

# Alufluoride Ltd

## Investment Thesis

# Executive Summary

## Company Overview and why Alufluoride?

Alufluoride Limited ('AL') is one of India's largest producers of Low Bulk Density Aluminum Fluoride (AlF<sub>3</sub>), a critical additive in aluminum production. With 25+ years of industry expertise, AL supplies to key domestic players like HINDALCO, BALCO, and NALCO, benefiting from a stable demand base as India remains the world's second-largest aluminum producer. AL has established a structural cost advantage by sourcing industrial waste from fertilizer plants instead of relying on imported fluorspar, unlike its global competitors that depend on fluorspar. This ensures supply chain stability, cost efficiency, and enhanced profitability. With rising global aluminum demand, increasing potential export opportunities, and recent capacity expansion, AL is well-positioned

for long-term growth. Its strategic raw material contracts, operational efficiencies, and margin improvements further strengthen its competitive edge. Given its niche expertise and underappreciated market position, Alufluoride presents a compelling investment opportunity with significant upside potential.

## Industry & Market Outlook:

aluminium Fluoride (AlF<sub>3</sub>) plays a critical role in aluminium smelting, reducing energy consumption and enhancing efficiency. Global AlF<sub>3</sub> demand is increasing, driven by China's expanding aluminium sector and growing EV battery applications. India, the world's second-largest aluminium producer, is experiencing significant industry growth, with major players like Hindalco and Vedanta driving demand for AlF<sub>3</sub>. India's aluminium production is projected to grow at approximately 5% CAGR, supported by infrastructure expansion, EV adoption, and rising industrial applications, directly benefiting domestic AlF<sub>3</sub> suppliers like Alufluoride.

Government policies promoting **import substitution** further strengthen Alufluoride's competitive position. The Indian government is considering **revising the inverted duty structure to increase import duties on finished AlF<sub>3</sub>**, reducing foreign competition (primarily from China) and boosting domestic production. Additionally, increasing global focus on **sustainable and cost-effective production methods benefits efficient producers like Alufluoride**. Unlike many competitors reliant on fluorspar, **Alufluoride has a more environmentally sustainable production process**. With China restricting fluorspar mining due to pollution concerns, the resulting global supply gap enhances Alufluoride's cost leadership and long-term growth prospects.

## Why is Alufluoride Undervalued?

Despite its strong fundamentals, Alufluoride remains significantly undervalued, currently **trading at a 47% discount** to the median P/E of its peers (15.12x vs. 28.39x). This valuation gap is largely due to **low market liquidity, limited investor awareness, and its niche positioning within the chemicals sector**. The company's **customer concentration** (three key clients), while **backed by long-term contracts**, may also contribute to investor caution. Additionally, the market has **yet to fully price in Alufluoride's structurally lower input costs**, which stem from its sustainable raw material sourcing, giving it a **cost advantage over fluorspar-reliant competitors**.

Furthermore, Alufluoride has **doubled its production capacity from 7,500 TPA<sup>1</sup> in FY21 to 15,000 TPA<sup>1</sup> in FY24**, yet the full impact of this expansion is not reflected in its valuation. Given its strong cost leadership, operational efficiencies, and favourable industry tailwinds, Alufluoride presents a compelling investment opportunity. **DCF valuation suggests an intrinsic value of ₹758.2 per share, implying a substantial 76% upside from its current market price of ₹430.**

## Conclusion:

Alufluoride stands out as a structurally advantaged player in a growing industry with cost leadership, and demand visibility. With its **competitive moat in raw material sourcing, long-term contracts with top aluminium producers, and expanding production capacity**, the company is well-positioned for sustained growth. The current valuation gap presents an attractive entry point for investors seeking exposure to India's aluminium value chain, backed by stable cash flows and improving profitability.

Alufluoride Limited	
CMP*	430
Intrinsic share price	758.2
3Y Exit XIRR	17%
20-D Average volume	20,591

Key Performance metrics	FY24	FY25E	FY26E
Revenue (Rs. Cr.)	167	185	214
CAGR	9%		
EBITDA margin %	30%	31%	31%
PAT CAGR	10%		
FCF	43	10	25
D/E	0.3	0.3	0.4
Net Debt to EBITDA	0.3	0.0	(0.5)
ROE	21%	28%	30%
ROCE	26%	41%	41%

<sup>1</sup>TPA: Tonne per Annum

# Investment Thesis – Why buy Alufluoride?

## Why buy Alufluoride?

- i. **Strong Industry Tailwinds:** India's \$13.8bn aluminium market is projected to grow at 6.27% CAGR by 2030, driven by EVs, infrastructure, and renewable energy adoption.
- ii. **Government support:** Government's plans to add higher tariffs on imported  $\text{AlF}_3$  favours domestic producers.
- iii. **Market Leadership & Demand Growth:** Alufluoride is one of India's largest  $\text{AlF}_3$  producers (and amongst the top 10 globally), supplying to (National aluminum Company Ltd ('NALCO'), Hindalco, and Vedanta ('BALCO')), with rising global aluminium demand boosting long-term growth.
- iv. **Stable Margins & Capacity Expansion:** Contracted sales ensures stable pricing, operating margin at 19% (up from 4% in FY21), and capacity doubled from 7,500 TPA (FY21) to 15,000 TPA (FY24).
- v. **Secure Raw Material Sourcing:** Over 75% of Hydrofluosilicic Acid sourced via Long-Term contracts with Coromandel, IFFCO<sup>1</sup>, and Paradeep Phosphates. Alumina Hydrate likely sourced from customers (NALCO, Hindalco, BALCO) ensures quality & cost efficiency.
- vi. **Cost Leadership & Sustainability Advantage:** Unlike competitors (domestic as well as global) reliant on imported fluorspar, Alufluoride sources industrial waste from fertilizer plants, significantly lowering raw material costs while promoting a circular economy. This ensures long-term cost stability, resilience against price fluctuations, and a lower environmental footprint, giving it a margin edge over domestic peers like Tanfac and global players like Fluorsid.
- vii. **Strong Financial Performance & Growth Potential:** High ROCE & ROE, consistent revenue & profit growth, and positioned for further expansion as domestic & global  $\text{AlF}_3$  demand rises.
- viii. **DCF Valuation Suggests Upside Potential:** Based on DCF valuation, Alufluoride's intrinsic value is ₹758.2 per share, implying a 43% discount to CMP (₹430 as of 6<sup>th</sup> March 2025). Strong cash flows and expanding margins indicate significant upside potential.
- ix. **Compelling Annualized Return Potential (XIRR ~17%):** At the current market price (as of 6<sup>th</sup> March 2025), Alufluoride offers an attractive annualized internal rate of return (XIRR) of approximately 17% over a three-year investment horizon, driven by strategic raw material sourcing advantages, stable EBITDA margins, planned capacity expansions (backed by secured ₹10.5 Cr loan from PNB), and robust projected cash flow generation as indicated by our DCF analysis.

XIRR	
3Y exit	17%

## Why is Alufluoride Currently Undervalued?

As of 6<sup>th</sup> March 2025, Alufluoride Ltd.'s Price-to-Earnings (P/E) ratio is **15.12x**, reflecting a **47% discount** compared to the **median P/E of 28.39x** for its peers in the **chemicals sector**. Despite **strong revenue growth and margin expansion**, the stock remains undervalued due to several key factors:

- i. **Limited Market Liquidity & Investor Awareness:** As a **small-cap, niche player**, Alufluoride has limited institutional coverage and trading liquidity, keeping valuations lower than diversified chemical sector peers.
- ii. **Customer Concentration Perception:** With **three key clients (NALCO, Hindalco, BALCO) accounting for most of its revenue**, investors may see this as a risk, even though **long-term contracts provide revenue stability**.
- iii. **Single-Product Focus:** Unlike diversified chemical companies, Alufluoride specialises in  $\text{AlF}_3$ , making it **less diversified** but also **more efficient in cost and production**.
- iv. **Market Hasn't Fully Priced in Cost Advantages:** Unlike competitors (domestic as well as global) relying on imported fluorspar, Alufluoride sources industrial waste from fertilizer plants, ensuring long-term cost stability and resilience against raw material price fluctuations.
- v. **Capacity Expansion Not Yet Factored In:** Alufluoride **doubled its capacity from 7,500 TPA (FY21) to 15,000 TPA (FY24)**, yet the market **may not have fully reflected future revenue growth** in its valuation.

