

RioTinto

Aluminium Billets

Asia Pacific



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Rio Tinto Aluminium Pacific Billet

Building on more than a century of experience and expertise, we are a global leader in the industry.

Our fully integrated facilities include high-quality bauxite mines, large-scale alumina refineries, and some of the world's lowest cost, most technologically advanced aluminium smelters and cast houses.

We take advantage of our strong and sustainable aluminium operations to renew and establish long-term partnerships with customers for which top quality products and high service is paramount.

As a global company, we are always close by, with three casthouses in Australia and New Zealand producing billet to meet your needs across the Pacific region.

High-quality solutions are within your reach; speak with our team today.



Rio Tinto is a leading global supplier of aluminium

Our vision for the decades to come is being your partner of choice by delivering value through:



Security of supply

- Integrated supply chain
- Multi-sourced supply options
- Reliable and trusted delivery



Consistent high-quality aluminium products

- Strict quality controls
- Enhanced extrudability, mechanical properties and metal surface finish



Leading technical support

- Alloy development
- Cutting-edge research
- Training and seminars
- Extrusion process survey and improvement



A responsible partnership

- START sustainability labels that provide up to 14 ESG metrics and provenance information
- Responsible sourcing through ASI
- Certified low CO₂ with RenewAl™
- Developing ELYSIS, an industry-first carbon free smelting process



Commitment to industry leadership

- Enhanced collaboration strategy with Original Equipment Manufacturers (OEMs)
- Innovation that sharpens your competitiveness

Global reach, local presence

As a global company, we are always close by.



Meeting the needs of over 600 customers in more than 50 countries, we have a long history of just-in-time delivery and short lead-times.

*Approximate billet production capacity



Integrated supply chain

Integrated from mine to market

Strict quality controls ensure consistent, high-quality products



Multi-sourced supply

Supply isn't dependent on a single source. We also have casthouses in North America
Minimises geopolitical risks



Reliable delivery

Robust, flexible and trusted delivery
Casthouses are strategically located to ensure just-in-time delivery



Rio Tinto Aluminium Pacific Billet Capability

Rio Tinto smelters offer customers a large number of billet alloys; 1000, 3000 and 6000 series. Our variety of alloys covers a broad range of end use applications. We are prepared to develop extrusion alloys that enhance extrudability, mechanical properties and metal surface finish. Tell us about your alloy needs.

Product features

Billet casting centres	Aluminium alloy series ¹			Billet Diameter Inches (mm)									Lengths ²
	1000	3000	6000	6 (152)	7 (178)	8 (203)	9 (228)	10 (254)	11 (280)	12 (304)	13 (328)	14 (355)	mm
Boyne Smelters Ltd – BSL (Queensland, AUS)			✓		✓	✓ 4	✓	✓		✓			5,500 – 7,200
New Zealand Aluminium Smelter – NZAS [†] (Tiwai Peninsula, NZ)	✓	✓ 3	✓		✓	✓	✓	✓	✓		✓	✓	600 – 7,000
Tomago (New South Wales, AUS)	✓	✓	✓	✓ 5	✓	✓	✓	✓					550 – 7,000

¹ Other alloys are subject to inquiry.

² All lengths are subject to inquiry.

³ Subject to inquiry.

⁴ Only 8 in. (204mm) available.

⁵ Also available in 6.12 in. (155mm).

[†] NZAS also offers, 9.65 in. (245mm) and 10.75 in. (273mm).

NOTE: Please refer to the Extrusion Billet Technical Specifications data sheet for dimensional tolerances.

Leading technical support

Focus on customers and providing innovative solutions

We are committed to delivering tangible solutions to our customers' needs. Our exclusive role as a supplier of specialty aluminium products demonstrates our desire to be the supplier of choice to global and regional customers. We understand the challenges of our customers and strive to be a strategic partner capable of providing innovative solutions to optimise productivity and competitiveness.

