



*Boutique
Aluminum
Creations*



“

To create sustainable
aluminum products tailored
to our customers' needs,
delivered with style and
premium service.

”

About Us

We are **Boutique Aluminum Creations** company. We specialize in creating a tailor-made experience for our customers focusing on providing a stylish service, satisfying the most demanding customers and applications, and consistently improving our quality on all metrics.

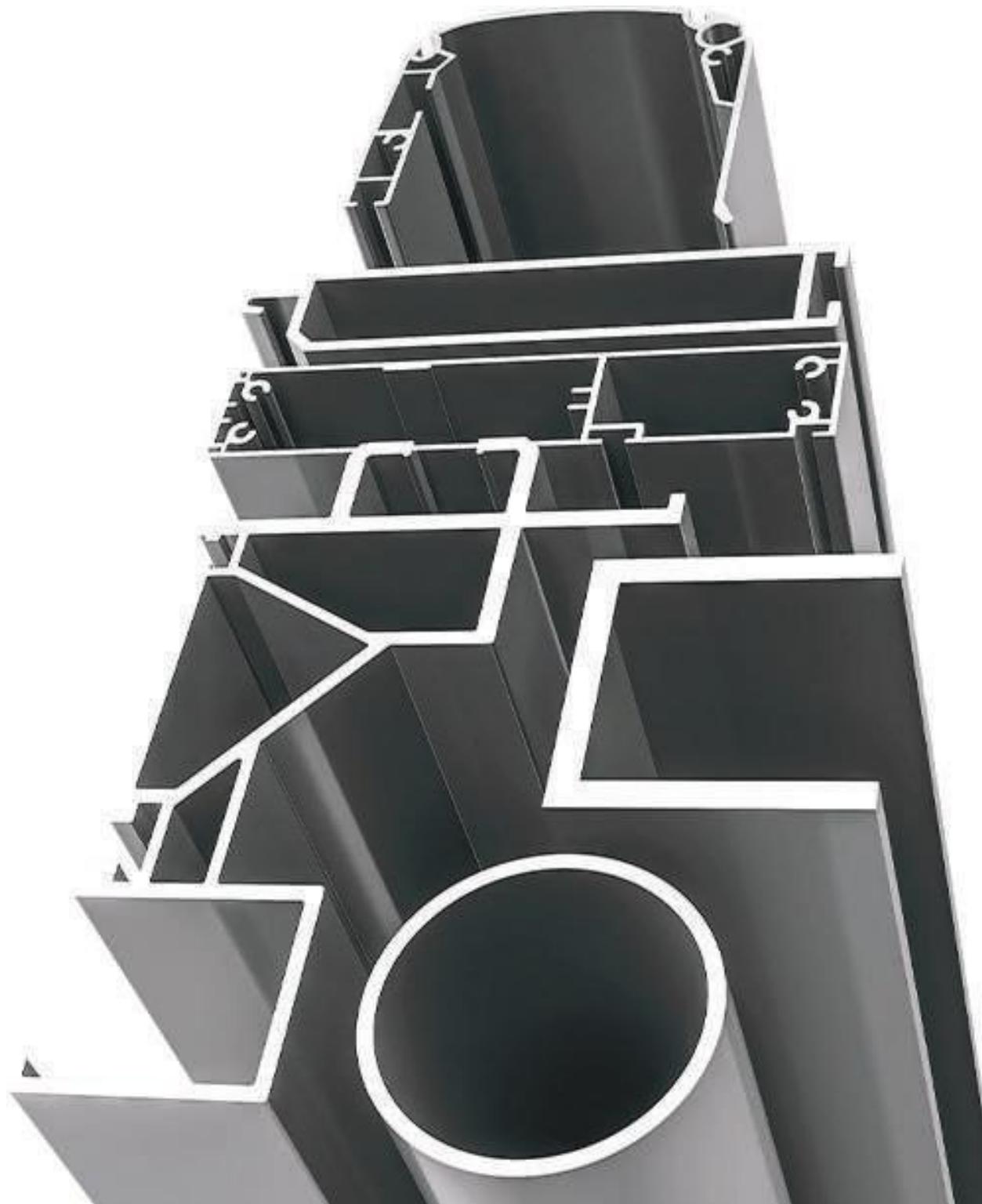
We grow when we best serve existing leaders in the Aluminum downstream industries and promote aluminum to replace other material whenever it can bring more environmental, operational and monetary value to potential customers.



Our products can be used in a range of business applications including buildings, construction, infrastructure projects, appliances, furniture, fencing, outdoor living, the telecommunications industry, packaging, lighting, transportation and automotive parts.

CANEX Aluminum started as an extruder who invested in casting value-added products to upcycle its extrusion process scrap.

We built a state-of-the-art factory and attracted the most talented technical and management teams, to pursue our impact mission in making our environment cleaner, constantly reducing our carbon footprint and helping our society prosper.



Values

Trust and Respect



Trust is a choice! It is what makes our company excel. We respect our differences and listen to other opinions with an open heart. We strive to create a safe space where authentic people are appreciated.



Be Honest and Transparent

Honesty, transparency, and integrity are the mantras by which we interact with all of our stakeholders. We believe this shows respect and builds trust within all parties involved.



Grow Together

We bring together those who work to be the best calibers in all relevant fields and disciplines and we cultivate an environment that brings out the best in all of us. We believe that our diversity is a learning opportunity and that we grow further together.

Have Dedication to Quality



Our definition of quality is to deliver on time, price right and consistently produce within the agreed tolerance. A dedication to quality is to us conserving, reducing waste and contributing to a more sustainable world.



Innovate and Diversify

We believe in dreamers! At CANEX, creativity, innovation, and taking the initiative are all encouraged. It is innovation that makes us more efficient, helps us raise the level of quality, while saving company time and resources. We believe our diverse customer and product portfolio help us to think outside of the box and opens our horizons. We take pride in the way we listen to our customers and tailor our practices and processes to fit their ever-evolving needs.

“

From the boardroom to the living room, our aluminum creations elevate every environment they grace.