# Company Overview (I/II)

- A. Business Model:** Primarily manufactures Aluminium Fluoride (AlF<sub>3</sub>), a key input in aluminium smelting, with a production capacity of 15,000 TPA (Tonne Per Annum). Aluminium fluoride is used as a flux to reduce the melting point of Alumina during the electrolytic process of producing aluminium, therefore reducing the carbon foot-print for production of aluminium.
- B. Ownership structure:** 59.93% held by promoters, 38.73% by public investors, 1.28% by FIIIs, and 0.05% by DIIs
- C. Revenue Streams:** (i) AlF<sub>3</sub> Sales (100% of operating revenue); (ii) By-products & Chemical Sales (<2% of Total income as disclosed in Annual report).
- D. Key Clients:** Supplies to major aluminium producers in **India** (NALCO, Hindalco, and Vedanta ('BALCO')) and **globally** (Emirates Global aluminium ('EGA'; 100% UAE sovereign owned), Egyptalum, Aditya Birla Novelis).
- E. Comfortable customer concentration:** While AL faces customer concentration with its top customer contributing to c. 53% of its total FY24 revenue and its 2nd largest customer contributing to c. 23% of its total FY24 revenue, we can draw comfort from the fact that:
- AL benefits from a track record of long-standing relationship with its customers as seen from repeat orders from its customers
  - These customers are some of the largest aluminium players within their respective regions with substantial market share and no recent negative media on payment defaults to suppliers
  - Revenues with customers are contracted under a fixed a sales price (typically this price is reset every year)
  - Alufluoride's trade receivables as of FY24 form c. 8% of its total revenue thereby indicating timely payments from its buyers.
- F. Raw Material Sourcing Advantage**
- Unlike competitors reliant on fluorspar imports (subject to price volatility), Alufluoride sources fluorine-bearing waste from fertilizer plants, ensuring **cost efficiency and supply stability**.
  - This combines with long-term supply contracts mitigate raw material volatility thereby providing **higher and stable EBITDA margins** compared to peers who rely on imported fluorspar.
  - Alufluoride's key raw materials include** – Alumina Hydrate (~57%; likely sourced from its key customers) and Hydrofluosilicic Acid (23%; secured by long-term supplier contracts). Below is a brief on its sourcing of these raw materials –
    - Hydrofluosilicic acid:** >75% of the company's Hydrofluosilicic Acid comes from long-term contracts, reducing exposure to price fluctuations
      - Coromandel International Ltd. (since 1995): 3,500 TPA
      - IFFCO<sup>1</sup>: 7,000+ TPA contract
      - Paradeep Phosphates Ltd.: ~2,500 TPA
    - Alumina Hydrate** is likely sourced from its key customers i.e., NALCO, Hindalco, and Vedanta (BALCO) considering (a) Alumina Hydrate is typically sourced from Alluminium refiners, (b) common practice within the industry to source the raw material from customers as it ensures product quality, and (c) proximity to Alufluoride's plants thereby reducing transportation costs. *(Please see appendix for detailed rationale)*
- G. Competitive Positioning Against Global Players:** AL's unique approach of sourcing fluorine-bearing waste from fertilizer plants provides a cost advantage over competitors who rely on imported fluorspar. While larger global players benefit from economies of scale, Alufluoride's long-standing expertise and specialized production processes enable it to maintain a competitive position in the market. *(Please see Global Production Landscape section on slide 6 for further details)*
- India has two major large-scale low-bulk density (LBD) AlF<sub>3</sub> producers — Alufluoride Ltd. and Tanfac Industries Ltd.** *(Please see Competitive Landscape in India section on slide 6 for additional details)*
    - While Tanfac is larger in size, this is due to its diversified product portfolio and historically larger capacity (15,600 MT since 1997), Alufluoride specializes exclusively in LBD AlF<sub>3</sub> production and has only recently expanded to 15,000 MT.

# Company Overview (II/II)

- Despite Tanfac's larger scale, **Alufluoride holds a strong market position**, supported by:
  - i. Minimal customer overlap between Alufluoride and Tanfac in the AIF<sub>3</sub> market.
  - ii. Alufluoride's competitive advantages, including:
    - a. long-standing track record and strong relationships with India's largest aluminium smelters (NALCO, Hindalco, BALCO) indicated by repeat orders from its customers.
    - b. Contracted revenue agreements, ensuring revenue stability and visibility.
- Additionally, Greenstar's SPIC also produces LBD AIF<sub>3</sub>, but since its primary operations are in fertilizers, it is not considered a direct competitor to Alufluoride.

## H. Expansion Plans: Expanding production capacity to meet growing domestic and international demand for AIF<sub>3</sub>

- Secured a ₹10.5Cr. term loan from Punjab National Bank ('PNB') in 2024 to support this initiative, though its direct utilization for **capacity expansion (potentially up to 20,000 MTA)** remains unconfirmed in public sources.
- The company is also exploring **manufacturing facilities in Southeast Asia** to enhance market positioning and leverage its cost-effective raw material sourcing model. This shift follows the cancellation of its planned 25,000 TPA AIF<sub>3</sub> plant in Jordan due to geopolitical instability and operational feasibility concerns.

## Peer Comparison – Alufluoride vs. Tanfac

	Metric	Alufluoride Limited	Tanfac Industries Ltd.
As of 6 <sup>th</sup> March 2025	Market Capitalization (₹ Cr)	337	3133
	Current Market Price (₹)	430	3140
	P/E Ratio	15.12	40.13
	<b>Median P/E of Chemicals Sector</b>		<b>28.39</b>
	Earnings Per Share (₹)	23.6	52.6
FY24	Key product offering	AIF <sub>3</sub>	AIF <sub>3</sub> , Hydrofluoric Acid, Sulfuric Acid
	Total AIF <sub>3</sub> Production Capacity (MTPA)	15,000	15,600
	Estimated Price per Unit Tonne (₹)	1,06,099	~122,200 (Estimated)**
	<b>Key financials</b>		
	Revenue (₹ Cr)	166.8	378.0
	Compounded Sales Growth 3Y*	61%	37%
	Operating Margin	30%	19%
	Net Profit (₹ Cr)	18.0	52.0
	Compounded Profit Growth 3Y*	217%	43%
	Cash Flow from Operations (₹ Cr)	35.7	34.0
	Cash Conversion Cycle (Days)	65	82
	<b>Key ratios</b>		
	Debt-to-Equity Ratio	0.3x	0.0x
	ROE	20.9%	22.8%
	ROCE	26.2%	30.1%
	Quick Ratio	2.2x	2.2x
	Earnings Per Share (₹)	23.6	52.6
	<b>Valuation multiples</b>		
	P/E (x)	15.12	37.4
	P/B (x)	4.3	8.5
EV/EBITDA (x)	10.5	25.1	

\*Source: Screener.in for consistency; \*\*Using Industry Average given no disclosures on realized price per tonne

# Industry Overview

## Aluminium Fluoride Market

- i. **Global Demand & Market Size:** The global  $\text{AlF}_3$  demand is expected to reach 13.25 million tonnes by 2030 (from 3.7 million tonnes in 2023), growing at a CAGR of 4-5% from 2024 to 2030, driven by rising aluminium production, infrastructure investments, and rising mandates for energy transition (Source: [World Bank, 2023](#)).
- ii. **Global Production Landscape:** China dominates  $\text{AlF}_3$  production, contributing over 60% of the global supply. The largest global manufacturers include:

Company	Region	$\text{AlF}_3$ Production Capacity	Products Offered	Market Cap
Fluorsid <sup>1</sup>	Italy	150,000 Metric Tonne (MT)	$\text{AlF}_3$ , Synthetic Cryolite, Anhydrite	Private
Do-Fluoride Chemicals <sup>1</sup>	China	60,000 MT <sup>2</sup>	$\text{AlF}_3$ , Lithium Hexafluorophosphate, Cryolite	~\$2,300mm
Gulf Fluor <sup>3</sup>	UAE	~60,000 MT (Estimated)	$\text{AlF}_3$ , HF Acid, Other fluoride-based products	Private
Tanfacs Industries <sup>1</sup>	India	15,600 MT	$\text{AlF}_3$ , Hydrofluoric Acid, Sulfuric Acid	~\$349mm
Alufluoride Ltd. ('AL')		15,000 MT	$\text{AlF}_3$	~\$35mm

<sup>1</sup>Limited to no disclosures on contribution to revenue from sale of  $\text{AlF}_3$ ; <sup>2</sup>Source: [Emis.com](#)

