

# Countless Possibilities, Endless Solutions.

Driven by precision technology and advanced extrusions.



## About Aditya Birla Group

Aditya Birla Group (ABG), a global conglomerate with a turnover of \$63 Billion, is in the league of Fortune 500 companies. Headquartered in India, the Group is present across 14 industry sectors. It has achieved global and national market leadership in several sectors like metals, pulp and fibre, chemicals, textiles, carbon black, cement, financial services, and fashion retail.

## About Hindalco

Hindalco Industries Limited is the metals flagship company of the Aditya Birla Group and a global leader in Aluminium, Copper, and Specialty Alumina. It is India's largest fully integrated aluminium manufacturer and one of Asia's top primary aluminium producers. Its subsidiary, Novelis Inc., is the world's largest aluminium rolling company and recycler.

Hindalco also operates a major copper smelter, and is the third-largest copper cathode rod manufacturer outside China.

Our specialty alumina (Chemicals) business is at the forefront of the industry in India and is recognised as a prominent global player in specialty alumina and hydrates.





## Our Commitment to Sustainability

### Carbon Footprint

Currently, 80% of waste is re-used, including 2.3 M tons of red mud and over 100% of fly ash.



### Environmental Effects

Hindalco aims to reduce net water intensity by 30% by FY'25 compared to 2019, saving over 18 MCM of water annually.



### Recycling of Waste

During the fiscal year 2022, Hindalco processed and recycled 2.2 MM tons of aluminium scrap.



### Impact on Biodiversity

Hindalco contributes to environmental conservation with 190 HA of greenbelt and 450,000 trees planted each year.



## HINDALCO INDUSTRIES

### TOP 1%

S&P Global (DJSI) ESG Score 2024

**87** / 100

as of February 7, 2024.

Position and Score are industry specific and reflect exclusion screening criteria. Learn more at [spglobal.com/esg/yearbook](https://spglobal.com/esg/yearbook)

### ESG Targets

- Zero net carbon & net loss of biodiversity by 2050.
- 100% of electricity requirement from renewable energy by 2050.
- Zero waste to landfill by 2050.
- Zero harm to occupational health & safety.

At Hindalco, our unwavering commitment to enriching lives is intricately woven into our sustainability efforts. We firmly believe in creating a greener future, and to achieve this, we are committed to attaining our environmental goals. Our ESG commitment is deeply ingrained in our strategic priorities, which drive positive change and make a lasting impact on the planet. Awarded "Most Sustainable Aluminium Company" in Dow Jones sustainable indices five years in a row from 2020-2024.



# One Hindalco Many Solutions

At Hindalco, we offer materials, products and solutions engineered to suit the needs of various applications across sectors.



## Our 5 Range Brands Offers Unique Benefits Across Sectors:

	Products/solutions that are circular in nature and hold recreation or recycling at their core.	Ingots from Recycled Aluminium, Aluminium Circles for Cookware, Aluminium Foil for Food Packaging, Copper Rods.
	Products/solutions that are zero or low carbon, use alternate sources of energy, and are ultimately greener, smarter, and better.	Primary Ingots made using Renewable Energy, Ultra light Gauge Aluminium Foil for Packaging.
	Products/solutions which promise use of superior technology to deliver precision and meeting exacting standards for high-tech applications.	Precision Extrusions for Transport, Aerospace, Defence and Electricals & Electronics, AluAlu foil for Pharmaceutical Packaging, Aluminium Rolled Stock for Closure, Clad, Litho, Detonators, Fin, Foil and Battery Foil, Copper Oxygen-Free Rods, Copper-Magnesium & Copper-Silver Rods for Railway Electrification, Copper Inner Groove Tubes for Air Conditioning and Refrigeration, Speciality Alumina Solutions for Refractory, Ceramics, Polishing, and Battery applications, EV Battery Frame Solutions, E-Cycle Components, Battery Foil Solutions and Crash Components.
	Products/solutions that offer the promise of durability and toughness.	Roofing and Façade Solutions for B&C, Bus Body Solutions.
	Product/ solutions that offer safety as their core value proposition.	Flame Retardant Solutions for Electrical Transmission, Building and Construction, Automotive, Railways and many more.