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Industries We Support



Construction



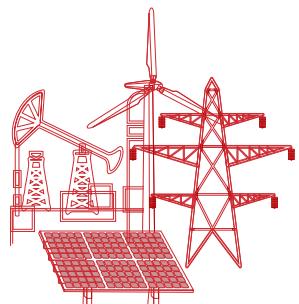
Sports



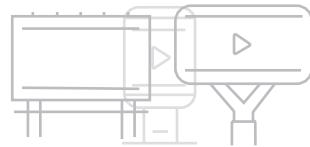
Home & Office



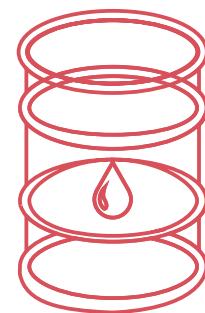
Telecommunications



Solar & Energy



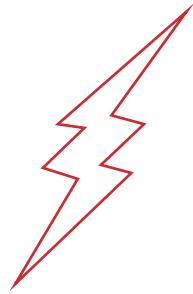
Media & Advertising



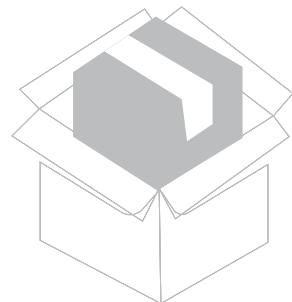
Oil and Gas



Architecture



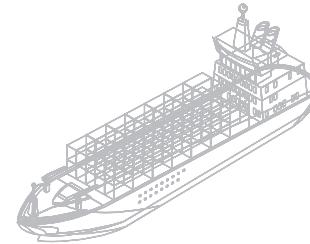
Electronics and Electrical



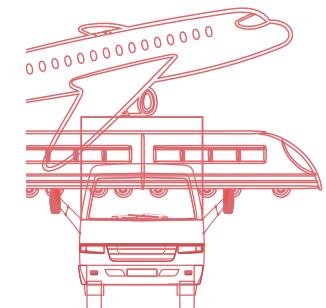
Consumer Goods



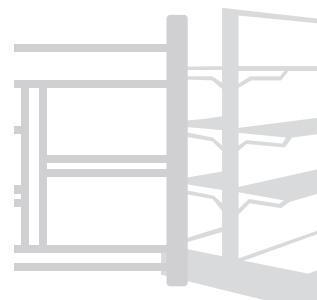
Infrastructure



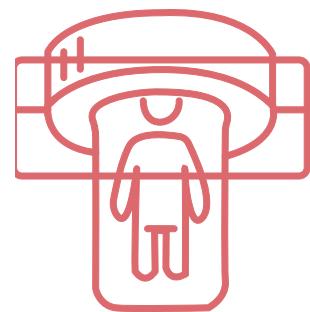
Marine



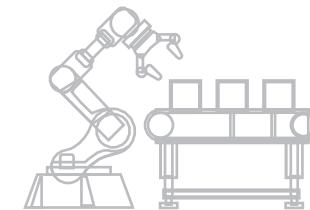
Transportation



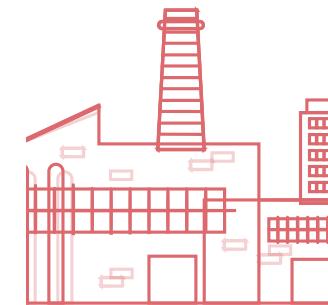
Retail and Display



Healthcare



Conveyor Technology

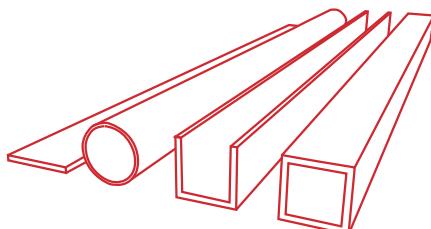


Industrial

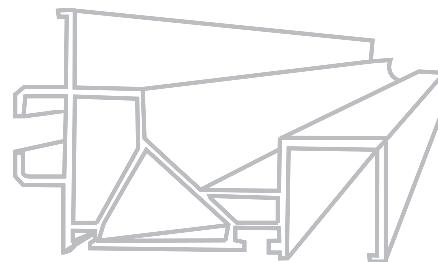
Products & Services

CANEX Aluminum fully owns and operates a highly advanced 32,000 m² production plant in 6th of October city, Egypt, and is well-positioned to produce a wide array of aluminum products.

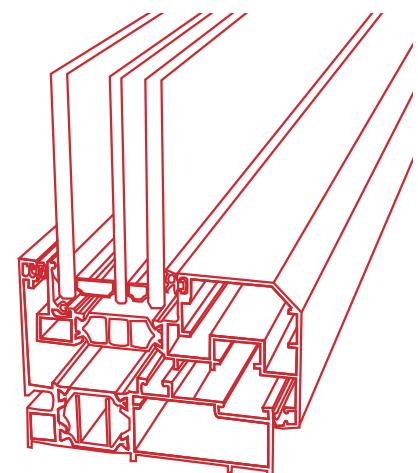
Aluminum Extrusion (Long Products)