- In comparison to other global players, Alufluoride's ('AL') market cap appears to be smaller. However, it is worth noting that (i) **AL is considered to be one of the top 10 largest  $\text{AlF}_3$  producers globally**, and (ii) its strategic location near the Visakhapatnam Port provides logistical advantages for both raw material procurement and product distribution.
  - <sup>3</sup>Given closer proximity to EGA and UAE's track record of preference to source locally and sovereign-linked entities, it can be reasonably assumed that **Gulf Fluor also supplies  $\text{AlF}_3$  to EGA**. This assumption is further supported by the fact that AL has not reported any exports in FY24 and FY23.
- iii. **Key demand drivers:**  $\text{AlF}_3$ 's demand is driven by demand of aluminium which in turn is driven by (i) End-use industries of aluminium such as automotive (to improve fuel efficiency and reduce emissions), aerospace (heavy reliance due its lightweight and high-strength properties), and construction (due to its durability and corrosion resistance), and (ii) rising mandates for energy transition to renewables (used in EVs, powering renewable technologies, etc). (Source: [World Bank Blog, 2023](#); [Data Horizon Research, 2023](#))

## Indian Aluminium Industry

- i. **India is the 2nd largest aluminium producer**, with major companies like Hindalco and Vedanta driving demand for  $\text{AlF}_3$ . India's \$13.8bn aluminium market growing at 6.27% CAGR by 2030, driven by EVs, infrastructure, and renewables. (Source: [BlueWeave Consulting, 2024](#); [TechSci research, 2024](#))
- ii. **Boost from the government:** Indian government's PLI (Production-Linked Incentive) scheme and infrastructure projects will boost aluminium consumption. (Source: [Invest India, Sept 2024](#))
- iii. India imports a significant portion of its  $\text{AlF}_3$  requirements, creating an import substitution opportunity for Alufluoride.
  - **Government's push for import substitution benefits domestic  $\text{AlF}_3$  producers.** (Source: [Economic Times, Dec 2024](#))
    - a. The Indian government is considering revising the inverted duty structure to increase import duties on finished aluminium Fluoride ( $\text{AlF}_3$ ) while promoting domestic production.
    - b. **Higher duties on imported  $\text{AlF}_3$  will reduce foreign competition (mainly from China)**, making domestic players like Alufluoride more competitive and increasing their market share.

## iv. Competitive Landscape in India:

Direct Competitors of Alufluoride Limited in Low Bulk Density ('LBD') Aluminium Fluoride			
Company	Country	Estimated Price per MT	Estimated Price per Metric Ton (INR) <sup>4</sup>
Alufluoride Limited	India	~\$1,220	₹1,06,099
TANFAC Industries Limited		~\$1,400 (Estimated) <sup>1</sup>	~₹121,964 (Estimated) <sup>1</sup>
Greenstar's SPIC ALF-96		~\$1,400 (Estimated) <sup>2</sup>	~₹121,964 (Estimated) <sup>2</sup>
Do-Fluoride Chemicals Co., Ltd.	China	\$1,466	₹127,900
Fluorsid SpA	Italy	\$1,941	₹169,500
Gulf Fluor	UAE	~\$1,500 (Estimated) <sup>3</sup>	~₹131,000 (Estimated) <sup>3</sup>

<sup>1</sup>Using industry average (Please see appendix for details); <sup>2</sup>Benchmarked against domestic peers; <sup>3</sup>Using regional average (Please see appendix for details); <sup>4</sup>Using 1 USD = 87.00 INR exchange rate

# Key Challenges & Mitigating Factors

Key risks	Mitigants
<p><b>Risk 1: Industry Cyclicity / aluminium Price Volatility</b></p> <p>Alufluoride's growth is dependent on the aluminium industry, which is cyclical in nature. Any downturn in aluminium demand or price volatility could affect earnings.</p>	<ul style="list-style-type: none"> <li>Global aluminium demand is expected to grow steadily, providing long-term stability for <math>AlF_3</math> producers.</li> <li>Government infrastructure spending and the transition to green energy are key drivers supporting aluminium demand.</li> <li>aluminium is a critical industrial metal with applications in: Automotive, Construction, Aerospace, Packaging, Renewable Energy (Solar &amp; Wind) industries.</li> </ul>
<p><b>Risk 2: Single plant concentration risk</b></p> <p>Alufluoride operates a single manufacturing facility located in Visakhapatnam, Andhra Pradesh. Any natural calamity (like cyclones, floods, or earthquakes), plant shutdown (due to regulatory issues, supply chain disruptions, or equipment failures) or labour strikes could pose a significant risk to the company's operations and revenue.</p>	<ul style="list-style-type: none"> <li>Alufluoride has no recorded events of plants shutdowns due to natural calamities, labour strikes, equipment failure, or regulatory issues, etc. Any temporary shutdowns were only strategic in nature (ex. Strategic shutdown in Q1 2021 to synchronize with expanded capacity).</li> </ul>
<p><b>Risk 3: High Customer Concentration</b></p> <p>Revenue from the top two customers' accounts for 76% of total revenue. Any demand slowdown or renegotiation of contracts could impact financial performance.</p>	<ul style="list-style-type: none"> <li>Top customers (NALCO, Hindalco, BALCO, EGA) are financially strong and highly rated companies, reducing default risk.</li> <li>Stable long-term contracts with fixed sale price ensure a steady revenue stream.</li> <li>Long-track record of customer relationship as seen from repeat orders from its customers.</li> </ul>
<p><b>Risk 4: Raw Material Volatility</b></p> <p>Raw materials procurement challenges can impact costs and margins. Procurement from distant suppliers increases transportation costs, leading to cost fluctuations.</p>	<ul style="list-style-type: none"> <li><b>Hydrofluosilicic Acid (c. 23% of total raw material expenses):</b> Over 75% of Hydrofluosilicic Acid (23% of total raw material expenses) is secured through long-term contracts, reducing exposure to spot price volatility. Strategic partnerships with Coromandel, IFFCO<sup>1</sup>, and Paradeep Phosphates ensure stable sourcing.</li> <li><b>Alumina Hydrate (c. 57% of total raw material expenses):</b> <ul style="list-style-type: none"> <li>Likely to be sourced from Alufluoride's key customers i.e., NALCO, Hindalco, and BALCO</li> <li>Additionally, it is worth noting that portion of total raw material expense attributable to Alumina hydrate has remained largely stable YoY despite being the raw material without long-term supply contracts further bolstering the argument that it is likely being sourced from its key customers.</li> </ul> </li> </ul> <p><i>(Please refer to appendix for detailed rationale.)</i></p>

<sup>1</sup>IFFCO: Indian Farmers Fertiliser Cooperative Ltd.

# Financial Performance

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## 9M update

- Alufluoride Limited delivered healthy growth in 9M24, with total revenue increasing by 13.1% YoY to Rs. 135.9 Cr. (9M23: Rs. 120.2 Cr.), driven primarily by operational revenue growth and additional contributions from solar units. EBITDA margins expanded, reflecting efficient cost management despite challenges from higher raw material and fuel expenses. The company's net profit rose sharply by 31.3% YoY to Rs. 16.6 Cr., with EBITDA margin improvement indicating sustained operational efficiency. EPS also improved significantly to Rs. 21.24, highlighting enhanced profitability during the period.

## Historical Performance (FY22-FY24):

- Between FY22 and FY24, the company demonstrated robust financial performance. Revenues increased significantly from Rs. 88.6 Cr to Rs. 166.8 Cr, delivering a strong CAGR of approximately 23%, driven primarily by strong growth in sales volumes and improvements in realized value per tonne. Specifically, sales volumes rose from 13,662 MT in FY23 to 15,260 MT in FY24, representing approximately 11.7% YoY growth. The realized value per tonne also improved notably, increasing by 7.5% YoY from approximately Rs. 101,700 per MT in FY23 to Rs. 109,300 per MT in FY24. EBITDA margins enhanced from 27.6% in FY22 to about 29.7% in FY24, reflecting better operational efficiency and cost control measures (*see previous slides for detailed rationale*). PAT recorded substantial growth, achieving a CAGR of approximately 118%, rising from Rs. 3.81 Cr in FY22 to Rs. 18.14 Cr in FY24, with margins expanding from 4.3% to 10.9%.
- ROE improved significantly from 6.8% in FY22 to 21.0% in FY24, while ROCE increased from 9.3% to 26.2%, highlighting improved profitability and capital efficiency.

