Aluminium Recycling Plant.
Production of Aluminium Ingots from Aluminium Scrap.
Aluminium Scrap Recycling Plant.
Mixed Aluminium Scrap Recycling Project.
Introduction

Aluminium recycling is the process by which scrap aluminium can be reused in products after its initial production. The process involves simply re-melting the metal, which is far less expensive and energy intensive than creating new aluminium through the electrolysis of aluminium oxide (Al2O3), which must first be mined from bauxite ore and then refined using the Bayer process. Recycling scrap aluminium requires only 5% of the energy used to make new aluminium. For this reason, approximately 31% of all aluminium produced in the United States comes from recycled scrap.
Aluminium recycling is economically beneficial to both the aluminium and recycling industry. The capital cost for the production of recycled aluminium is already recognized to be far lower than making new aluminium. The financial benefit has also spurred the development of the recycling program.

India's per-capita consumption of aluminium, it is 0.6 kilograms per person. Whereas in developed markets the consumption level is around 20 kilograms. "India obviously has a tremendous (potential) market for recycled aluminium. Recycled aluminium was sure to shadow growth in primary aluminium usage, which is projected to more than double in the next five years. Recycled aluminium had a huge competitive advantage as the cost of manufacturing was only 5 percent of primary aluminium."
Aluminium Ingot

Ingot and billet play an integral part in the production of many aluminium products. Plate, sheet, foil, wire, rod, and bar products are all produced by pressing or rolling ingot and billet.

Ingot and billet are cast from molten aluminium. In the cast house, crucibles of molten aluminium empty their silvery liquid either directly into molds or into a holding furnace where the metal is kept molten at temperatures between 1,200 and 1,500 degrees Fahrenheit. Alloying elements are then added.
The process of casting aluminum ingots takes place through the fusion and refining of aluminum scrap previously retrained through the use of specific technological installations. The process that allows to obtain aluminum ingots from aluminum scrap is called smelting process.
Aluminium Ingots are produced through the smelting process. Various grades of ingots are produced which are used for production of castings in Auto Industry as well as electrical applications. Ingots of various dimensions with maximum purity of 99.7%. Ingots are the material that is cast into a shape suitable for further processing. Ingots usually require a second procedure of shaping, such as cold/hot working, cutting, or milling to produce a useful final product. Aluminium Ingots are re-melted and further processed into a large number of products for various downstream applications.
Aluminum ingots can be used in different sectors, including automotive, household appliances, lighting, construction, mechanics and household goods. The ingots are sent to other process or flattened into thin sheets, which are then used to make new cans. Aluminum is becoming a favourite with architects and builders opening up a potential for increasing use of metal in the construction industry. Likewise, the use of the metal is increasing in the auto sector.

Exports of aluminium ingots have been increasing on a y-o-y basis, 21% from FY 2014-15 to FY 2015-16 and 52% from FY 2015-16 to FY 2016-17.
Aluminium plays a major role in the modern world through its innumerable applications, because of its intrinsic and versatile properties of lightness, strength to weight ratio, corrosion resistance, electrical and thermal conductivity, nontoxicity etc. Secondary Aluminum Production is the process of recycling aluminum scrap into aluminum that can be used again—an environmentally sound process that is 92 percent more energy efficient than primary production. In fact, aluminium scrap recycling has proven so valuable—both economically and ecologically—that recovery and recycling has become its own industry, and a highly successful one.
The aluminum industry works hard to encourage consumer recycling by educating the public and advocating for the expansion of municipal recycling programs. The recycling of aluminium generally produces significant cost savings over the production of new aluminium, even when the cost of collection, separation and recycling are taken into account. Over the long term, even larger national savings are made when the reduction in the capital costs associated with landfills, mines, and international shipping of raw aluminium are considered.
The Indian Aluminium industry’s enthusiasm to grow smelting capacity on an ambitious scale here and abroad. Aluminium industry in India is moving towards overcapacity, since supply is likely to grow in excess of demand going forward. Demand for aluminium is estimated to grow at 4 to 6% per annum. The demand for the metal is expected to pick up as the scenario improves for user industries like power, infrastructure and transportation, which are all on the move. From around 1.6 mn tonne of demand in 2013-14, the demand by end 2019-20 is expected to touch a near 2.4 mn tonne, and is projected at close to 3.4 mn tonne by 2024-25.
# Cost Estimation

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<td>Break Even Point (BEP):</td>
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<tr>
<td>Cost of Project:</td>
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</table>
Machinery/Equipment Photographs

CAN SHREDDING MACHINE

AIR COMPRESSOR

ALUMINIUM MELTING HYDRAULIC CRUCIBLE FURNACE
INGOT CASTING ROTARY CONVEYOR

FUEL STORAGES

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Major Queries/Questions Answered in the Report?