Standard
Profiles

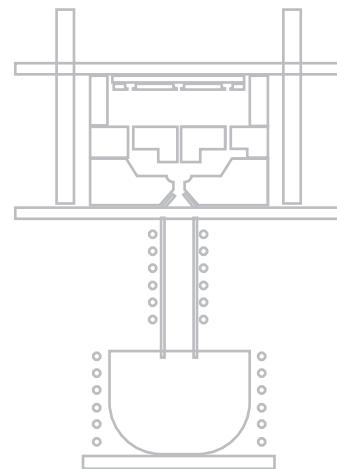


Custom
Profiles

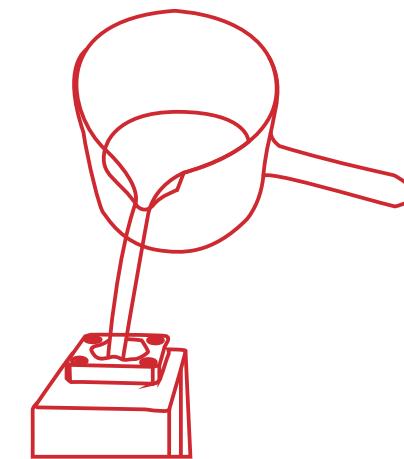


Thermal Break
Profiles

Aluminum Die Cast

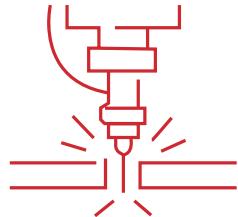


Low Pressure
Die Cast



Gravity
Die Cast

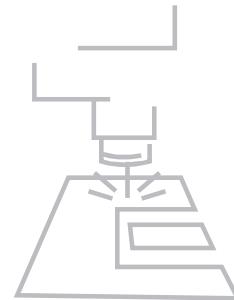
Value-added Services



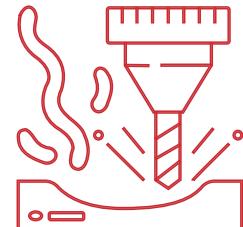
Cutting to length



Drilling



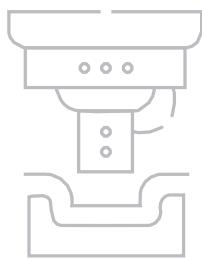
Notching



Milling



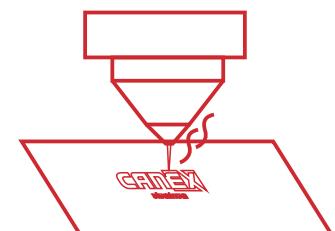
Assembly



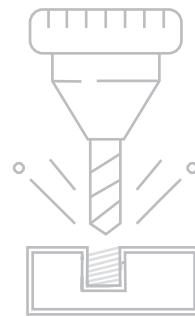
Punching



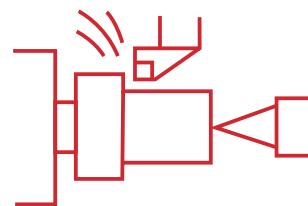
Shrink Fitting



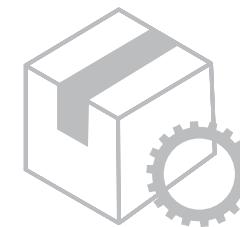
Laser Printing



Threading

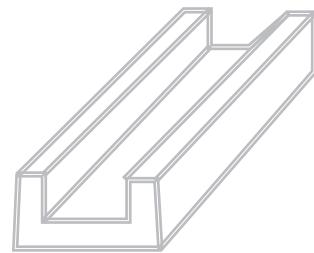


Turning

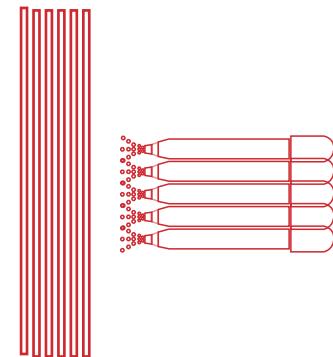


Custom Packaging

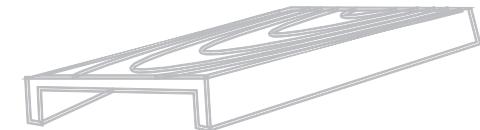
Surface Finish



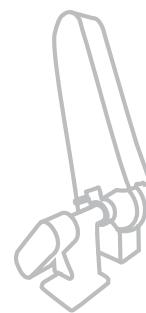
Mill Finish



Powder Coating



Wood Effect



Grinding

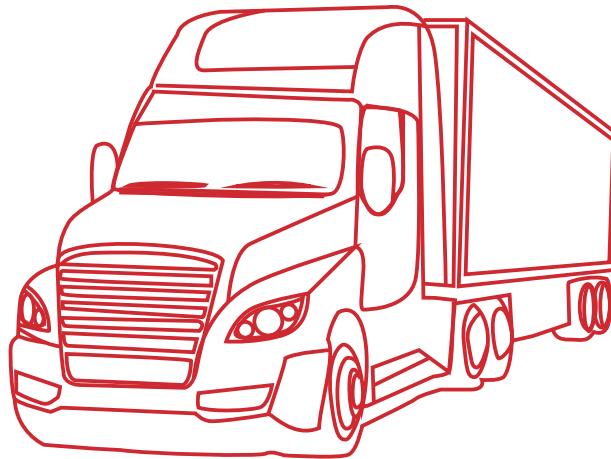


Barrel



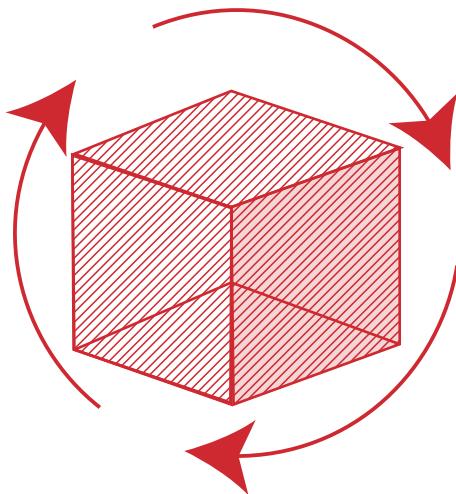