## Projected Performance (FY25E-FY29E):

- Looking forward, **revenues are expected to grow at a healthy CAGR of approximately 14%**, reaching Rs. 329.3 Cr by FY29E. This growth is anticipated from consistent increases in production and sales volumes, rising from 16,508 MT in FY25E to 20,000 MT by FY29E, driven by strategic capacity expansions. Realized value per tonne is projected to consistently rise from approximately Rs. 1,18,831 per tonne in FY25E to Rs. 1,64,648 per tonne by FY29E, reflecting historical pricing trends, stable raw material sourcing advantages, and strategic market positioning assumptions.
- EBITDA margins are expected to stabilize between 33%-34%**, driven by sustained operational efficiencies and economies of scale. PAT is forecasted to grow steadily with a CAGR of approximately 14%, reaching Rs. 44.0 Cr by FY29E. ROE and ROCE are expected to remain strong and stable, projected at around 30% and 41% respectively, underscoring efficient capital utilization.
- Cash Flow and Liquidity:** The company is expected to generate healthy positive cash flows, with operating cash flow growing steadily from Rs. 35 Cr in FY25E to Rs. 58 Cr by FY29E. Free cash flow (FCF) is projected to remain robust, improving from Rs. 47.7 Cr in FY25E to Rs. 75.6 Cr by FY29E, ensuring adequate liquidity for future growth and financial flexibility.
- Working Capital Management:** Working capital management is expected to remain efficient, with inventory days improving notably from 34 days in FY25E to stabilizing at 36 days by FY29E. Debtor days are projected to stay efficient, reducing from 26 days in FY25E to around 24 days by FY29E. The cash conversion cycle demonstrates consistent improvement, expected to improve from current 65 days (FY24) to 56 days during forecast period, indicating effective management of working capital.
- Debt and Capital Expenditures:** Given AL's historical track record of prudent debt management, the company is expected to maintain a stable debt-to-equity ratio of ~0.3x throughout the forecast period supported by its robust cash flows and strong liquidity positions. With rising global demand for aluminium—and, consequently, for ALF<sub>3</sub>—AL's capital expenditures are expected to focus on strategic capacity expansions, averaging approximately ₹17.6 Cr annually from FY26E onwards, reinforcing its commitment to long-term growth and operational scalability.

*Overall, the company's financial outlook is robust, supported by strong volume-driven revenue growth, stable profitability margins, efficient working capital management, disciplined capital expenditure, prudent leverage, and healthy cash generation capabilities.*

# Valuation Assumptions Summary

## 1. Financial and Valuation Assumptions:

Assumption	Value	Source
Tax Rate	25%	Corporate tax rate under New Tax Regime as Alufluoride has opted for New tax Regime
Risk-free rate	6.85%	India 10-Year Government Bond Yield
Beta	0.91	5Y monthly Beta for Alufluoride; Source: yahoo.finance
Equity Risk premium	7.26%	Damodaran's January 2025 ERP value for India
Terminal Growth Rate	3%	India long-term GDP growth estimate

## 2. Capacity Expansion Assumptions:

- **Historical Track Record:** Alufluoride consistently increased production capacity, demonstrating successful expansions in recent years (e.g., FY2020-21, FY2022-23). Between 2020 and 2024, the company has added 7,000 MT of additional capacity.
- **Projected Expansion:** Capacity is expected to steadily grow by about 1,000 MT annually, from 15,000 MT in FY2024 to reach 20,000 MT by FY2029.
- **Rationale for Expansion:** The planned expansions reflect management's historical execution capability, market-driven demand growth, and demonstrated cost-effective capital spending.

## 3. Revenue and Operational Assumptions:

- **Revenue Assumptions:**
  - Revenue growth driven by both volume increase (aligned with production growth) and pricing improvements (~7%-12% annual increase in price realization per tonne from 2025 onwards).
  - Utilization and sales volume closely align with production, maintaining efficiency and minimizing excess capacity.
- **Cost Assumptions:**
  - **Raw material costs:** Consistent growth reflecting proportional production increments.
  - **Employee benefit expenses:** Forecast growth of 8%-14% annually (reflective of initial expansions and subsequent stabilizations).

## 4. Funding and Capex Assumptions:

- **Historical Debt Context:** Alufluoride has funded capacity expansions primarily through debt financing or a balanced combination of debt and internal accruals. For instance, total borrowings increased significantly from ₹6.7 Cr in FY2020 to ₹24.2 Cr in FY2021 due to substantial capex requirements. This highlights the company's willingness and capacity to leverage external financing strategically for growth.
- **Future Debt Assumptions:** Given Alufluoride has historically funded its capacity expansions through a balanced mix of debt and internal accruals (e.g., 35% debt and 65% equity/internal funds in FY21). Based on recent secured financing (e.g., ₹10.5 Cr PNB loan for planned expansions) and available internal funds (~₹77 Cr retained earnings or ~₹35 Cr FCF), we project future incremental annual debt funding in the range of ~₹10–12.6 Cr for the assumed 1000 MT capacity addition per year.

# Financial Projections

## INCOME STATEMENT

Rs. Cr.	FY22	FY23	FY24	FY25E	FY26E	FY27E	FY28E	FY29E
<b>Revenues</b>	<b>88.6</b>	<b>138.9</b>	<b>166.8</b>	<b>185.0</b>	<b>214.3</b>	<b>245.1</b>	<b>273.8</b>	<b>308.4</b>
<i>Growth (%)</i>		56.8%	20.1%	10.9%	15.8%	14.4%	11.7%	12.6%
Raw Material	58.4	88.4	105.4	120.3	139.3	160.0	178.8	203.2
Other Expenses	15.9	11.4	15.9	29.24	34.40	39.93	45.36	51.66
<b>EBITDA</b>	<b>24.4</b>	<b>41.6</b>	<b>49.6</b>	<b>56.9</b>	<b>66.0</b>	<b>75.0</b>	<b>83.9</b>	<b>93.2</b>
<i>EBITDA Margin (%)</i>	27.6%	30.0%	29.7%	30.7%	30.8%	30.6%	30.6%	30.2%
<i>EBITDA Growth (%)</i>		70.6%	19.1%	14.6%	16.1%	13.6%	12.0%	11.0%
Depreciation & Amortization	6.3	7.4	8.6	5.0	5.5	6.0	6.5	7.0
<b>EBIT</b>	<b>18.1</b>	<b>34.2</b>	<b>41.0</b>	<b>51.9</b>	<b>60.5</b>	<b>69.0</b>	<b>77.4</b>	<b>86.2</b>
Interest	2.7	2.9	3.1	1.9	2.5	3.0	3.4	3.6
<b>PBT</b>	<b>5.2</b>	<b>19.3</b>	<b>24.5</b>	<b>28.6</b>	<b>32.6</b>	<b>36.1</b>	<b>39.8</b>	<b>42.8</b>
Tax	1.4	5.4	6.4	7.2	8.2	9.1	10.0	10.8
<b>PAT</b>	<b>3.81</b>	<b>13.88</b>	<b>18.14</b>	<b>21.41</b>	<b>24.40</b>	<b>27.01</b>	<b>29.76</b>	<b>32.06</b>
<i>PAT Margin (%)</i>	4.3%	10.0%	10.9%	11.6%	11.4%	11.0%	10.9%	10.4%
<i>PAT Growth (%)</i>		264.0%	30.7%	18.0%	14.0%	10.7%	10.2%	7.7%

## BALANCE SHEET

Rs. Cr.	FY22	FY23	FY24	FY25E	FY26E	FY27E	FY28E	FY29E
<b>SOURCES OF FUNDS</b>								
(a) Equity Share Capital	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
(b) Other Equity	48.0	61.5	78.5	85.7	94.0	103.0	113.0	123.8
<b>Total Equity</b>	<b>55.9</b>	<b>69.3</b>	<b>86.4</b>	<b>93.6</b>	<b>101.8</b>	<b>110.9</b>	<b>120.9</b>	<b>131.7</b>
(a) Long-term Debt	16.0	14.9	8.3	13.6	16.8	19.3	21.1	22.3
(b) Short-Term Debt	6.4	8.4	8.1	8.4	11.2	12.9	14.1	14.9
<b>Total Debt</b>	<b>22.4</b>	<b>23.3</b>	<b>16.4</b>	<b>22.0</b>	<b>28.0</b>	<b>32.2</b>	<b>35.2</b>	<b>37.2</b>
<b>Total Leases</b>	<b>7.7</b>	<b>7.9</b>	<b>7.7</b>	<b>7.7</b>	<b>7.7</b>	<b>7.7</b>	<b>7.7</b>	<b>7.7</b>
Others	15.5	17.2	17.5	13.3	13.4	13.6	13.7	13.9
<b>Trade Payables</b>	<b>6.3</b>	<b>5.1</b>	<b>8.0</b>	<b>1.6</b>	<b>1.8</b>	<b>2.1</b>	<b>2.3</b>	<b>2.6</b>
<b>TOTAL SOURCES OF FUNDS</b>	<b>100.2</b>	<b>115.2</b>	<b>128.3</b>	<b>145.5</b>	<b>166.4</b>	<b>184.8</b>	<b>202.9</b>	<b>224.5</b>
<b>APPLICATION OF FUNDS</b>								
Fixed Assets	51.7	59.9	58.3	103.1	120.2	137.3	154.4	171.5
Right of use assets	6.2	6.1	5.6	5.6	5.6	5.6	5.6	5.6
Other Non-current Assets	4.2	2.9	2.6	2.6	2.6	2.6	2.6	2.6
Non-current Investments	6.6	1.6	4.4	4.4	4.4	4.4	4.4	4.4
<b>Total Non-current Assets</b>	<b>68.7</b>	<b>70.5</b>	<b>71.0</b>	<b>115.7</b>	<b>132.8</b>	<b>149.9</b>	<b>167.0</b>	<b>184.1</b>
Inventories	12.8	16.0	10.6	12.1	14.0	16.0	17.9	20.2
Trade receivables	13.5	13.7	12.7	14.5	18.8	18.8	18.8	21.1
Cash and cash equivalents	0.3	2.1	7.4	29.2	69.8	110.7	155.7	207.2
<b>TOTAL APPLICATION OF FUNDS</b>	<b>100.2</b>	<b>115.2</b>	<b>128.3</b>	<b>145.5</b>	<b>166.4</b>	<b>184.8</b>	<b>202.9</b>	<b>224.5</b>