1. What is Aluminium Ingots Manufacturing industry?

2. How has the Aluminium Ingots Manufacturing industry performed so far and how will it perform in the coming years?

3. What is the Project Feasibility of Aluminium Ingots Manufacturing Plant?

4. What are the requirements of Working Capital for setting up Aluminium Ingots Manufacturing plant?
5. What is the structure of the Aluminium Ingots Manufacturing Business and who are the key/major players?

6. What is the total project cost for setting up Aluminium Ingots Manufacturing Business?

7. What are the operating costs for setting up Aluminium Ingots Manufacturing plant?

8. What are the machinery and equipment requirements for setting up Aluminium Ingots Manufacturing plant?
9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Aluminium Ingots Manufacturing plant?

10. What are the requirements of raw material for setting up Aluminium Ingots Manufacturing plant?

11. Who are the Suppliers and Manufacturers of Raw materials for setting up Aluminium Ingots Manufacturing Business?

12. What is the Manufacturing Process of Aluminium Ingots?
13. What is the total size of land required for setting up Aluminium Ingots Manufacturing plant?

14. What will be the income and expenditures for Aluminium Ingots Manufacturing Business?

15. What are the Projected Balance Sheets of Aluminium Ingots Manufacturing plant?

16. What are the requirement of utilities and overheads for setting up Aluminium Ingots Manufacturing plant?

17. What is the Built up Area Requirement and cost for setting up Aluminium Ingots Manufacturing Business?
18. What are the Personnel (Manpower) Requirements for setting up Aluminium Ingots Manufacturing Business?

19. What are Statistics of Import & Export for Aluminium Ingots?

20. What is the time required to break-even of Aluminium Ingots Manufacturing Business?

21. What is the Break-Even Analysis of Aluminium Ingots Manufacturing plant?

22. What are the Project financials of Aluminium Ingots Manufacturing Business?
23. What are the Profitability Ratios of Aluminium Ingots Manufacturing Project?

24. What is the Sensitivity Analysis-Price/Volume of Aluminium Ingots Manufacturing plant?

25. What are the Projected Pay-Back Period and IRR of Aluminium Ingots Manufacturing plant?

26. What is the Process Flow Sheet Diagram of Aluminium Ingots Manufacturing project?
27. What are the Market Opportunities for setting up Aluminium Ingots Manufacturing plant?

28. What is the Market Study and Assessment for setting up Aluminium Ingots Manufacturing Business?

29. What is the Plant Layout for setting up Aluminium Ingots Manufacturing Business?
Table of Contents of the Project Report

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1. PROJECT LOCATION

1.1. District Profile and Geotechnical Site Characterization
   1.1.1. General
   1.1.2. Location & Geographical Area
   1.1.3. Topography
   1.1.4. Demographics
   1.1.5. Map
   1.1.6. Administrative set up

2. INTRODUCTION

3. USES AND APPLICATION

3.1. Aluminium in Electrical Sector
3.2. Aluminium in Transportation Sector
3.3. Aluminium in Building and Architecture Sector
3.4. Consumer Durables
3.5. Channing and Packaging
3.6. Competing Materials
4. PROPERTIES OF ALUMINIUM