Shot Blasting

Insured Delivery



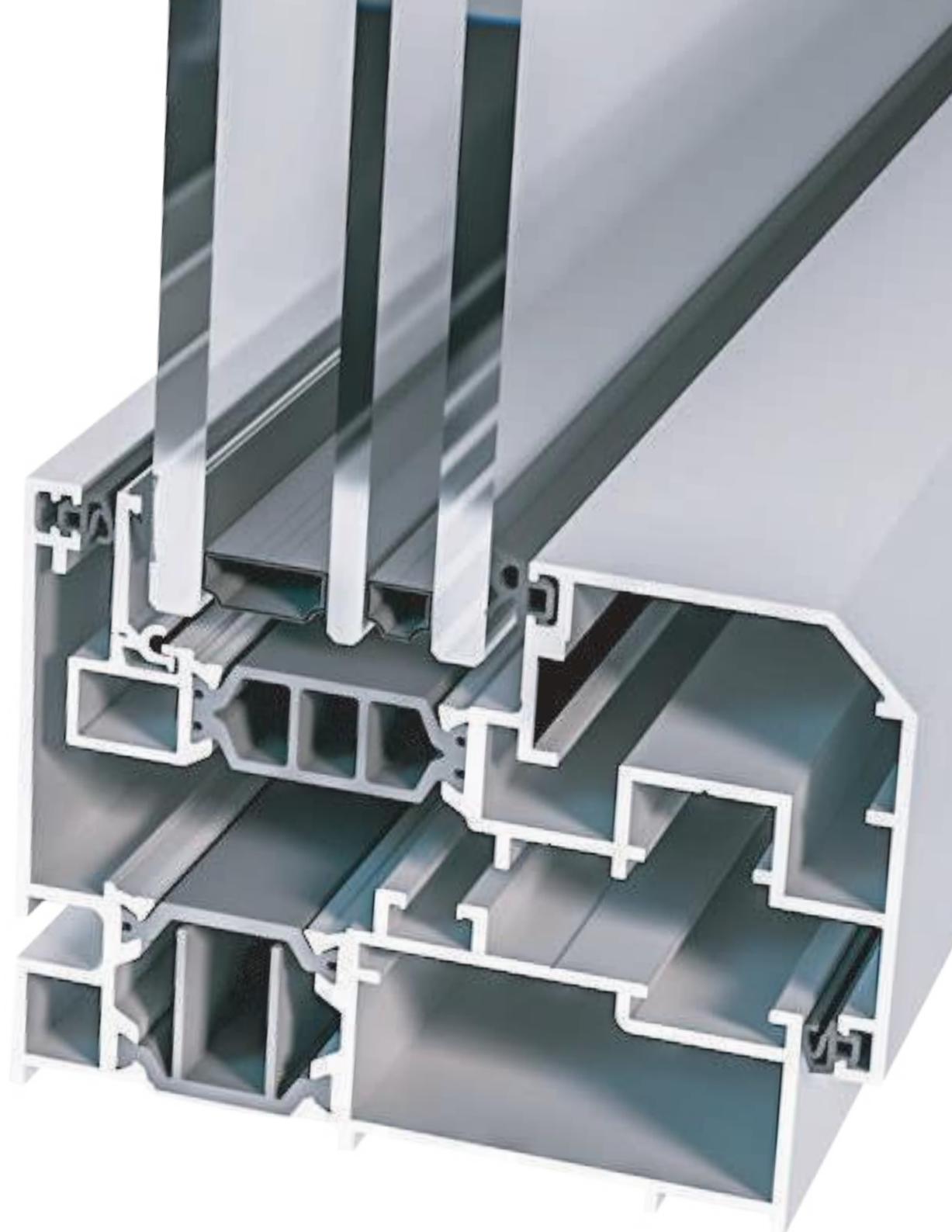
At CANEX, we recognize the critical importance of timely and reliable deliveries for your projects. Our comprehensive delivery service guarantees that your aluminum profiles and parts arrive safely and on schedule, regardless of the destination. We offer a variety of delivery options to meet your specific needs, including handling all types of Incoterms, from EXW to DDP, ensuring smooth door-to-door service.

New Product Development



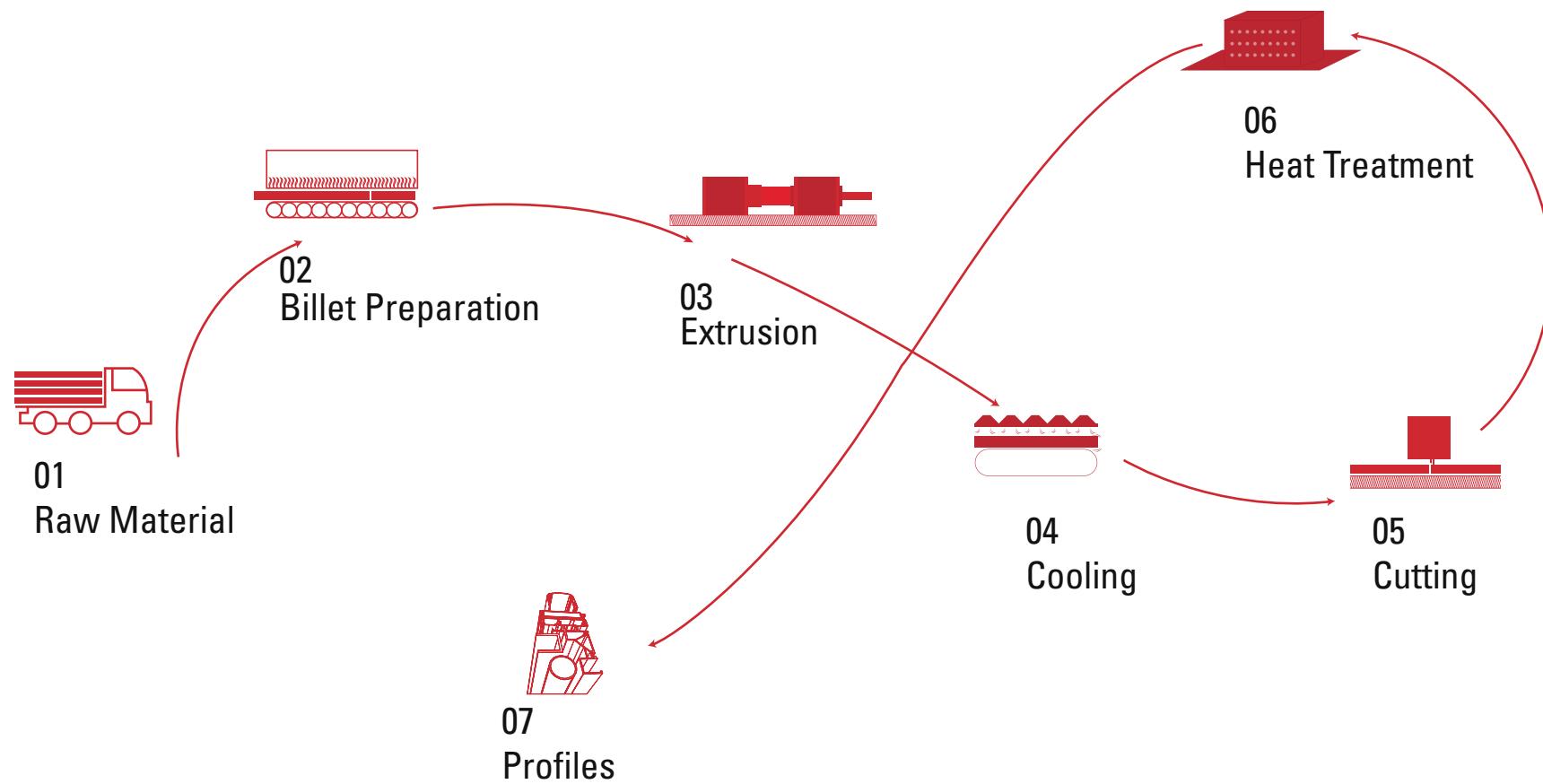
Our team of experienced engineers and designers collaborates closely with you to develop custom aluminum profiles and components tailored to your specific requirements. Whether you are looking to enhance an existing product or create something entirely new, our comprehensive development process is focused on delivering solutions that meet your exact specifications and exceed your expectations. Discover the limitless possibilities of aluminum with CANEX aluminum, where imagination meets craftsmanship.