## CASH FLOW STATEMENT

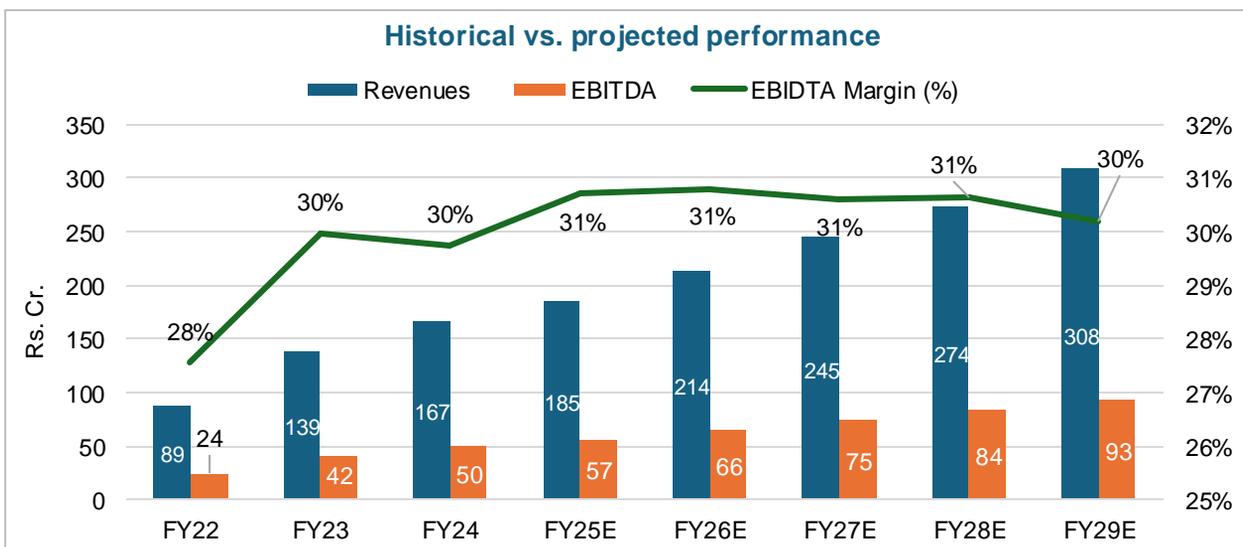
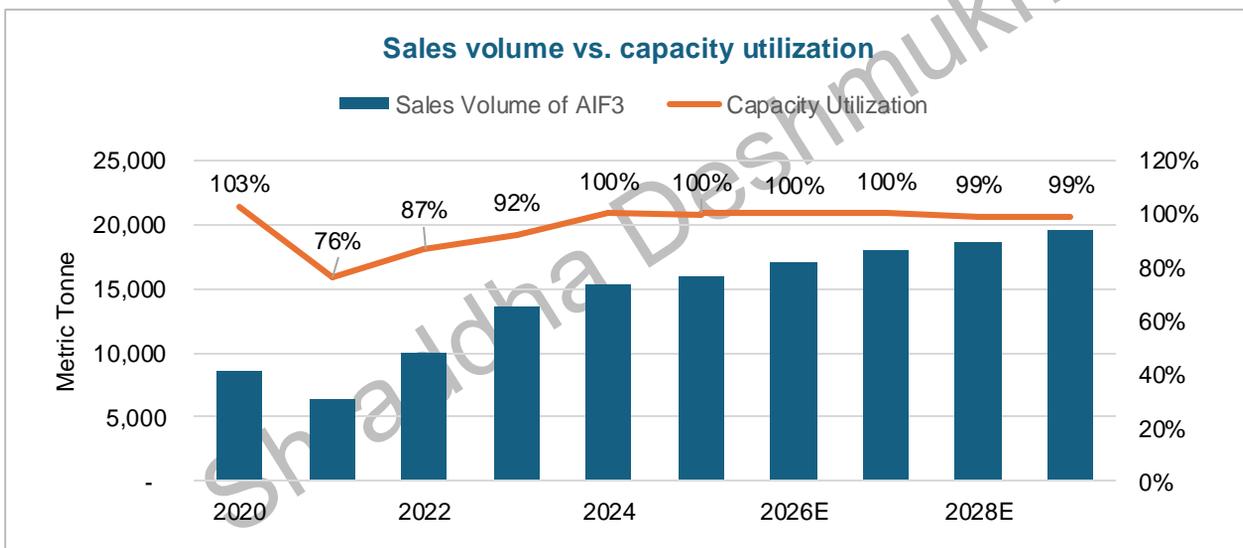
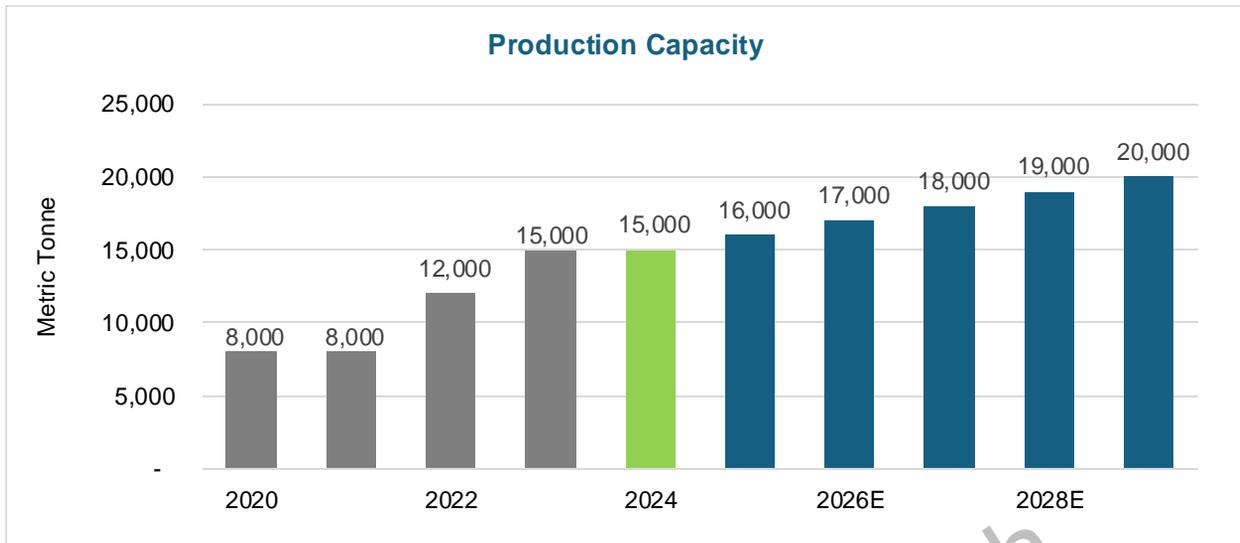
Rs. Cr.	FY22	FY23	FY24	FY25E	FY26E	FY27E	FY28E	FY29E
PBT	5.2	19.3	24.5	28.6	32.6	36.1	39.8	42.8
Depreciation & Amortization	6.3	7.4	8.6	5.0	5.5	6.0	6.5	7.0
Interest expenses	2.7	2.9	3.1	1.9	2.5	3.0	3.4	3.6
Working capital changes	(10.5)	(2.1)	7.9	(3.3)	0.0	(2.6)	(2.9)	(3.5)
Other non-operating, non-cash items, and exceptional items	5.6	18.8	23.2	6.9	9.0	6.3	5.9	9.0
Tax paid	1.4	5.4	6.4	7.2	8.2	9.1	10.0	10.8
<b>OPERATING CASH FLOW ( A )</b>	<b>4</b>	<b>22</b>	<b>35.7</b>	<b>28</b>	<b>42</b>	<b>41</b>	<b>44</b>	<b>49</b>
Capex	(4.9)	(15.5)	(6.8)	(17.1)	(17.6)	(17.6)	(17.6)	(17.6)
<b>Free Cash Flow (FCF)</b>	<b>8.8</b>	<b>37.8</b>	<b>42.5</b>	<b>10.5</b>	<b>24.7</b>	<b>23.1</b>	<b>26.0</b>	<b>31.7</b>
Investments	(2.9)	(2.6)	(12.6)	-	-	-	-	-
Non-operating Income	0.3	0.1	0.1	-	-	-	-	-
<b>INVESTING CASH FLOW ( B )</b>	<b>(7.5)</b>	<b>(18.0)</b>	<b>(19.3)</b>	<b>(17.1)</b>	<b>(17.6)</b>	<b>(17.6)</b>	<b>(17.6)</b>	<b>(17.6)</b>
Net Debt Issuance/(Repaid)	(1.8)	0.8	(6.8)	15.4	19.2	21.0	22.3	23.1
Interest paid	(2.8)	(2.7)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)
<b>Free Cash Flow to Firm (FCFE)</b>	<b>7.0</b>	<b>38.6</b>	<b>35.7</b>	<b>25.9</b>	<b>44.0</b>	<b>44.2</b>	<b>48.3</b>	<b>54.8</b>
Share Capital Issuance	-	-	-	-	-	-	-	-
Dividends paid	-	(0.8)	(1.6)	-	-	-	-	-
<b>FINANCING CASH FLOW ( C )</b>	<b>(4.6)</b>	<b>(2.7)</b>	<b>(11.7)</b>	<b>12.1</b>	<b>15.9</b>	<b>17.7</b>	<b>19.0</b>	<b>19.9</b>
<b>NET CASH FLOW ( A + B + C )</b>	<b>(8.2)</b>	<b>1.7</b>	<b>4.7</b>	<b>22.6</b>	<b>40.7</b>	<b>40.9</b>	<b>45.0</b>	<b>51.5</b>
<b>Closing Cash &amp; Equivalents</b>	<b>0.1</b>	<b>1.8</b>	<b>6.5</b>	<b>29.2</b>	<b>69.8</b>	<b>110.7</b>	<b>155.7</b>	<b>207.2</b>