# Our Innovation Capabilities

Innovation is not just our biggest tool; it is the foundation of our journey to unveil new products, combinations, and designs to cater to an array of opportunities.

Our innovation capabilities are one part of the equation, with external associations and industry learnings completing the loop. We invest in partnerships, specialised innovation centres, and state-of-the-art facilities to bolster our innovation capabilities.

Our innovation centres at Belagavi and Taloja in India are recognised by the Department of Scientific and Industrial Research (DSIR). This relentless pursuit of ours is substantiated through new patents, well-equipped innovation labs and our increased spending on Research and Development (R&D).

## Key Highlights

529

Patents Filed

427

Patents Granted

62

New Products  
Developed



Battery Enclosure for 2-Wheeler EVs



Battery Enclosure for 4-Wheeler EVs



Anti-lock Braking System (ABS)



Propellor Shaft for Vehicles





## Hindalco Extrusions

Hindalco Industries Limited, a prominent player in the Aluminium Extrusions industry, boasts an annual production capacity of 1,15,000 tons. The company is at the forefront of developing tailored solutions for a wide spectrum of industries, including automotive, building & construction, defense, aerospace, maritime, renewable energies, railways and more. Drawing from over five decades of experience, Hindalco Extrusions, manufactured from high-quality billets, provide the expertise and assurance of top-tier extrusion quality to fuel the growth of these industries.

### Our Strength

4

Manufacturing  
Plants

4

Billet  
Casting

3

Die Manufacturing  
Shops

15

Extrusion  
Presses

2

Anodizing  
Plants

3

Powder  
Coating Plants

2

Fabrication and  
Assembly Shops



# Our Presence

We are primarily involved in the business of aluminium and copper, operating across 10 countries with 52 established units.

Our operational footprint across India has been indicated on the map.