Production Excellence

Our commitment to excellence goes beyond the finished product; it's ingrained in every step of our process.

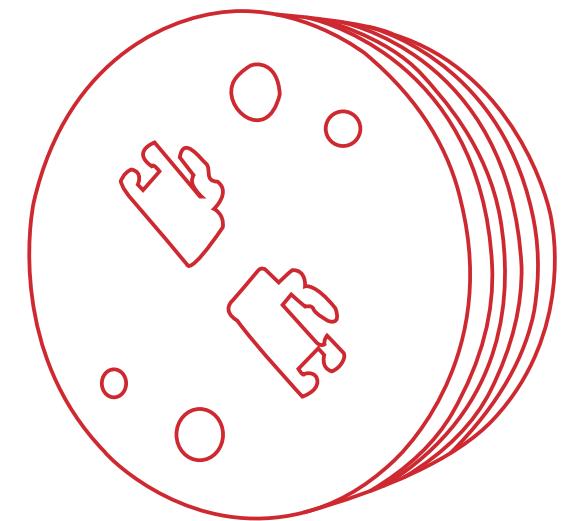


Tooling Excellence

Whether it's extrusion or die casting, the first step is to perfect the die design because it is the tool that determines the quality, productivity and scrap rate of our production.

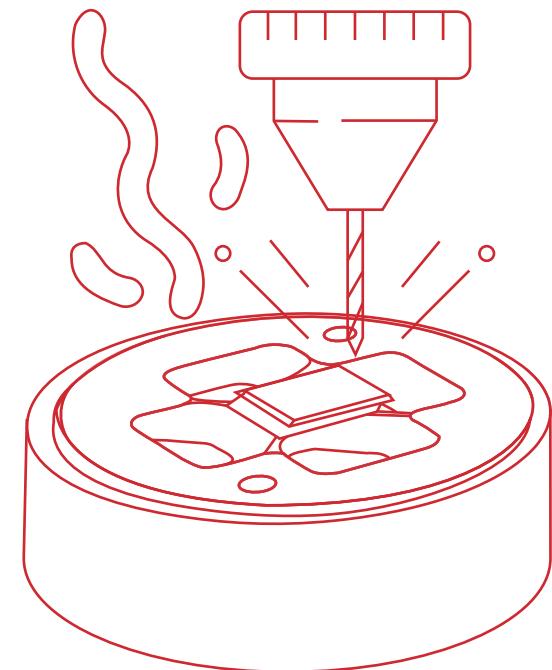
Die Design

We invest significantly in building die design expertise among our engineers and utilize the most advanced design and simulation software. Our approach is designed to support decarbonized production, ensure fast delivery, and maintain high quality.



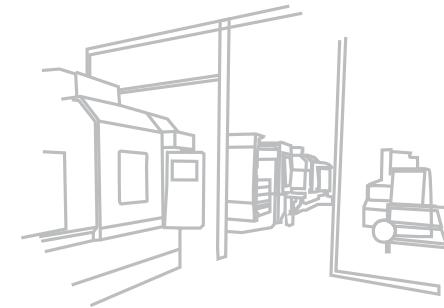
Die Manufacturing

We recognize that manufacturing dies according to simulation designs is crucial for achieving optimal results, which is why we invested in the most advanced simulation software. In order to execute the simulated designs perfectly, we invest in top-of-the-line machinery to produce with the highest possible precision.



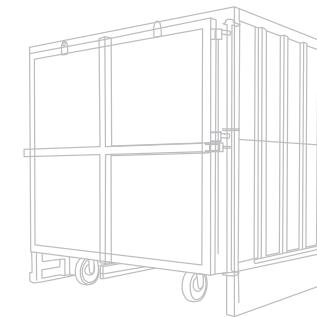
Advanced Precision Machining

By employing advanced machining techniques such as CNC milling and turning, electrical discharge machining (EDM), and wire cutting, we achieve dimensional precision up to 0.001 mm. These cutting-edge techniques, combined with optimized die design, enable our tools to produce consistent, high-quality products with minimal defects and improved cycle times.



Heat Furnaces

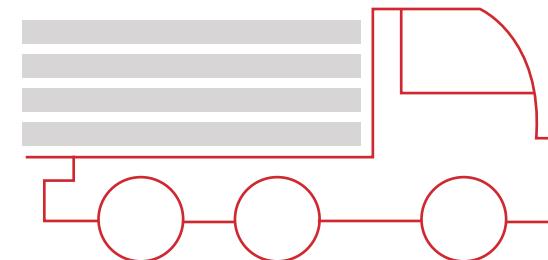
We are equipped with an electrically heated chamber that utilizes radiation heating up to 1100°C, with a charging capacity of 2500 kg, and our advanced electrically heated forced convection furnace operates at temperatures up to 850°C and handles a charging capacity of 1400 kg. These high-performance systems enable us to meet demanding production requirements with precision and efficiency.



Extrusion Excellence (Long Products)

Raw Material

To ensure the supply of top-quality materials, we go through a careful and detailed process.



Supplier Evaluation

We carefully check each supplier against clear criteria, to make sure they meet our standards and provide consistent quality.

Material Specification

We clearly define the requirements for all the raw materials we use, especially the chemical composition of the Aluminum Alloys we use (6060, 6063, 6463, 6005, 6005A, 6061, 6082, 6101, 1050) as well as their heat treatment. Our R&D team continuously works to enhance these materials and ensure they meet our precise specifications.

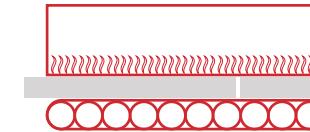
Material Inspection

We inspect all incoming materials to ensure they meet our specifications, such as using a Spectrophotometer to analyze the chemical composition of aluminum billets, among other materials.



Billet Preparation

Billet temperature control is crucial because even a slight variation in billet temperature can significantly affect the extrusion output. We invest in high-precision furnaces and tools to ensure optimal results.



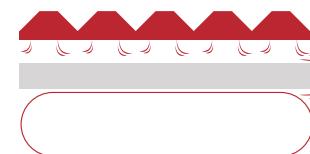
Extrusion

At CANEX Aluminum, we invest in the latest technology to enhance our extrusion processes. With our IOT adapted 22 MN and 27 MN extrusion presses, we achieve the highest level of AI driven productivity, while maintaining the lowest scrap rates.