# Financial Projections (Ratios) and Peer Comp

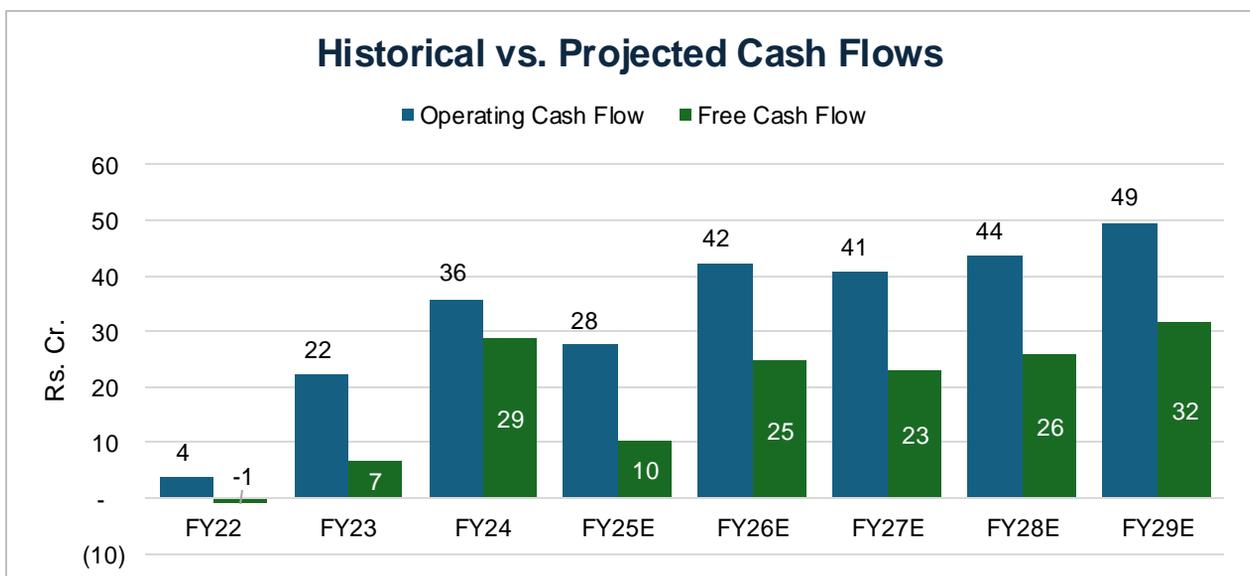
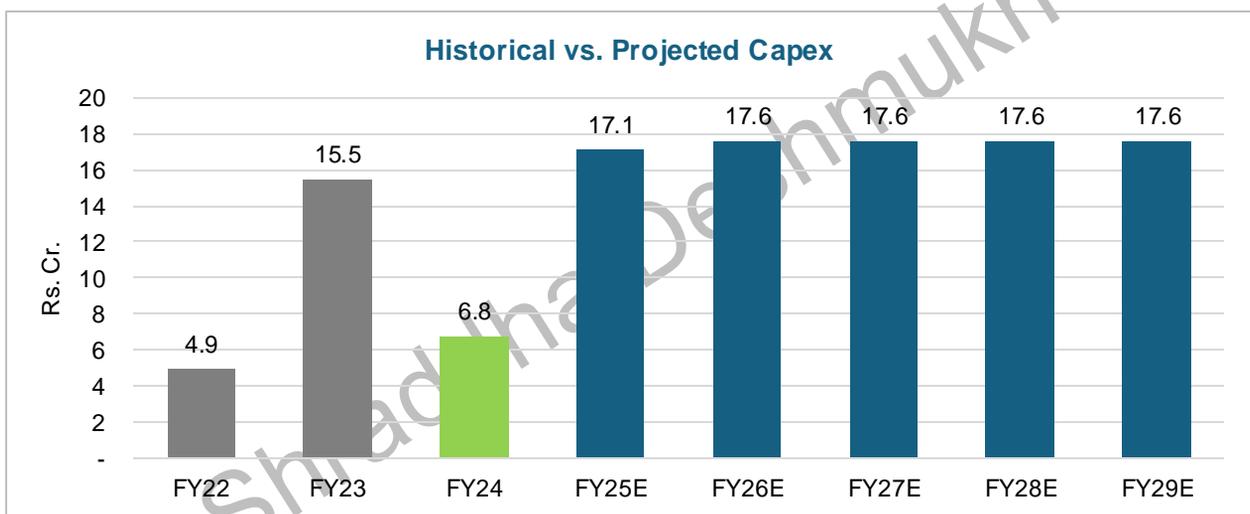
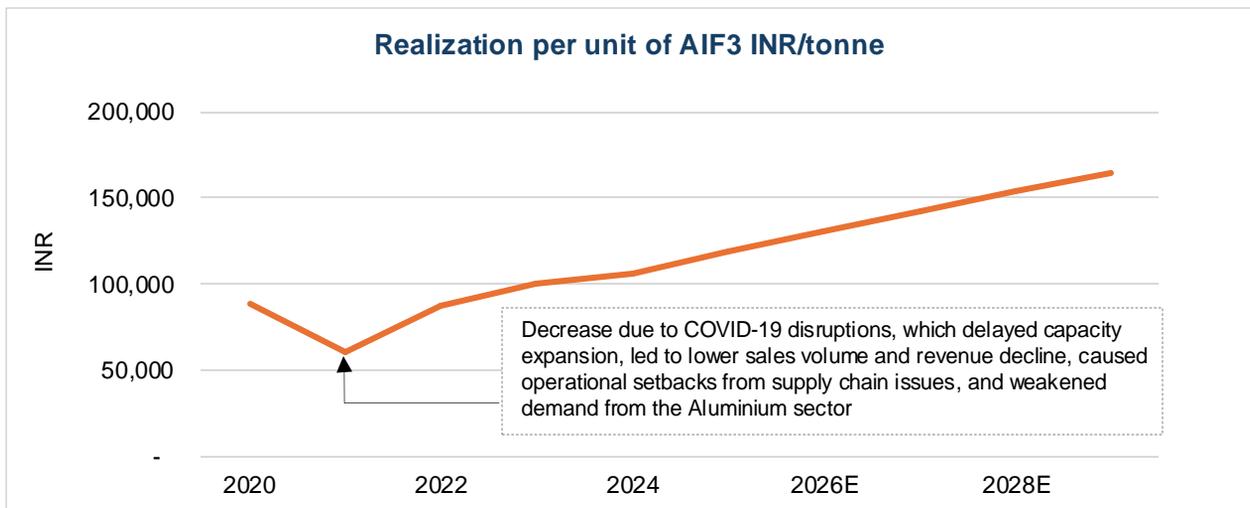
## KEY RATIOS