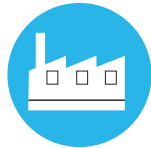
**Regional Sales Offices**



**Headquarter**



**R & D Lab**  
- HIC Taloja



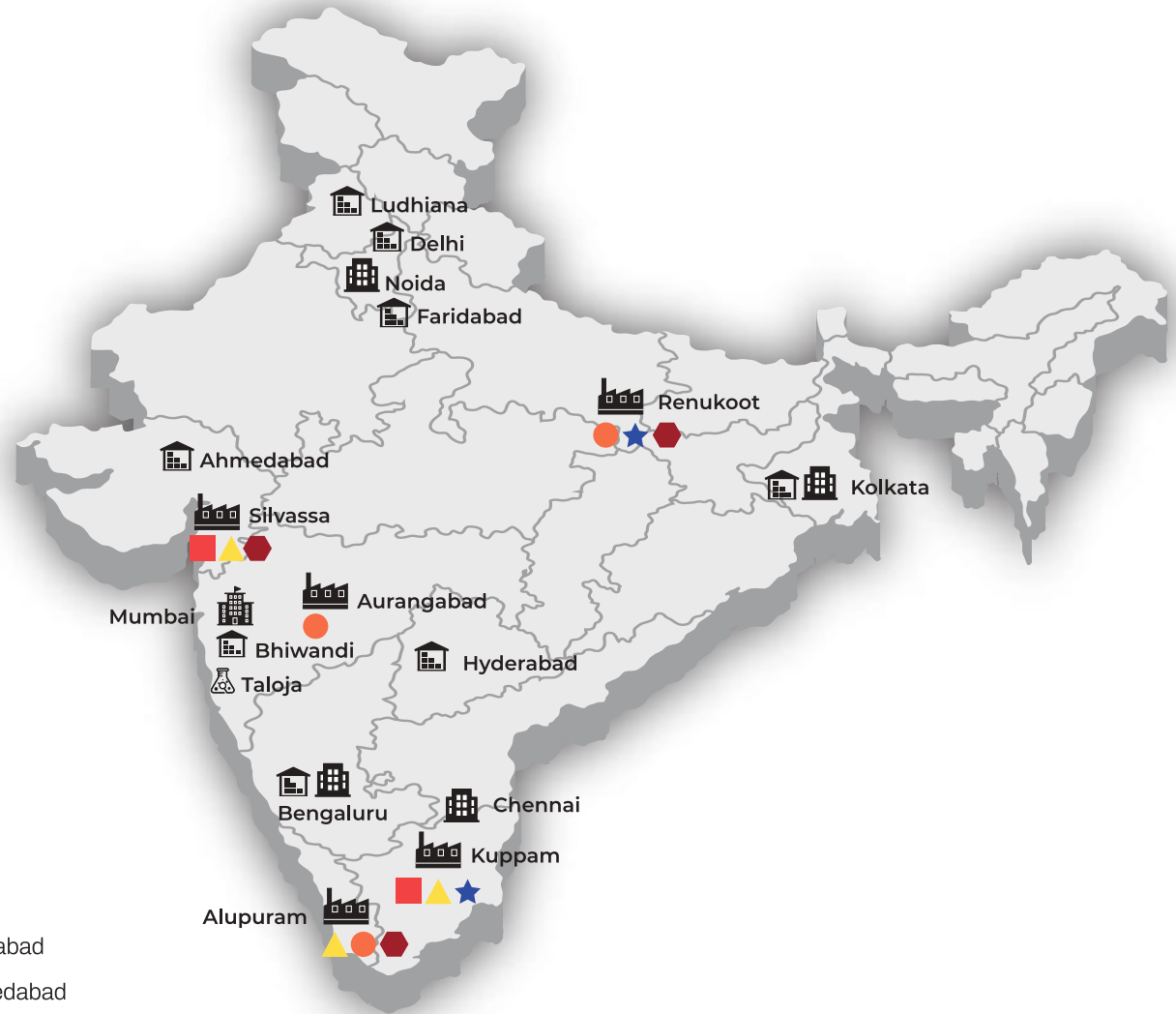
## Plants

- Renukoot, Sonbharda, Uttar Pradesh
- Alupuram, Kochi, Kerala
- Kuppam, Andhra Pradesh
- Silvassa, Dadra and Nagar Haveli
- HAAL, Aurangabad
















## Warehouses

- Delhi
- Ludhiana
- Bhiwandi
- Hyderabad
- Faridabad
- Ahmedabad
- Bengaluru
- Kolkata





## Capabilities of Our Plants

Plant location		Renukoot								Alupuram		Kuppam		Silvassa		
Extrusion Presses	Press Force	11 MN	12 MN	14 MN	16 MN	25 MN	20 MN	22 MN	50 MN	11 MN	29 MN	22 MN	25 MN	20 MN	26 MN	40 MN
	Container (Inch)	6"	6"	6"	8"	8"	9"	9"	13.5"	6"	9"	8"	8"	7"	8"	10"
Max. CCD (mm)	Hollow Profiles	60	80	150	100	120	150	150	350	80	150	190	190	175	195	460
	Solid Profiles	150	150	150	210	210	234	234	425	152	267	190	190	200	225	480
Alloy Range		1xxx, 2xxx, 3xxx, 4xxx, 5xxx, 6xxx, 7xxx, Special Alloys								1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, Special Alloys		1xxx, 3xxx, 6xxx, Special Alloys		6xxx, Special Alloys		
Surface Treatment		-								Powder Coating		Anodizing Powder Coating		Anodizing Vertical Powder Coating		
Fabrication Facility		CNC machining, 4th and 5th Axis VMC, Precision Cutting, Chamfering Machine								-		CNC Machining, CNC Milling, Manual & Robotic Welding, Punching, Flaring		Cutting Machine		
Additional Capabilities		Billet Casting Solution for Heat Treatment Furnace Customised Alloy Grade Solutions								Billet Casting Solution Heat Treatment Furnace		Thermal Break MIG Welding lines		-		
Industry Focus		       										  		 		





## About Silvassa Plant

Hindalco has made a major advancement by establishing a state-of-the-art extrusion plant at Silvassa, near Gujarat and Maharashtra. This new facility has a capacity of 34,000 tons and is India's first fully automated plant. It ensures efficient production and high-quality output for various applications, along with value-added services. Hindalco has also partnered with Phoenix Italy for die manufacturing, to ensure precision and innovation in die design.