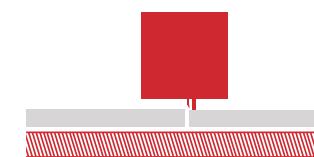
Cooling

The extruded aluminum profiles are cooled immediately using air or water after exiting the die, according to the specific requirements of the extrusion process, to achieve the desired temper.



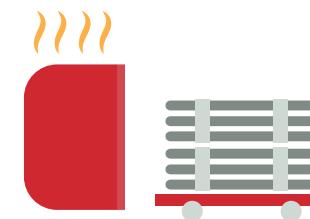
Cutting

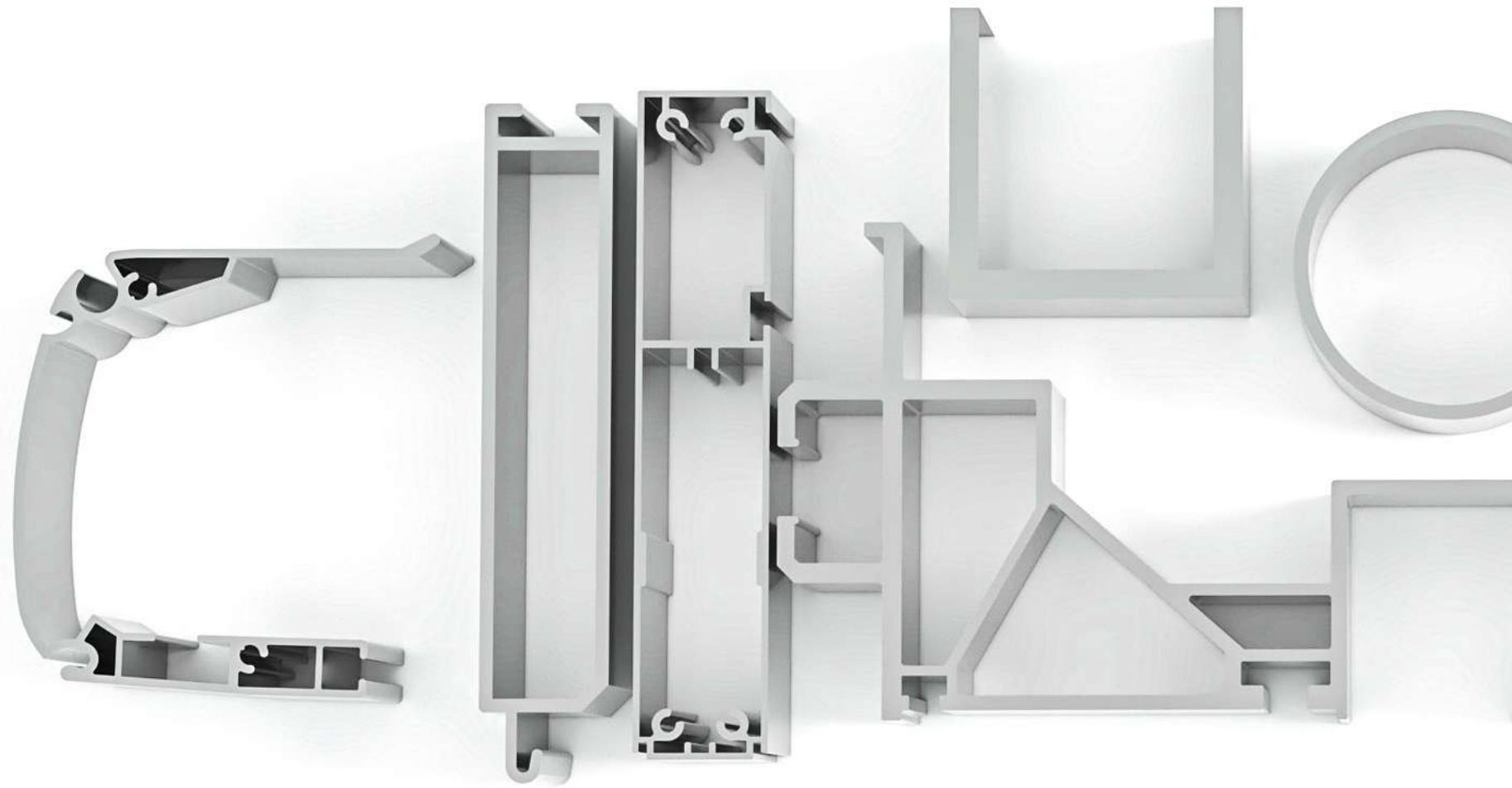
After cooling, the long-extruded profiles are cut to specified lengths based on customer requirements and their intended application. Our profiles can be cut to a maximum length of 13 meters (42.65') and a minimum length of 3 meters (9.8').



Heat Treatment

To improve the mechanical properties of aluminum profiles, they undergo aging, a heat treatment that strengthens the aluminum for various industrial uses. We are capable of producing heat treatment tempers including T4, T5, T6, and T66.





canex

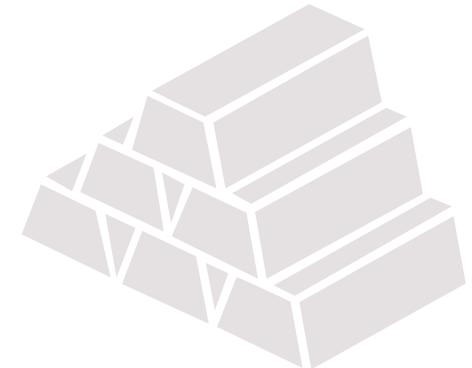
aluminum

Boutique Aluminum Creations

Die Cast Excellence

Raw Material

Our die casting excellence begins with sustainable innovation. We upcycle extrusion scrap, adding top-quality alloying elements to develop custom alloy compositions that meet precise specifications. This approach allows us not only to minimize waste but also to ensure high-quality castings with superior mechanical properties. By transforming our scrap into premium alloys, we deliver top-tier performance while promoting environmental responsibility.



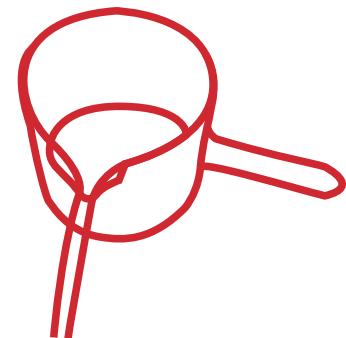
Melting

In our state-of-the-art melting furnaces, our scrap and raw materials are heated to a liquid state with a strict control over the temperature ($\pm 5^{\circ}\text{C}$) to maintain alloy composition and to ensure that the molten aluminum achieves the ideal flow characteristics. This precision in the melting process is another important step towards delivering consistent and high-quality castings.