Ratios	FY22	FY23	FY24	FY25E	FY26E	FY27E	FY28E	FY29E
<b>PROFITABILITY %</b>								
Gross Margin	34.1%	36.4%	36.8%	35.0%	35.0%	34.7%	34.7%	34.1%
<b>EBITDA Margin</b>	<b>27.6%</b>	<b>30.0%</b>	<b>29.7%</b>	<b>30.7%</b>	<b>30.8%</b>	<b>30.6%</b>	<b>30.6%</b>	<b>30.2%</b>
EBIT Margin	20.4%	24.6%	24.6%	28.0%	28.2%	28.1%	28.3%	27.9%
PAT Margin	4.3%	10.0%	10.9%	11.6%	11.4%	11.0%	10.9%	10.4%
<b>ROE</b>	<b>6.8%</b>	<b>20.0%</b>	<b>21.0%</b>	<b>27.7%</b>	<b>30.2%</b>	<b>30.9%</b>	<b>30.6%</b>	<b>30.0%</b>
<b>ROCE</b>	<b>9.3%</b>	<b>23.7%</b>	<b>26.2%</b>	<b>41.4%</b>	<b>41.3%</b>	<b>41.2%</b>	<b>41.1%</b>	<b>41.0%</b>
<b>EFFICIENCY</b>								
Tax rate %	27.3%	27.9%	26.1%	25.2%	25.2%	25.2%	25.2%	25.2%
Fixed Asset Turnover (x)	1.7	2.5	2.8	2.3	1.9	1.9	1.9	1.9
Inventory days	62	59	46	34	34	34	35	34
Debtor days	38	36	29	27	28	28	25	24
Payables days	21	12	10	6	2	2	2	2
<b>Cash Conversion Cycle</b>	<b>80</b>	<b>83</b>	<b>65</b>	<b>56</b>	<b>60</b>	<b>60</b>	<b>57</b>	<b>56</b>
<b>LEVERAGE (x)</b>								
<b>Gross Debt to EBITDA</b>	<b>1.2</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
Net Debt to EBITDA	1.2	0.7	0.3	0.0	(0.5)	(0.9)	(1.3)	(1.7)
Debt to Equity	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3
<b>Interest Coverage</b>	<b>9.1</b>	<b>14.4</b>	<b>15.9</b>	<b>29.4</b>	<b>26.2</b>	<b>24.8</b>	<b>24.8</b>	<b>25.6</b>
<b>PER SHARE DATA (Rs.)</b>								
<b>EPS</b>	<b>4.5</b>	<b>16.4</b>	<b>22.6</b>	<b>27.37</b>	<b>31.20</b>	<b>34.54</b>	<b>38.06</b>	<b>41.00</b>
Book Value	71.4	88.7	110.4	119.6	130.1	141.8	154.6	168.3

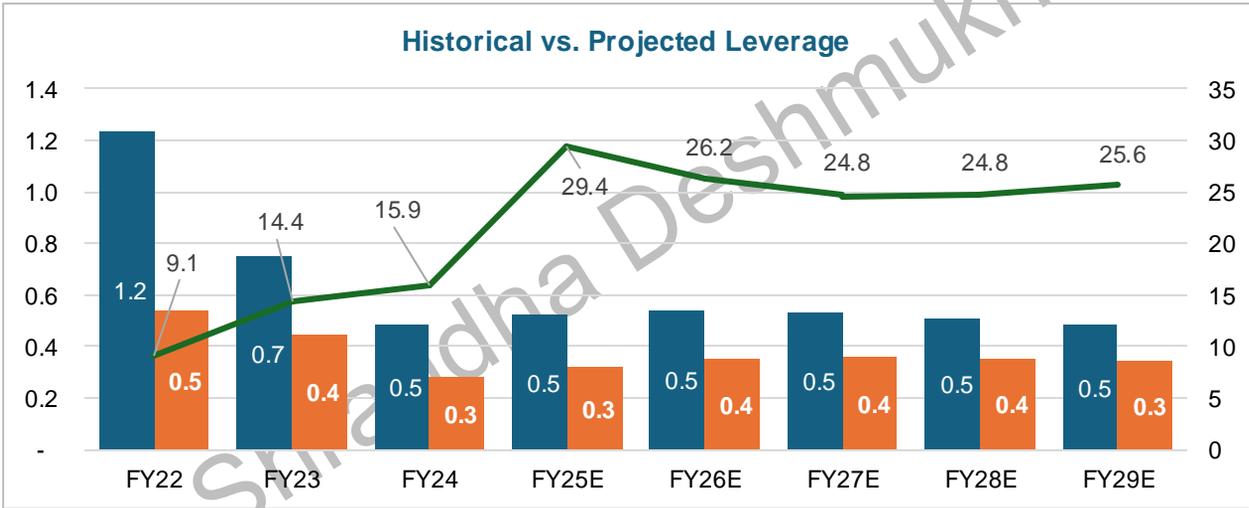
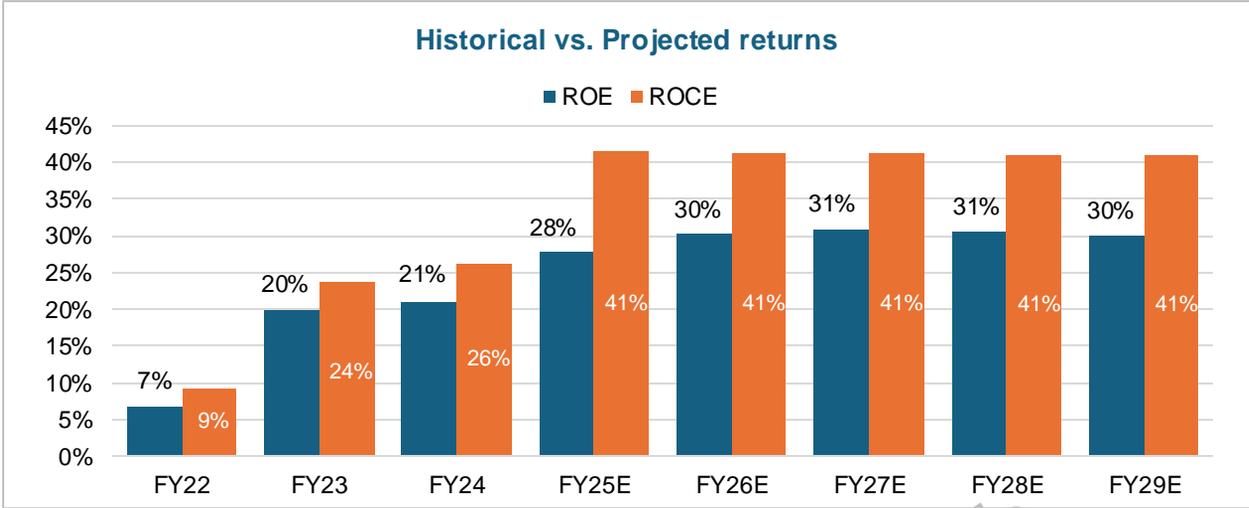
# Key Charts (I/III)