### Applications:

• Building & Construction • Automotive • Consumer Goods • Industrial Goods

### Our Capabilities:

- The facility has 3 Extrusion Presses of 7", 8" and 10", equipped with Italian technology.
- It features India's first vertical powder coating line and an anodizing line for 8 mtr. profiles.
- Top class testing systems and procedures to ensure high-quality standards.
- The automated plant with ASRS (Automatic Storage & Retrieval System) ensures efficient production and high-quality output.

Hindalco's Silvassa plant is a pioneer in India's aluminium extrusion industry. With cutting-edge technology, sustainable practices, and a commitment to quality, Hindalco is set to lead in serving both architectural and automotive applications.



ETP & ZLD



Automatic Storage & Retrieval System



Extrusion Lines



Vertical Powder Coating





## Shaping Solutions: The Extrusion Process

- Billet Casting
- Die Manufacturing
- Extrusion
- Anodizing
- Powder Coating
- Fabrication & Assembly







## Billet Casting

Our extrusion process utilises billets that are internally casted. This in-house casting approach provides us with the flexibility needed to customise alloys according to specific customer requirements. Hindalco's billets are cast using advanced technologies such as Wagstaff® Airslip® Air Casting Technology and Almex Technology.

### Capabilities:

- Annual production capacity of 1,50,000 tons
- 1xxx, 2xxx, 3xxx, 4xxx, 5xxx, 6xxx, 7xxx, & special alloys
- 5, 6, 7, 8, 9, 10, 13.5-inch billet diameters
- Billet casting length up to 6000 mm
- ALSCAN and PoDFA used for assessing metal purity
- Ultrasonic tested aluminium billets



## Die Manufacturing

Our proficient die design and development team is committed to crafting top-notch extrusion dies, with the entire process centred around the customer's project objectives. Our team's primary focus is to deliver solutions that not only meet but exceed customer expectations, all while minimising the time required for development. Every plant has its own dedicated die service shop, and the Central Die Shop is situated at our state-of-the-art facility at Silvassa, servicing the demands of all four extrusion plants.

### **Capabilities:**

- Die Production lead time 2-4 weeks
- Production capacity of 700+ dies/month
- Cost-effective and technologically advanced die solutions