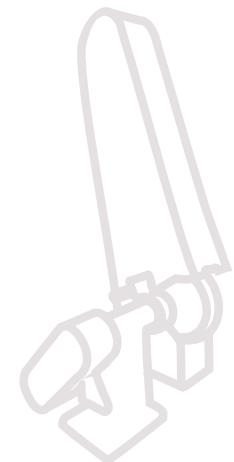
Casting

Once the molten metal reaches the desired temperature, the molten metal is degassed and skimmed before pouring or injecting into the carefully coated molds under controlled conditions ensuring smooth filling, minimum turbulence, and minimum defect occurrences. After the aluminum solidifies, the casting is carefully removed from the mold, ready for further processing. At CANEX Aluminum, we offer Gravity Casting (GC) technique and Low Pressure Die Casting (LPDC) technique, designed to deliver precision and quality for diverse applications with product sizes up to 1.5 meters and a surface roughness of Ra 3.2 – 6.3 μm (125 – 250 μin). Additionally, our expertise extends to provide tailored solutions using other casting techniques, ensuring we meet the specific needs and challenges of each project with flexibility and innovation.



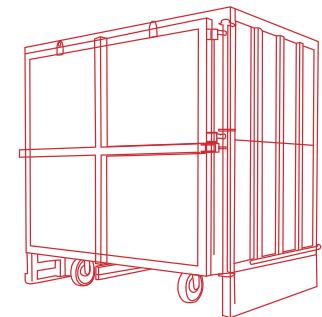
Essential Cutting & Trimming Processes

After casting, the gating and feeding extras are meticulously cut and removed; and the semi-finished products undergo a mandatory grinding process to clean the cutting area allowing the semi-finished products to be ready to undergo a series of operations, including machining, heat treatment, and surface finished, based on our client's needs.



Heat Treatment

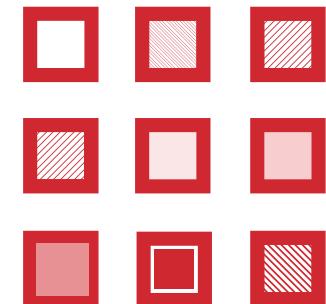
We can further enhance the mechanical properties of castings through a series of thermal treatments to achieve the desired performance characteristics. This can be achieved with the help of our state-of-the-art furnaces with strict temperature control to get the best out of the heat treatment process. Our knowledge and expertise allow us to achieve the required mechanical properties through standard tempers (T7, T6, T5, and T4) or through specifically tailored temper.





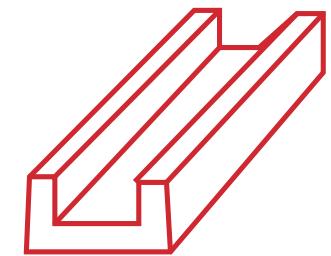
Surface Finish Excellence

The final step involves finishing processes for both extrusion & die cast products. CANEX offers a variety of surface finishes to meet the sophisticated needs of various industries and applications.



Mill Finish

We offer aluminum profiles in various surface quality classes with different inspection methods, tailored to our clients' specifications and applications, without any kind of surface treatment or coloring.



Powder Coating

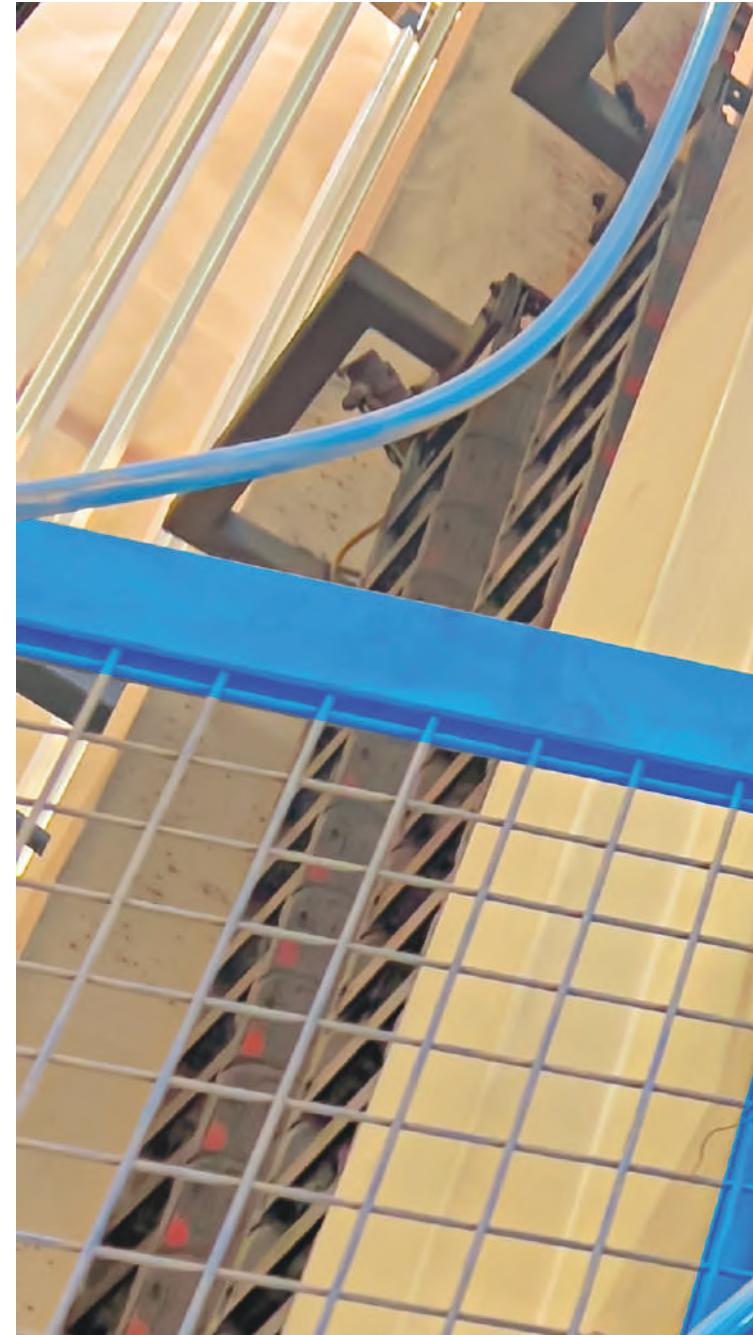
Our carefully designed powder coating process starts with an advanced 9-stage pretreatment tunnel. Our pretreatment first stage is alkaline, followed by rinsing stages, acid etching, demi rinsing and it ends with a chrome-free stage followed by demi fogging. Not only do we have such a long and multistage line, but we are also utilizing both cascading and nozzles technology to thoroughly prepare the surface chemically and mechanically, especially for seaside applications.