# Key Charts (II/III)



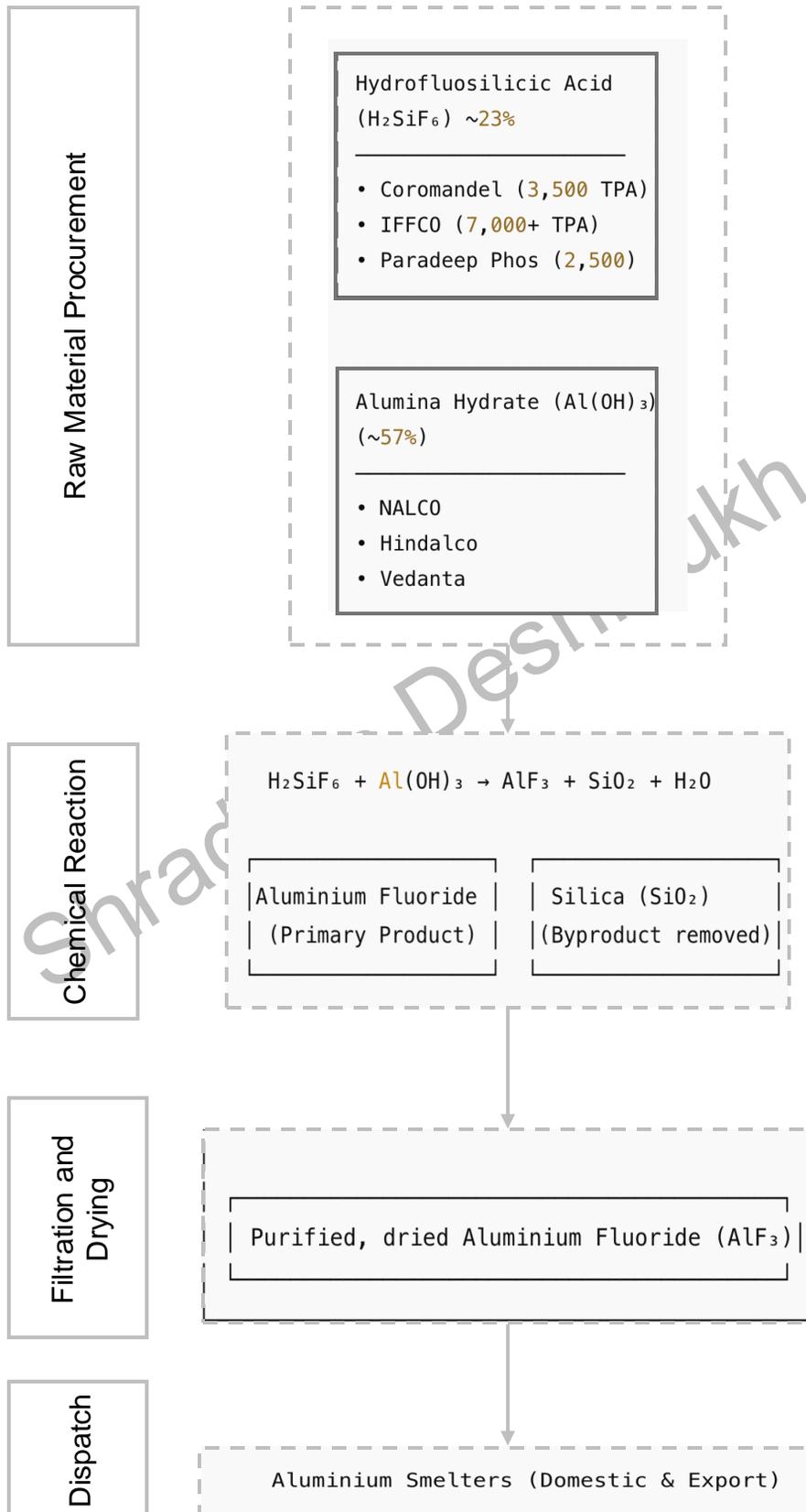
# Key Charts (III/III)



## Appendix

Shraddha Deshmukh

# Alufluoride's sourcing to output process



## Alufluoride's Production Process and its sustainability edge

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### Production Process:

#### 1. Hydrofluosilicic Acid (H<sub>2</sub>SiF<sub>6</sub>) from Fertilizer Plants

1. Alufluoride procures H<sub>2</sub>SiF<sub>6</sub> from **Coromandel International Ltd. (CIL), IFFCO, and Paradeep Phosphates Ltd. (PPL)**.
2. This acid is a **byproduct of phosphoric acid manufacturing** in the fertilizer industry.

#### 2. Reaction with Alumina Hydrate (Al(OH)<sub>3</sub>)

1. **Alumina Hydrate**, which contains **aluminium hydroxide**, is mixed with H<sub>2</sub>SiF<sub>6</sub>.
2. This initiates a **chemical reaction**, forming **Aluminium Fluoride (AlF<sub>3</sub>)**, **Silica (SiO<sub>2</sub>)**, and **Water (H<sub>2</sub>O)**.
3. **Reaction:**
4.  $H_2SiF_6 + Al(OH)_3 \rightarrow AlF_3 + SiO_2 + H_2O$   
 $H_2OH_2 SiF_6 + Al(OH)_3 \rightarrow AlF_3 + SiO_2 + H_2 O$

#### 3. Filtration & Drying

1. The **Silica (SiO<sub>2</sub>)** is removed as a byproduct.
2. The resulting **AlF<sub>3</sub>** is **purified, dried, and packed** for shipment to aluminium smelters.

### Alufluoride's production process provides a sustainability edge over competitors due to the following factors:

- **No reliance on fluorspar:** Unlike many global AlF<sub>3</sub> producers who depend on fluorspar (mostly sourced from China), Alufluoride utilizes **Hydrofluosilicic Acid**, a byproduct of fertilizer plants, making its process more cost-effective and environmentally sustainable.
- **Lower environmental impact:** By repurposing industrial byproducts, Alufluoride reduces waste and supports a circular economy, making its production more environmentally friendly than traditional methods.
  - **Utilization of Hydrofluosilicic Acid (H<sub>2</sub>SiF<sub>6</sub>):** Unlike traditional methods that rely on fluorspar, Alufluoride uses Hydrofluosilicic Acid—a byproduct from fertilizer plants—as a raw material. This approach not only optimizes resource consumption but also reduces the energy-intensive steps associated with mining and processing fluorspar.
- **Energy-efficient production process:** Alufluoride's manufacturing process requires lower energy consumption compared to traditional fluorspar-based methods, reducing both costs and carbon footprint.
  - **Solar Power Integration:** Demonstrating a commitment to renewable energy, Alufluoride has commissioned a 3 MW solar power plant for captive use in Andhra Pradesh. This initiative helps offset conventional energy consumption, thereby reducing the overall carbon footprint of their operations.

### Industry pricing averages

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- **IMARC Group: Reports** that in December 2023, aluminium fluoride prices were approximately \$1,406 per metric ton in the United States, \$1,466 per metric ton in China, and \$1,941 per metric ton in Germany.
- **Intratec: Provides historical and current prices of aluminium fluoride**, noting that in February 2020, prices in Southeast Asia reached \$1,650 per metric ton, while in Europe, prices were around \$1,640 per metric ton.

## Raw Material Supply Chain & Logistics

Raw Material	Supplier	Quantity	Location	Purpose in AlF <sub>3</sub> Production
Hydrofluosilicic Acid (H <sub>2</sub> SiF <sub>6</sub> )	Coromandel International Limited (CIL)	3,500 TPA	Visakhapatnam, Andhra Pradesh	Key fluorine source for the chemical reaction.
	IFFCO (Indian Farmers Fertiliser Cooperative Ltd.)	7,000+ TPA	Paradeep, Odisha	Additional supply due to CIL's shortfall.
	Paradeep Phosphates Ltd. (PPL)	~2,500 TPA	Paradeep, Odisha	Backup supplier, ensures stable raw material availability.
Alumina Hydrate (Al(OH) <sub>3</sub> )	Likely sourced from NALCO / Hindalco / Vedanta - widely observed within the Aluminium industry	N/A	Odisha (NALCO), India-wide	Provides the aluminium content required to form AlF <sub>3</sub> .

**Alumina Hydrate Sourcing:** While Alufluoride does not publicly disclose its specific suppliers for Alumina Hydrate, it is likely that it sources Alumina Hydrate from its key customers – **Hindalco and NALCO**. This rationale is driven by:

- Proximity & Logistics:** Hindalco operates alumina hydrate facilities near Alufluoride's plant in Visakhapatnam, reducing transportation costs.
- Product Compatibility:** Both Hindalco and NALCO produce Alumina Hydrate with specifications suitable for AlF<sub>3</sub> manufacturing.
- Industry Practices:** In the aluminium industry, sourcing raw materials from domestic producers ensures supply chain reliability and cost efficiency.
- Customer-Supplier Relationship:** Hindalco and NALCO are also key **customers** of Alufluoride, making it highly probable that they supply raw materials to the company in a reciprocal arrangement.

Metric	(Rs. Cr.)		
	FY24	FY23	FY22
<b>Revenue (A)</b>	<b>161.9</b>	<b>136.1</b>	<b>879.5</b>
<i>Growth</i>	19%	55%	128%
<b>Raw materials consumed</b>			
Alumina Hydrate (B) - raw material w/o LT supply contracts	56.7	51.8	32.2
<b>Total COGS</b>	<b>100.0</b>	<b>92.7</b>	<b>63.9</b>
<i>Growth</i>	8%	45%	77%

<b>B as a % of A</b>	<b>35%</b>	<b>38%</b>	<b>37%</b>
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**Note:** The table above further indicates limited raw material volatility seeping through the uncontracted raw material i.e., Alumina Hydrate and supports our understanding that AL likely sources this raw material from its key customers to ensure circular economy and product quality as is seen within this sector.