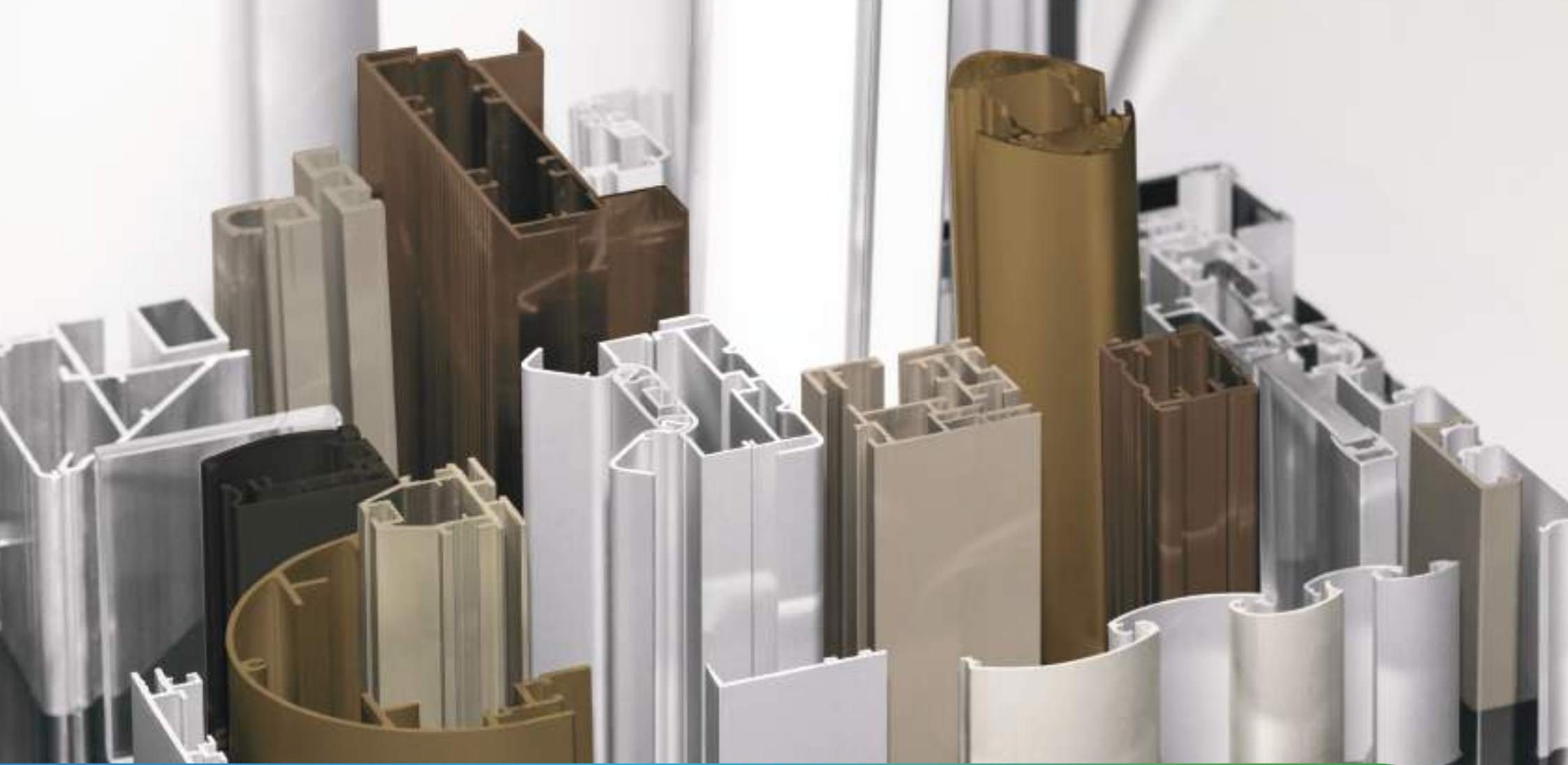


## Extrusion

Hindalco's Extrusion division consists of four distinct and highly efficient production plants, ranging in press size from 6" to 7", 8", 9", 10", and 13.5" using only 100% premium-quality billets. We at Hindalco specialise in custom profile production by investing in our ability to design and develop more innovative solutions for a broad range of applications.

### Capabilities:

- 1,15,000 tons annual production capacity
- From 0.5 kg/m to 217 kg/m extrusion capability
- Up to 15 mtr. single-length profile extrusion
- Up to 320 mm diameter or 420 mm width profile extrusion
- End to end traceability



## Anodizing

Hindalco relies on stringent quality management systems to ensure the production of an exceptional anodizing process. The anodizing process complies with all environmental standards and offers a variety of finishes and colours, such as natural black, bronze, bright dip, brushed nickel, and polished silver.

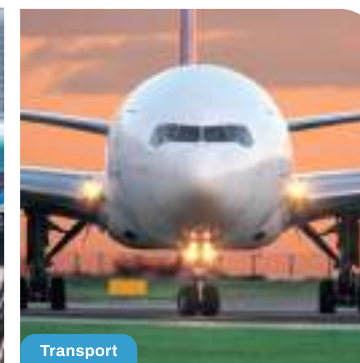
### Capabilities:

- 7250 tons per annum capacity
- Up to 7200 mm of single-length anodizing capability
- Anodizing thickness: 5-25 microns
- Acid Etch and Caustic Etch
- Bright Nickel and Silver Dip