Technical assistance

We are available to address our customers' concerns, including questions about the casting, extrusion and heat treatment processes, corrosion resistance, and mechanical properties of our billet. Assisted by a multi-skilled team of experts, we offer technical solutions, we conduct advanced metallurgical investigation of extrusion samples to suggest fact-based approaches. We follow up with the customer and if necessary, visit their facility to assist in the implementation of our recommendations. Our objective is to ensure a satisfactory end result and tangible value for our customers.

For support to your technical challenges, please contact your local representative who will put you in touch with the appropriate technical expert.

Research and development

Our Research and Development group consists of a global system of research laboratories, applied engineering centres and university partnerships in America, Europe and Australia.

The Arvida Research and Development Center (ARDC), founded in 1946, provides R&D support for Rio Tinto Aluminium with an extensive range of expertise in end products. ARDC employs approximately 150 scientists, researchers, technicians and other employees on staff.

The ARDC applied engineering centre includes a state of the art metallography area for microstructural analysis and a spectrographic lab for the study of the chemical composition of alloys, as well as a small-scale casting equipment for testing new alloys. This includes a prototyping foundry offering small batch billets capabilities for testing at the customer and a full extrusion line for advanced alloy and extrusion process developments.

Rio Tinto Aluminium also collaborates with the Queensland University of Technology (QUT) in providing metallography assessment of extrusion samples and billet samples.



Rio Tinto's research and development group provides chemical and analysis support.



Rio Tinto offers customers technical solutions from beginning to end.



Rio Tinto is committed to meeting our customers' needs as a strategic partner.



Consistent high-quality products

Rio Tinto billet is a product carefully manufactured to achieve consistent and optimum quality on every shipment.

Our role is to produce high-quality aluminium in line with requirements of our customers in such a manner that health, safety and environmental matters are kept in the forefront.

We are committed to excellence in all our activities and determined to maintain continuous improvement and to always operate in harmony with the environment and society.

Quality management system

All billet casthouses operate under quality management systems certified to meet ISO 9001 standard requirements.

Chemical composition

The chemical composition of billet products is certified by Optical Emission Spectrometry laboratories accredited to meet the technical requirements of ISO 17025 standard (NATA or IANZ accreditations).

Metal quality and microstructure

The metallurgical quality of our billet is ensured by respecting tight process parameters for alloying, in-line degassing treatment, filtration, casting and homogenisation and by using state-of-the-art technologies. Using primary aluminium as a raw material allows Rio Tinto Aluminium to provide consistent quality from one plant to another, as well as from one cast to the next.

Ultrasonic inspection

Our aluminium billet is 100% ultrasonically tested as a routine quality control measure to ensure they are free of centre cracks.

Surface quality and dimensions

Billets are carefully inspected to ensure they meet the surface quality required for remarkable performance at each and every step of the extrusion process and finishes.



All billet chemical composition meets technical requirements of ISO 17025.



Rio Tinto is committed to continuous improvement and maintaining excellence.



All billet casthouses operate under ISO 9001 standard requirements.

High performance alloys provide excellent performance while considering extrudability and properties



Rio Tinto Aluminium billet alloy classifications

High speed alloys

allow for high extrusion speeds and offer excellent surface finish on extruded profiles. These alloys meet the minimum property limits as required by the relevant standards under typical extrusion conditions. Suitable for customers who produce general applications and focus on achieving high throughput.

High strength alloys

can achieve tensile properties above the typical property levels, far above the minimum property limits. Appropriate for customers who produce extruded products for high strength applications or prefer alloys with robust property performance.

High performance alloys

provide overall excellent performance considering both extrudability and properties. Suitable for customers who prefer using the minimum number of alloys to cover a variety of products with different levels of property requirements.

AA Alloy Group	High speed	High strength	High performance
6060	6060X 6060007		SF6060 6060408
6063	6063.2 6063AX	SF6063	6063T
6061	6061HE 606196 6061AP	SF6061 6061220	6061T 606182 6061820
6106	6106470 6106.4		SF6106 6106065
6005A			SF6005 6005065
6351			SF6351 6351007
6082			SF6082 6082007

For assistance in alloy selection and optimisation, please contact your local representative who will put you in touch with the appropriate technical expert.