4.1. Optical Properties
4.2. Chemical Properties

5. B.I.S. SPECTIFICATIONS

6. MARKET SURVEY

7. FINANCIALS & COMPARISON OF MAJOR INDIAN PLAYERS/COMPANIES

7.1. About Financial Statements of CMIE Database
7.2. Profits & Appropriations
7.3. Total Liabilities
7.4. Total Assets
7.5. Net Cash Flow from Operating Activities
7.6. Section – I
7.6.1. Name of Company with Contact Details
7.6.2. Name of Director(S)
7.6.3. Plant Capacity
7.6.4. Location of Plant
7.6.5. Capital Expenditure Projects
7.6.6. Name of Raw Material(S) Consumed With Quantity & Cost
7.7. Section – II
7.7.1. Assets
7.7.2. Cash Flow
7.7.3. Cost as % Ge of Sales
7.7.4. Forex Transaction
7.7.5. Growth in Assets & Liabilities
7.7.6. Growth in Income & Expenditure
7.7.7. Income & Expenditure
7.7.8. Liabilities
7.7.9. Liquidity Ratios
7.7.10. Profitability Ratio
7.7.11. Profits
7.7.12. Return Ratios
7.7.13. Structure of Assets & Liabilities (%)
7.7.14. Working Capital & Turnover Ratios

8. EXPORT IMPORT STATISTICS DATA OF INDIA
8.1. Export Statistics Data on Aluminium Ingot
8.2. Import Statistics Data on Aluminium Ingot

9. PRESENT MANUFACTURERS

10. MANUFACTURING PROCESS

11. PROCESS FLOW DIAGRAM

12. SUPPLIERS OF PLANT AND MACHINERY

13. SUPPLIERS OF RAW MATERIAL

14. MACHINERY, RAW MATERIAL & PRODUCT PHOTOGRAPHS

14.1. Machinery Photographs
14.2. Raw Material Photographs
14.3. Product Photographs

15. PLANT LAYOUT
Project Financials

- Project at a Glance
- Assumptions for Profitability workings
- Plant Economics
- Production Schedule
- Land & Building

Annexure

1. Assumptions for Profitability workings
2. Plant Economics
3. Production Schedule
4. Land & Building

Factory Land & Building
Site Development Expenses
• Plant & Machinery
  Indigenous Machineries
  Other Machineries (Miscellaneous, Laboratory etc.)

• Other Fixed Assets
  Furniture & Fixtures
  Pre-operative and Preliminary Expenses
  Technical Knowhow
  Provision of Contingencies

• Working Capital Requirement Per Month
  Raw Material
  Packing Material
  Lab & ETP Chemical Cost
  Consumable Store
<table>
<thead>
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<th>Category</th>
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<td>Utilities &amp; Overheads (Power, Water and Fuel Expenses etc.)</td>
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<td>Selling and Distribution Expenses</td>
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<tr>
<td>Salary and Wages</td>
<td>9</td>
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<tr>
<td>Turnover Per Annum</td>
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<tr>
<td>Share Capital</td>
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<tr>
<td>Equity Capital</td>
<td></td>
</tr>
<tr>
<td>Preference Share Capital</td>
<td></td>
</tr>
</tbody>
</table>
• Annexure 1 :: Cost of Project and Means of Finance

• Annexure 2 :: Profitability and Net Cash Accruals

- Revenue/Income/Realisation
- Expenses/Cost of Products/Services/Items
- Gross Profit
- Financial Charges
- Total Cost of Sales
- Net Profit After Taxes
- Net Cash Accruals
• Annexure 3 :: Assessment of Working Capital requirements

- Current Assets
- Gross Working Capital
- Current Liabilities
- Net Working Capital
- Working Note for Calculation of Work-in-process

• Annexure 4 :: Sources and Disposition of Funds
• Annexure 5 :: Projected Balance Sheets
  - ROI (Average of Fixed Assets)
  - RONW (Average of Share Capital)
  - ROI (Average of Total Assets)

• Annexure 6 :: Profitability Ratios
  - D.S.C.R
  - Earnings Per Share (EPS)
  - Debt Equity Ratio
• Annexure 7 :: Break-Even Analysis

- Variable Cost & Expenses
- Semi-Variable/Semi-Fixed Expenses
- Profit Volume Ratio (PVR)
- Fixed Expenses / Cost
- B.E.P
• Annexure 8 to 11 :: Sensitivity Analysis-Price/Volume

- Resultant N.P.B.T
- Resultant D.S.C.R
- Resultant PV Ratio
- Resultant DER
- Resultant ROI
- Resultant BEP
• **Annexure 12 :: Shareholding Pattern and Stake Status**
  - Equity Capital
  - Preference Share Capital

