

ATIEUNO MAGAZINE 4.0

Key trends in Aluminium Manufacturing Industry



The aluminium manufacturing industry is currently experiencing several key trends that are shaping its future globally. Let’s explore them together:

Growth in Automotive and Transportation Sectors

The demand for aluminium is significantly driven by the automotive and transportation industries. The automotive aluminium market is expected to grow at a CAGR of 10.3% from 2024 to 2032, driven by the increasing production of electric vehicles (EVs) and the automotive industry’s focus on decarbonization (1) (2).

Sustainability and Recycling

Sustainability is a major trend in the aluminium industry. Aluminium’s recyclability makes it a key material in efforts to reduce environmental impact. Initiatives to incorporate more recycled aluminium are gaining traction. Recycling aluminium uses 95% less energy compared to producing new metal, significantly reducing production costs and environmental footprint (3) (4).

Technological Advancements and Innovation

The industry is seeing advancements in production technologies, including improvements in smelting processes and the development of new alloys. For instance, Rio Tinto is investing in “low carbon” aluminium smelters, and RusAL has developed new anodized aluminium alloys with enhanced corrosion resistance and aesthetic appeal (5).

Overall, the aluminium industry is poised for growth driven by its applications in automotive, construction, and packaging sectors, coupled with advancements in recycling and sustainable production practices.

Information
Sources

1. AGBI
2. Expert Market Research
3. Fortune Business Insights
4. AGBI
5. Fortune Business Insights

EMS 3rd Generation Ecosystem Go-Live at Hindalco

We are pleased to announce the successful go-live of our cutting-edge EMS Ecosystem 3rd G at Hindalco Industries Limited. The EMS 3rd G Ecosystem integrates seamlessly with Hindalco's processes, optimizing aluminium extrusion, fabrication, and finishing. This advanced system enhances efficiency, reduces waste, and streamlines operations, driving significant growth and performance improvements.



Seamless Integration and Unparalleled Efficiency

The deployment was meticulously planned to ensure minimal disruption and maximum impact. Our team worked tirelessly to integrate this system, achieving seamless transitions and unparalleled efficiency.

A Collaborative Effort

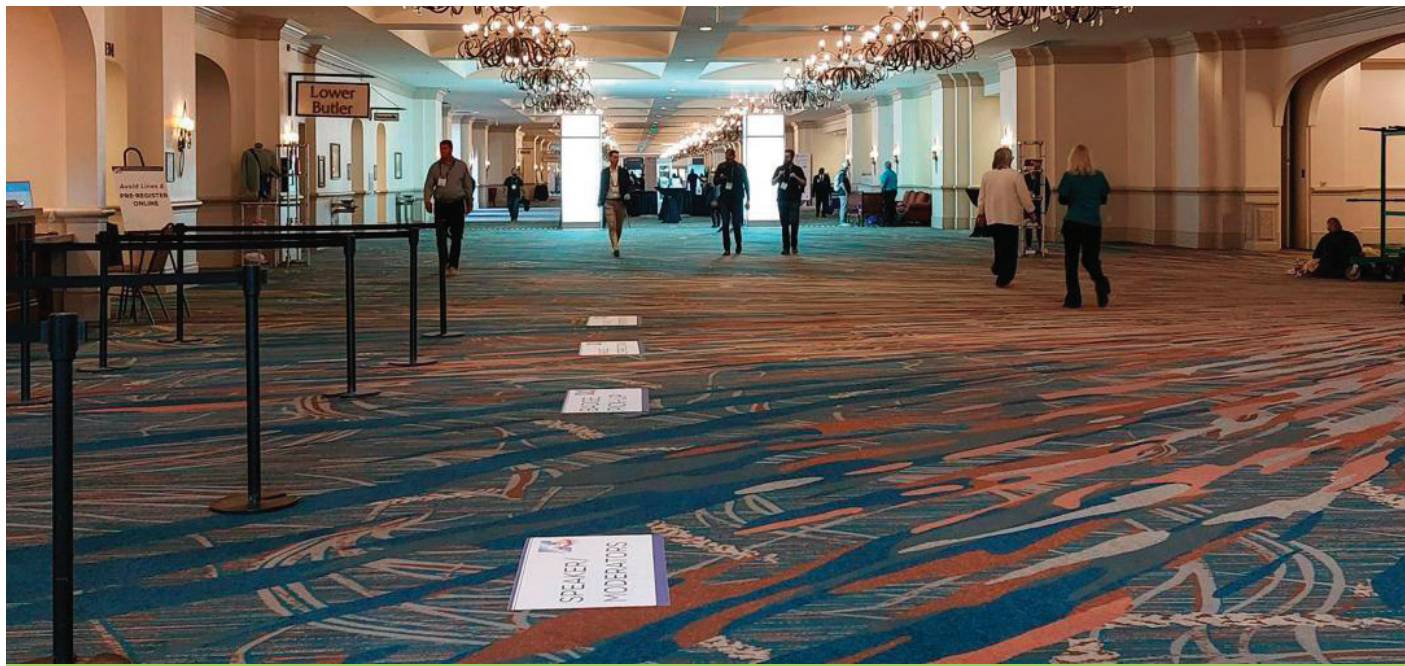
This success wouldn't have been possible without the unwavering support of the Hindalco team. Their commitment to excellence and readiness to embrace innovative solutions have been instrumental in the success of this project. We extend our heartfelt gratitude to the entire Hindalco team for their invaluable contributions and tireless efforts throughout the deployment process.