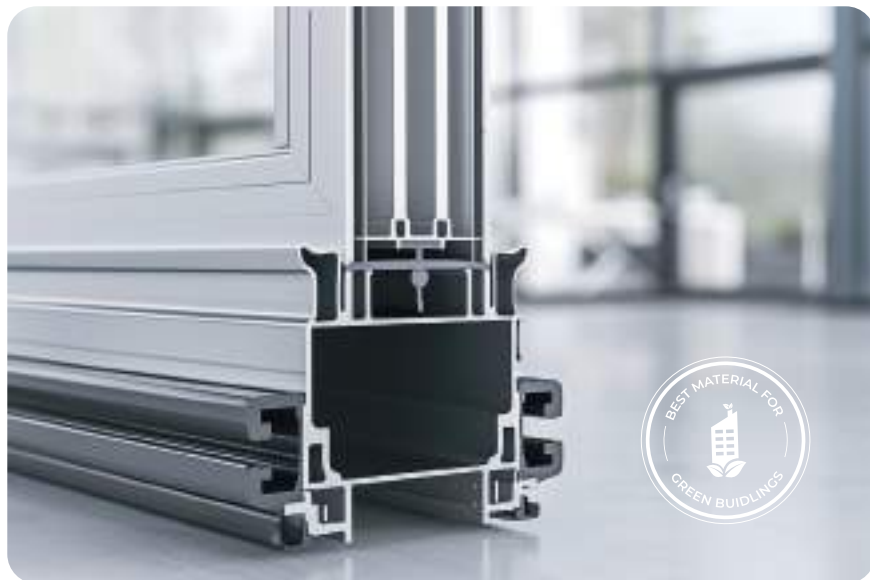


## Solutions For Every Segment

Aluminium stands out as the favored choice across various industries due to its exceptional characteristics, including its lightweight nature, resistance to corrosion, and the ability for infinite recycling. Hindalco Extrusions specialises in delivering tailor-made solutions to meet the specific needs of each industry.







## Building and Construction

Aluminium Extrusions have emerged as a cornerstone material in the realm of building and construction due to their exceptional versatility, durability, and eco-friendliness. Notably, 75% of aluminium products ever made continue to serve their purpose today.

Hindalco Extrusions stands out as the premium option, renowned for its exceptional anodizing, PC, PVDF and bright dip quality, dimensional precision, impeccable material finishing, and a host of other superior characteristics. Aluminium Extrusions are preferred for their ability to withstand heavy loads, extreme weather conditions, and seismic events.

The company has contributed its expertise to countless innovative construction ventures, spanning from airports and towering office complexes to private residences and municipal structures.

### Solutions offered for the architectural industry

- |                            |                   |                            |                          |
|----------------------------|-------------------|----------------------------|--------------------------|
| • Door and window profiles | • Façade profiles | • Skylight system profiles | • Ladders & scaffolding  |
| • Curtain wall systems     | • Formworks       | • Thermal breaks           | • Interior & decoratives |





## Transport

Aluminium has become an indispensable material in the automotive sector, contributing to lighter, more fuel-efficient, and environmentally friendly vehicles. Hindalco Extrusions specialises in providing tailored solutions with advanced metallurgical composition and mechanical properties, perfectly suited to meet the growing demand for performance, efficiency, and sustainability. Our commitment is unwavering as we strive to introduce innovative solutions that align with India's ambitious mission to modernise its transportation infrastructure.

### Our Capabilities:

- Alloy development • Precise CNC cutting • CNC machining
- Anodizing and powder coating
- NABL accredited testing lab • IATF 16949:2016 certification

### Applications:

- EV battery casing • Crash management system • Metro third rail (Power)
- Tubes for propeller shafts • ABS and EBS components • NVH components
- Front forks for high performance bikes • Forging components



## Renewable Energy

Aluminium, known for its lightweight properties, exceptional strength, unparalleled resistance to corrosion, and durability, is widely used to construct renewable energy platforms such as solar panels and wind turbines. Hindalco stands out by offering a comprehensive solution' from design and manufacturing to fabrication and assembly' all under one roof. This unique approach makes us the sole mounting structure provider in India covering the entire value chain. Also, supporting the renewable sector with customised value added products as per market requirements.