• **Annexure 13 :: Quantitative Details-Output/Sales/Stocks**
  - Determined Capacity P.A of Products/Services
  - Achievable Efficiency/Yield % of Products/Services/Items
  - Net Usable Load/Capacity of Products/Services/Items
  - Expected Sales/ Revenue/ Income of Products/ Services/ Items
• Annexure 14 :: Product wise Domestic Sales Realisation

• Annexure 15 :: Total Raw Material Cost

• Annexure 16 :: Raw Material Cost per unit

• Annexure 17 :: Total Lab & ETP Chemical Cost

• Annexure 18 :: Consumables, Store etc.

• Annexure 19 :: Packing Material Cost

• Annexure 20 :: Packing Material Cost Per Unit
• Annexure 21 :: Employees Expenses
• Annexure 22 :: Fuel Expenses
• Annexure 23 :: Power/Electricity Expenses
• Annexure 24 :: Royalty & Other Charges
• Annexure 25 :: Repairs & Maintenance Expenses
• Annexure 26 :: Other Manufacturing Expenses
• Annexure 27 :: Administration Expenses
• Annexure 28 :: Selling Expenses
• Annexure 29 :: Depreciation Charges – as per Books (Total)
• Annexure 30 :: Depreciation Charges – as per Books (P & M)
• Annexure 31 :: Depreciation Charges - as per IT Act WDV (Total)
• Annexure 32 :: Depreciation Charges - as per IT Act WDV (P & M)
• Annexure 33 :: Interest and Repayment - Term Loans
• Annexure 34 :: Tax on Profits
• Annexure 35 :: Projected Pay-Back Period and IRR
Reasons for Buying our Report:

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product.

- This report provides vital information on the product like it’s characteristics and segmentation.

- This report helps you market and place the product correctly by identifying the target customer group of the product.
• This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials

• The report provides a glimpse of government regulations applicable on the industry

• The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions
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• The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players.

• We use reliable sources of information and databases. And information from such sources is processed by us and included in the report.
The report titled “Market Survey cum Detailed Techno Economic Feasibility Report on Aluminium Ingots from Aluminium Scrap” provides an insight into Aluminium Ingots from Aluminium Scrap market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Aluminium Ingots from Aluminium Scrap project. The report assesses the market sizing and growth of the Indian Aluminium Ingots from Aluminium Scrap Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:
• Good Present/Future Demand
• Export-Import Market Potential
• Raw Material & Manpower Availability
• Project Costs and Payback Period

We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in the Aluminium Ingots from Aluminium Scrap sector in India along with its business prospects. Through this report we have identified Aluminium Ingots from Aluminium Scrap project as a lucrative investment avenue.
How to Start Aluminum Ingot Manufacturing Industry Aluminum Ingot Production project ideas, Projects on Small Scale Industries, Small scale industries projects ideas, Aluminium Recycling Based Small Scale Industries Projects, Project profile on small scale industries, How to Start Aluminum Ingot Production Industry in India, Aluminium Ingot Production from Aluminium Scraps Projects, New project profile on Aluminum Ingot Production industries, Project Report on Aluminium Ingot Production from Aluminium Scraps, Detailed Project Report on Aluminium Recycling, Project Report on Aluminium Recycling, Pre-Investment Feasibility Study on Aluminium Recycling, Techno-Economic feasibility study on Aluminium Ingot Production from Aluminium Scraps, Feasibility report on Aluminium Ingot Production from Aluminium Scraps, Free Project Profile on Aluminium Recycling, Project profile on Aluminium Recycling, Download free project profile on Aluminium Recycling, Industrial Project Report, Project consultant, Business consultant, Project identification and selection, Preparation of Project Profiles, Startup Project for Aluminium Ingot Production from Aluminium Scraps
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And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- Good Present/Future Demand
- Export-Import Market Potential
- Raw Material & Manpower Availability
- Project Costs and Payback Period

The detailed project report covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,
Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market research and analysis are supported by a panel of experts and digitalized data bank.

We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in India along with its business prospects......Read more
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- We use authentic & reliable sources to ensure business precision
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- Thorough analysis of the project
- Economic feasibility study of the Project
- Market potential survey/research
- Report Compilation
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