Expert Management and Leadership

Special thanks to JoTech FZCO for expertly managing the project and go-live session, ensuring a smooth transition and outstanding results. We also appreciate our CTO, Giacomo Mainetti, and Software Developer, Luca Romanato, for their close involvement and meticulous oversight, ensuring successful integration and optimal performance. As we celebrate this achievement, we look forward to Hindalco's continued success with the EMS 3rd G Ecosystem. This collaboration sets a new standard for aluminium manufacturing, exemplifying the power of innovation and teamwork.

Highlights and Insights from ET Seminar in Orlando

In this issue of the Journal, we are excited to share moments from the **International Aluminium Extrusion Technology Seminar (ET Seminar)** held in Orlando. This prestigious event brought together aluminium professionals from over 50 countries to explore the latest advancements in aluminium extrusion technology.



Our General Manager, Marco Bosisio, and CFO, Pierpaolo Longhi, attended this key industry event. The seminar featured over 100 technical sessions, providing a deep dive into innovative techniques and technologies shaping the future of aluminium extrusion. The impressive exposition showcased state-of-the-art equipment and services, leaving us inspired to drive excellence in our industry.



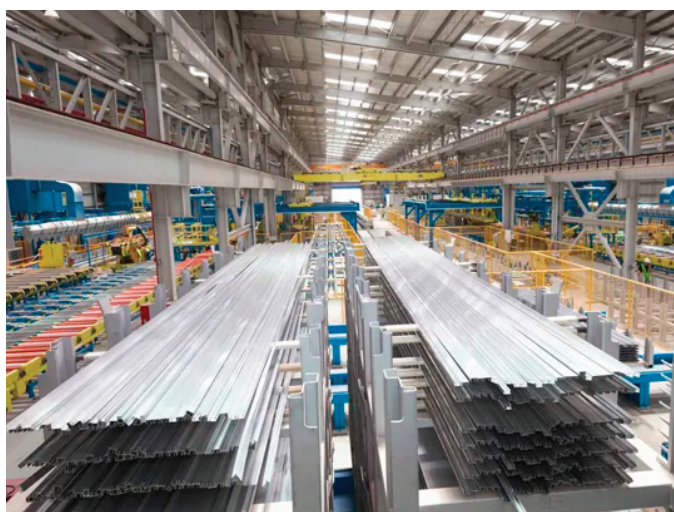
The seminar was not just about sessions and exhibits. It was also an invaluable opportunity to connect with industry peers and experts from around the globe. Networking events facilitated engaging conversations and fostered new collaborations that will undoubtedly influence the future of aluminium extrusion.

Latest Case Study: EMS Implementation at Gulf Extrusions

In this issue of the Atie Uno Journal, we are excited to present our latest case study, showcasing the successful implementation of the Extrusion Management System (EMS) at Gulf Extrusions in Dubai. This comprehensive system has significantly increased productivity, recovery, and efficiency across their operations.

Overcoming Challenges

Gulf Extrusions faced challenges such as fixed order routing and lack of control over production variability. The EMS system addressed these by standardizing production processes and enabling smart data collection and analysis, leading to improved consistency and performance.



Building on this success, the EMS was also implemented at Gulf Extrusions' new plant in Abu Dhabi, extending its benefits to all production lines and the cast house. For more detailed insights, explore the full case study on our website.

Stay tuned for more success stories and industry insights in the next issue of the Atie Uno Journal, as we continue to highlight advancements and achievements in the aluminium manufacturing sector. Together, we are shaping the future of excellence.

Final Results:

Since the implementation, Gulf Extrusions has seen significant improvements:

1. **Productivity, Recovery, and Efficiency:** Increased due to the system automatically registering and applying optimal production parameters across profile, die, alloy, press, and surface treatment types.
2. **Production Scheduling:** Enhanced maturity and floor-followed, ensuring extrudable products with all necessary information and restrictions provided by EMS.
3. **Traceability:** Maintained throughout production, supporting high standards in various sectors and improving operational efficiency by minimizing missing products and ensuring accurate tracking.
4. **Quality Management:** Improved die quality through managed and tracked die life and maintenance cycles.
5. **Reporting:** Comprehensive real-time reporting for all management levels, eliminating the need to wait for end-of-shift/day/month reports.



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