Other specialty alloys

Rio Tinto Aluminium's Pacific smelters also produce a number of specialty alloys that are tailored for specific applications such as heat sink applications, bright dipping applications, forging applications and high strength automotive applications.



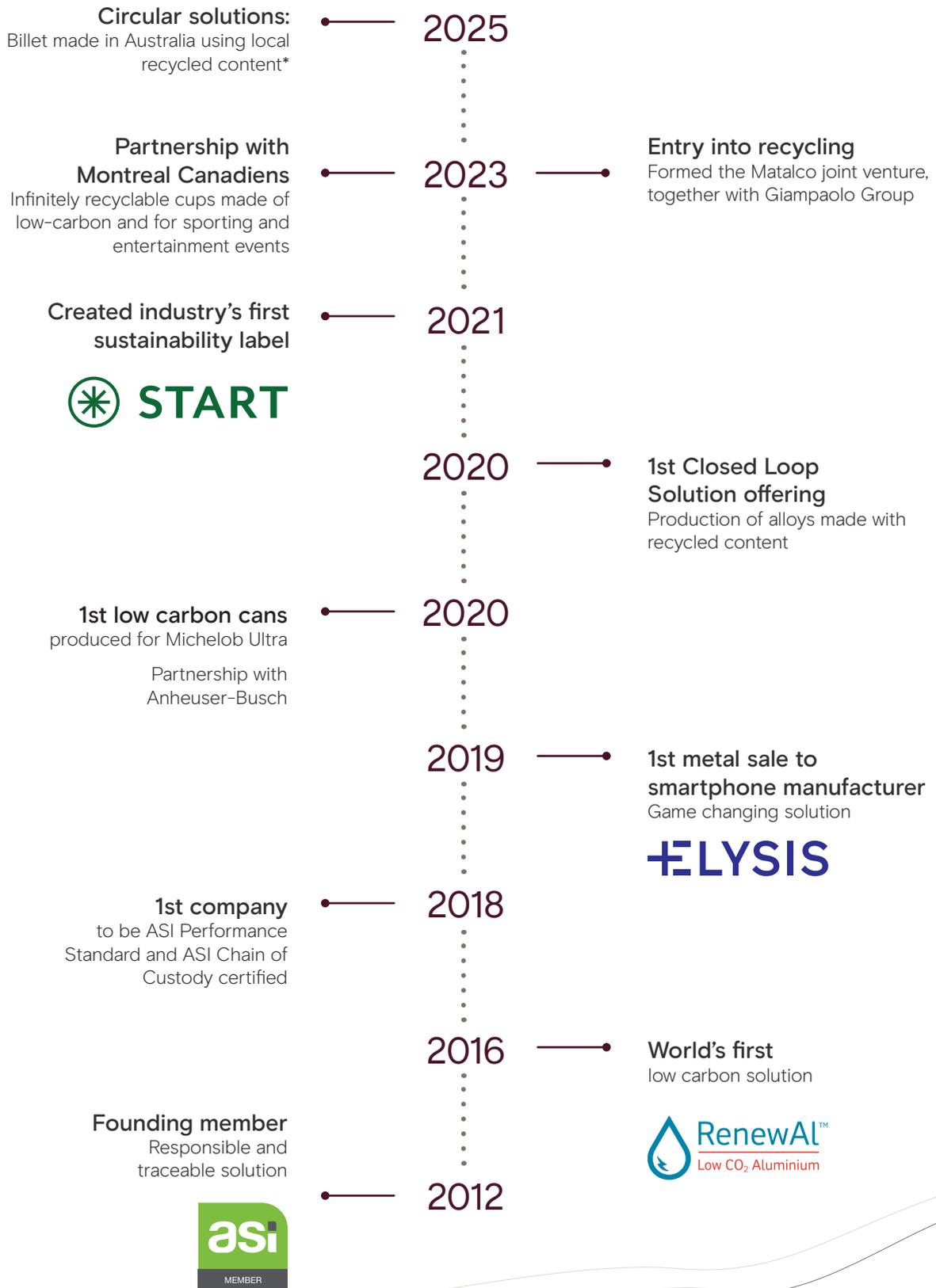
A responsible partnership focuses on sustainability

At Rio Tinto, our purpose is to produce materials essential to human progress. We aim to do this in a sustainable way and be part of the solution to help address the climate change challenge and assist in the transition to a low-carbon future.