### Our Capabilities:

- Site visit before project initiation • Structural & wind load analysis
- Design of the array layout • Complete solar mounting system solution
- Semi-fabricating, including cutting to size, drilling, machining, etc.

### Applications:

- Photovoltaic mounting systems • Solar mounting solutions
- Sub construction and mounting systems for ground & roof
- Other renewable applications





## Industrial Machinery

The use of aluminium extrusion in industrial machinery has gained significant momentum in recent years due to its exceptional versatility, lightweight properties, and durability. From frames to enclosures, conveyor systems to automation components, aluminium's lightweight yet durable properties make it an indispensable material in modern industrial machinery design. Extrusion allows for complex and customised shapes, making it suitable for a wide range of applications in machinery design. As industries continue to seek innovative solutions for enhanced productivity, energy efficiency, and sustainability, Hindalco Aluminium Extrusion will undoubtedly play a pivotal role in shaping the future of industrial machinery.

### Capabilities:

- Pneumatic Systems • Conveyor Systems • Enclosures and Housings
- Automation Components • Textile Machinery • HVAC



## Electrical & Electronics

Aluminium stands out as the perfect material for electrical applications, offering outstanding heat transfer capabilities and conductivity while being both cost-effective and lighter compared to alternative metals. Aluminium extrusion solutions can weigh up to 70% less than copper, making them an optimal choice for a wide range of electrical and electronic appliances. Aluminium extrusions have redefined the landscape of electrical power distribution through their excellent conductivity, lightweight properties, corrosion resistance, and design flexibility.

### **Our Capabilities:**

- Customer-oriented, tailored solutions
- Flat and Tubular Bus Bars exhibit exceptional bending quality and undergo material tests that meet international standards
- Heat Sink profiles
- Electric Motor Housing
- Lighting fittings and LED profiles







## Defence Industry

Defence solutions not only need to be effective but also need to improve the survivability of personnel on and off the battlefield. Hindalco offers a wide range of light, strong, and corrosion resistant advanced alloys in addition to many standard alloys. Combination of Alloys with suitable tempers for forming application is available. We also have the experience in delivering specific shapes as per customer technical specifications as well as international standards. Across air, land and sea, our defence innovations maximise speed, agility and survivability.

### Capabilities:

- ISO 9001:2015 certified • 2xxx, 5xxx, and 7xxx series alloy range • PCG free product
- CEMILAC certification • Class A ultrasonic tested billets • Superior Almex Casting Technology • R & D facility for new product and process development

### Application:

- Tank wheel forging • Mobile bridges • Bombshell • Forging components • Pinaka Pods



## Aerospace Industry

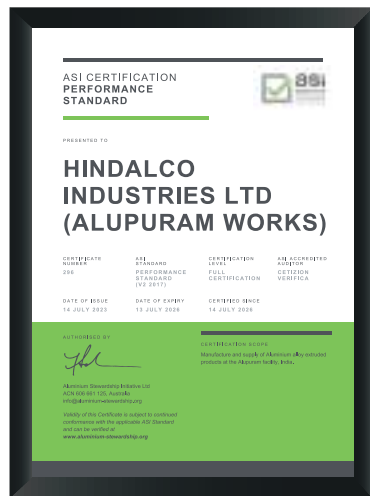
Aluminium Extrusions plays a crucial role in the contemporary aerospace sector due to their exceptional strength-to-weight ratio and ability to resist corrosion. Hindalco Extrusions offers aluminium rods that are extruded in two commonly used alloys, namely 2014 and 7075 aluminium, which are frequently utilised in modern aircrafts.

### Capabilities:

- AS9100 Rev D certified • ISO 9001:2015 certified
- 2xxx, 5xxx, 6xxx and 7xxx series alloy range



# Global Recognitions



ASI Certified Performance



IATF 16949 2016 (Automotive)



Member of QMEA



QUALICOAT Certified



ISO 9001 2015, ISO 14001 2015,  
ISO 45001 2018



AS 9100 2016 Rev D (Aerospace)



CE Certification



Lloyd's Register Certificate



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