- Due to the natural appearance of the aluminium and their plain outline, these small bottles are ideally suited for the display of perfumes, eaux de toilette or cosmetics to which a personal touch could be given without much sophistication.

Specifications:

- One-piece body is pure aluminium 99.5%.
- External rolled-on screw neck formed by the sealing of a threaded P.P. Collar-on to the exterior of the neck.
- Closure with plastic screw cap Type EUROPA
- Sealed with tear-off aluminium cap.

MARKET POTENTIAL:

The demand estimates of Aluminium containers required for various sectors depend upon the consumption pattern of various products. The consumption of pesticides, insecticides, edible oils, lubricants, paints, baby food products, beverages etc. are on the increase. There is a growth in the consumption of packaging material used as Aluminium containers.

The Indian aluminium market is growing at a rapid pace and it is one metallic industry where India can emerge as a powerhouse within the next decade.

Currently all the major Indian producers are trying to make good the opportunity by expanding furiously. China, which has doubled its aluminium capacity over past half decade to account for more than a fifth of the world's output, is a net exporter of the metal. The Indian aluminium market is growing at a rapid pace, yet per capita consumption is extremely low: With over 7% growth per annum, one of the highest in the world, the Indian aluminium market is booming. Even better, sectors that extensively use aluminium are themselves booming, ensuring that this sector stays firmly on the growth path for times to come. Total aluminium consumption in the country is around 1,100 KT at present, which has grown significantly from 2002 level of 600 KT.

Domestic aluminium production in India sufficiently meets the demand. Production of 1,200 KT is well consumed domestically with demand accounting for over 1,100 KT. With production surpassing the consumption marginally, India, at present, is a net exporter of aluminium.

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World aluminium demand fell about 8 percent in 2009 as the global slowdown hit demand for raw materials in the automotive and construction sectors

But demand is likely to rise about 14 percent in 2010, mainly on rising consumption in the rapidly expanding economies of China and India.

The Indian packaging industry is expected to grow to Rs 82,500 crores by 2015 from the current Rs 65,000 crores.

India stands at the 11th position in the world packaging industry, which is $550-billion, and with the rising consumer demand and new technologies, it is expected to grow at 18-20 per cent from the current 15 per cent, as per Indian Institute of Packaging (IIP).

Among the total packaging sources, plastic packaging is at 6.8 million tonne and growing at 20-25 per cent per annum, whereas paper packaging is 7.6 million tonne. Glass packaging contributes to 4-5 per cent and metal 8 per cent. Forty per cent of the total paper production goes for packaging.

Today, whatever we use needs a packaging. Last year, our GDP growth was 8.5 per cent while the packaging industry grew 15 per cent.

Indian Packaging Industry
- The market volume of the Indian packaging industry amounts to about Rs. 77,570 crore and has constantly grown by approximately 15 percent year on year.
- The pace of growth will accelerate to between 20-25 percent over the next five years.
- The highest demand for packaging and the associated equipment come from the food processing industry at 50 percent and from the pharmaceutical industry at 25 percent.

- The large growing middle class, liberalization and organized retail sector are the catalysts to growth in packaging. Also food and Pharma packaging are the key driving segments.
- The Indian food market is estimated to total about Rs. 8,82,350 crore according to the 'India Food Report 2008' published by Research and Markets.
- Food retail turnover is expected to grow from the current Rs 3,39,365 crore mark to 7,27,212 crore by 2025.
- The pharmaceutical industry is expected to average an annual growth of 16 percent till 2012.
- There are about 600-700 packaging machinery manufacturers, 95 percent of which are in the small and medium sector located all over India.
- Indian packaging machinery imports are around Rs 606 crore (20-25 percent)while the Indian packaging machinery exports are rapidly growing.
- Germany and Italy are the largest suppliers of packaging machinery to India but focus is now shifting on Taiwan and China.
- Indian companies are now placing increasing emphasis on attractive and hygienic packaging. This promises enormous potential for the future.

TECHNICAL ASPECTS:

INSTALLED CAPACITY:

The installed capacity of the unit is 1000 Aluminium containers of different capacities per day of 8 hours. On this basis the annual installed capacity will be 300000 containers.

PLANT & MACHINERY:

The plant and machinery required are the following.

Particulars	Nos.
Spinning lathe 6'	8
Threading centre lathe	4

100 ML Aluminium container die set.	1
250 ML Aluminium container die set.	1
500 ML Aluminium container die set.	1
1000 ML Aluminium container die set.	1
5000 ML Aluminium container die set.	1
Suguna Brand 3 HP Buffing polisher	3
Total cost of machinery	**Rs.17.00 lakhs**.

MANUFACTURING PROCESS:

Aluminium circles of required diameter is pressed in the hydraulic press and a tube form is obtained. The tube are then shaped in the spinning lathe with the help of the dies to form the neck. The neck formating may be formed to fit pilfer proof cap or can the threaded for fixing screw cap. Then the finished container is polished despatched.

RAW MATERIALS:

The material required for manufacturing Aluminium containers are Aluminium circles which are available from local aluminium rerollers.

LAND & BUILDING:

The building area requirement is about 1000 sqft which can be taken on rental basis. Rs. 8000 per month advance Rs. 0.80 lakhs.

UTILITIES:

Electricity: The total power requirement of the unit is 10 HP.

Water: Water is not required for process.