Our responsibly produced and high-quality aluminium delivers competitive value to your sustainability agenda by:

- Providing you visibility as to how and where your aluminium was made.
- Reinforcing and promoting consumer and stakeholder confidence in your products and supply chain
- Increasing your ability to meet new demands and create potential opportunities
- Unlocking access to sustainability related financial market instruments and credit ratings
- Reducing your risk exposure to regulations in local and international markets

We are proud to be a leader in sustainability thinking



* For specific recycled content percentage requirements, please contact your sales manager

Circular solutions

Made in Australia using local recycled content*
– Available Now!

*For specific recycled content percentage requirements, please contact your sales manager

The most responsible aluminium

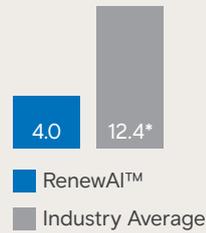
Low Carbon

Through the full lifecycle of production



In 2016, we launched RenewAl™, the world's first certified low CO₂ primary aluminium brand.

It guarantees that for every tonne of aluminium produced, the CO₂ content is 4 tonnes of CO₂ or below, almost one third the industry average of 12.4*.



ELYSIS

The ELYSIS™ technology eliminates all direct greenhouse gas (GHG) emissions from the aluminium smelting process and is the first technology ever that emits oxygen as its by-product.

Work is underway to commercialise deployment of this technology.

Responsible

Produced with respect and care for host communities, partners, First Nations, and environment



ASI certification means customers can be assured that the aluminium they purchase has been produced to the highest environmental, social and governance standards, ranging from greenhouse gas emissions to human rights.

Environment | Governance | Social

Performance standard
1st level of certification



Chain of Custody standard
2nd level of certification



Traceable

Materials identifiable and traceable throughout lifecycle



We provide a START sustainability label that provides up to 14 ESG metrics of our production process, as well as its provenance information.

This provides you visibility and transparency you need to make more sustainable choices on the materials you purchase.

Circular

Recyclable material

In 2025, billet made in Australia using local recycled content*

In 2023, we entered the recycling industry with our Matalco joint venture, with our JV partner, Giampaolo Group.

The Matalco joint venture expands our value-added product portfolio while allowing us to offer circular recycling solutions.

* Source: The industry average is based on the International Aluminium Institute (IAI) 2022 data

+ For specific recycled content percentage requirements, please contact your sales manager

Committed to innovation that sharpens your competitiveness

We are known for outstanding products and technical support, plus excellent customer service. With so much at stake in your business, consider all the benefits of making us your primary aluminium supplier of choice.

Security of supply

As a global company, we're always close by. This means we can offer a range of cost-cutting benefits, including faster response times and more robust supply chains.

Alloy and product development

If you cannot find the perfect alloy or solutions for your needs among our offering, talk to us. We'll work with you to develop precisely what you need.

It is through global partnerships and alliances with universities, colleges, institutions and private R&D centres, that we give you access to cutting-edge alloys and products.

Leading technical support

It is not just about alloys. We provide a full suite of outstanding services, which include customisable training for your teams, assess your processes and offer solutions that enhance your productivity.

A responsible partnership

We are committed to reduce your supply chain's CO₂ footprint and underscore your own commitment to sustainability. With START, our new offering that aims to provide our customers with transparent and traceable information regarding the sustainable nature of our aluminium products, you can now support your customers to make better informed decisions about the materials they use for the parts and products they sell.



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