Man Power Requirement:

	Designation		Rs./Month	Total
1.	Supervisor	1	8000	8000

2.	Skilled	10	6000	60000
3.	Unskilled	3	4000	12000
4.	Administrative assistants	2	5000	10000
				90000
	Add: Benefits 20%			18000
	Total			**108000**
	Annually			Rs.12.96 lakhs.

IMPLEMENTATION SCHEDULE:

The machinery is available locally. They can be supplied within 2 months provided finance is available. The entire project can be implemented within 3 months.

ASSUMPTIONS:

1. The installed capacity is 300000 nos of 1 litre aluminium containers. This can be increased or decreased depending on time taken to produce smaller or larger containers.
2. Selling price is calculated based on a uniform product of 1 litre container. Rs.35.00 per container
3. Material cost per 1 litre container is taken for 120 gms weight, which works out to Rs.18.00 per piece inclusive of wastage Rs. 54.00 lakhs at 100% pa.
4. Consumables represent machine consumables.
5. Power charges are estimated at Rs. 90000 per annum at 100%.
6. Wages and salaries are estimated at Rs.11.95 lakhs per annum as per the details given above with annual increase 5%.
7. Repairs & Maintenance is calculated at Rs. 0.60 lakh p.a. (Rs. 5000 per month) with annual increase 5%
8. Depreciation is calculated on WDV method at 15% on Plant & Machinery.
9. Administrative & General expenses is calculated at Rs.2.40 p.a (Rs. 20000 p.m) with annual increase 5%

10. Selling expenses is calculated at 3% on sales.

11. Interest on Term Loan is calculated at 12% p.a.

12. Interest on Working Capital is calculated at 12% p.a.

13. Income tax is calculated at 33.22% on profits.

LIST OF MACHINERY SUPPLIERS:

1. M/s. Hero Machine Tool, 41/4, Armenian Street, Chennai - 600001.

2. M/s. Vaishali Engineering Works,, 18, Hoodwharf 3rd Lane (Waltax Road), Chennai - 600 079.

LIST OF RAW MATERIALS SUPPLIERS

1. M/s. Vaishali Engineering Works,, 18, Hoodwharf 3rd Lane (Waltax Road), Chennai - 600 079.

FINANCIAL ASPECTS

1. COST OF PROJECT   **[Rs. lakhs]**

Land & Building (Advance)	0.80
Plant & Machinery	15.00
Contingencies	1.00
Other Misc. assets	0.60
Pre-Operative expenses	1.00
Margin for WC	2.59
Total	**20.99**

2. MEANS OF FINANCE

Capital	8.99
Term Loan	12.00
Total	**20.99**

Term loan is calculated at 75% on plant and machinery

3. COST OF PRODUCTION & PROFITABILITY STATEMENTS   **[Rs.lakhs]**

Years	1	2	3
Installed Capacity (Nos.)	300000	300000	300000
Utilisation	60%	70%	80%
Production/Sales (Nos.)	180000	210000	240000

Selling Price		Rs.35.00per no.		
Sales Value (Rs. lakhs)		**63.00**	**73.50**	**84.00**
Raw Materials		34.20	39.90	45.60
Consumables		1.20	1.26	1.32
Power		0.54	0.63	0.72
Wages & Salaries		11.95	12.55	13.18
Repairs & Maintenance		0.60	0.66	0.73
Depreciation		2.40	2.04	1.73
Cost of Production		50.89	57.04	63.28
Admin. & General expenses		2.40	2.52	2.65
Selling expenses		1.89	2.21	2.52
Interest on Term Loan		1.44	1.26	0.90
Interest on Working Capital		1.27	1.27	1.27
Total		**57.89**	**64.30**	**70.62**
Profit Before Tax		5.11	9.20	13.38
Provision for tax		1.74	3.13	4.55
Profit After Tax		**3.37**	**6.07**	**8.83**
Add: Depreciation		2.40	2.04	1.73
Cash Accruals		5.77	8.11	10.56

4. WORKING CAPITAL:

	Months Consumptions	Values	%	Margin Amount	Bank Finance
Raw Materials	2.00	5.70	25%	1.43	4.27
Finished goods	0.50	2.12	25%	0.53	1.59
Debtors	1.00	5.25	10%	0.53	4.72
Expenses	1.00	0.10	100%	0.10	0.00
		13.17		**2.59**	**10.58**

6. PROFITABILITY RATIOS BASED ON 80% UTILISATION

$$\frac{\text{Profit after Tax}}{\text{Sales}} = \frac{8.83}{84.00} \quad 11\%$$

$$\frac{\text{Profit before Interest and Tax}}{\text{Total Investment}} \quad = \quad \frac{15.55}{31.57} \quad 49\%$$

$$\frac{\text{Profit after Tax}}{\text{Promoters Capital}} \quad = \quad \frac{8.83}{8.99} \quad 98\%$$

7. BREAK EVEN LEVEL

Fixed Cost (FC):   **[Rs. lakhs]**

Wages & Salaries	13.18
Repairs & Maintenance	0.73
Depreciation	1.73
Admin. & General expenses	2.65
Interest on TL	0.90
	19.19
Profit Before Tax (P)	13.38

$$\text{BEL} \; = \; \frac{\text{FC x 100}}{\text{FC +P}} \quad = \quad \frac{19.19}{32.57} \quad \text{x} \quad \frac{80}{100} \quad \text{x} \quad 100$$

47% of installed capacity