We've also optimized our energy use by incorporating insulated tanks and tunnels in the alkaline and acid stages, which reduces the heat required for chemical treatments. This detailed pretreatment not only qualifies our products for harsh coastal environments but also reduces chemical usage, making our operations more conserving for an environmentally friendly operation.

We've invested in state-of-the-art coating technology, including a top-of-the-line powder center, pumps, and guns on our vertical production booth and clean room. This allows us to achieve a uniform powder application with excellent coverage, even in hard-to-reach angles. The result is a smooth surface free of orange peel and an even distribution of metallic particles, ensuring a perfect finish.





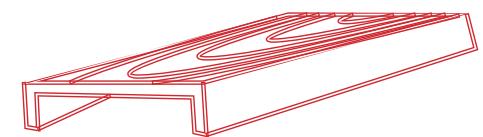
Throughout this process, we follow strict international quality standards, including but not limited to QUALICOAT and AAMA certifications, along with many other industry-leading accreditations. We carefully check each product's appearance, gloss, and coating thickness and conduct thorough tests for wet and dry adhesion, hardness, bending, and impact resistance. We offer three levels of powder coating—Standard, Super Durable, and Hyper Durable—ensuring our finishes not only look flawless but are also built to last in diverse climates, meeting the high standards of architects and interior designers.





Wood Effect

To create an elegant wood effect, our profiles are first coated with the base powder. After curing, they enter the film sublimation process, where the wood pattern is transferred from the film to the profile. Once the pattern is fully absorbed, the film is removed, revealing a stunning wooden appearance.



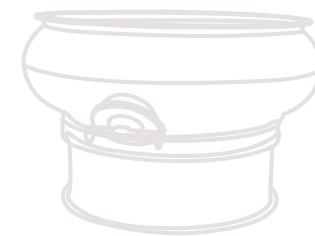
Grinding & Polishing

Based on our clients' needs, our grinding and polishing processes for aluminum products are designed to deliver exceptional surface quality that ensures smooth, and defect free surfaces. Through precision grinding and polishing, we can achieve surface finishes between Ra 0.1 - 0.2 μm (4 - 8 μin).



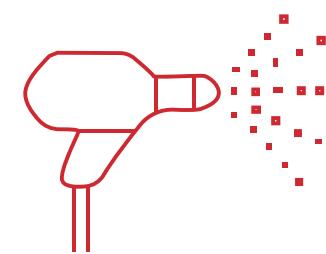
Barrel Finishing

Our barrel finishing processes for aluminum products provide a consistent and refined surface finish achievable by removing imperfections and enhancing their overall appearance, while also improving durability and resistance to corrosion. Using advanced tumbling techniques, we can achieve a surface finish as fine as Ra 1.6 μm (63 μin).



Shot Blasting

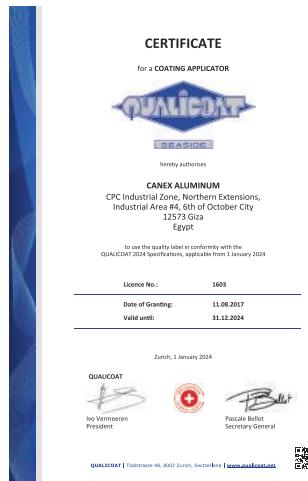
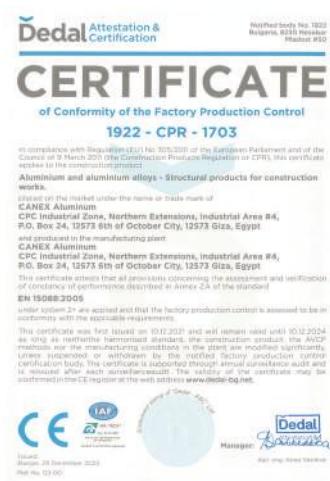
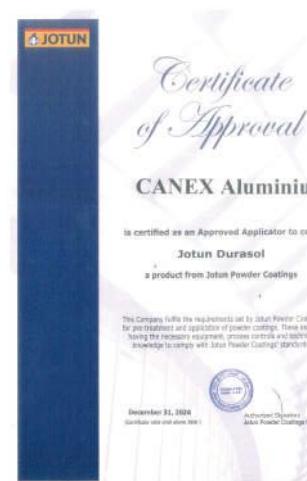
Our shot blasting process for aluminum products is used to achieve a clean, uniformly textured surface, and matt finish improving the castings response for subsequent treatments. By carefully controlling the blasting parameters, we can achieve a surface finish with a roughness of approximately $Ra 3.2 \mu\text{m}$ (125 μin).



Quality To Satisfaction

We are committed to maintaining the highest standards of quality in all our products and services. Our certifications are a testament to our dedication to excellence. We do this to solve our customers' sophisticated problems and ensure that every product we deliver meets rigorous international standards for performance and reliability.





Team

We are an integral part of our community and of our employees' lives at work and outside! We regularly hold social events and activities for our staff, their families, as well as the neighboring communities. These gatherings help us build stronger connections with each other and with our respective families.





Sustainability

Coming originally from natural resources that are abundant in the Earth's crust, aluminum is the 3rd most abundant element and one of the most environmentally friendly materials across the metal industries. Unlike other metals, aluminum can be endlessly recycled while retaining its distinctive properties. It is also used to produce energy-efficient transportation and construct eco-friendly buildings.

Since natural resources form the foundation of our business, we deeply respect the Earth and its resources, which have been made to serve humanity and are a gift not only for us but for future generations as well. That's why we believe that prioritizing the health and safety of people is paramount, and we consider the environment in every decision we make, ensuring we minimize our environmental footprint. We're committed to sustainable practices that protect our planet today and preserve its wealth for tomorrow.





Health & Safety

We work hard to create a secure work environment by preventing potential hazards. Our facilities are well-lit and well-ventilated, and we use only safe, non-hazardous materials. We have strict safety rules to stop any dangerous operations immediately and provide regular training to keep everyone aware of safety practices. This approach helps us avoid accidents and ensures a healthy workplace.

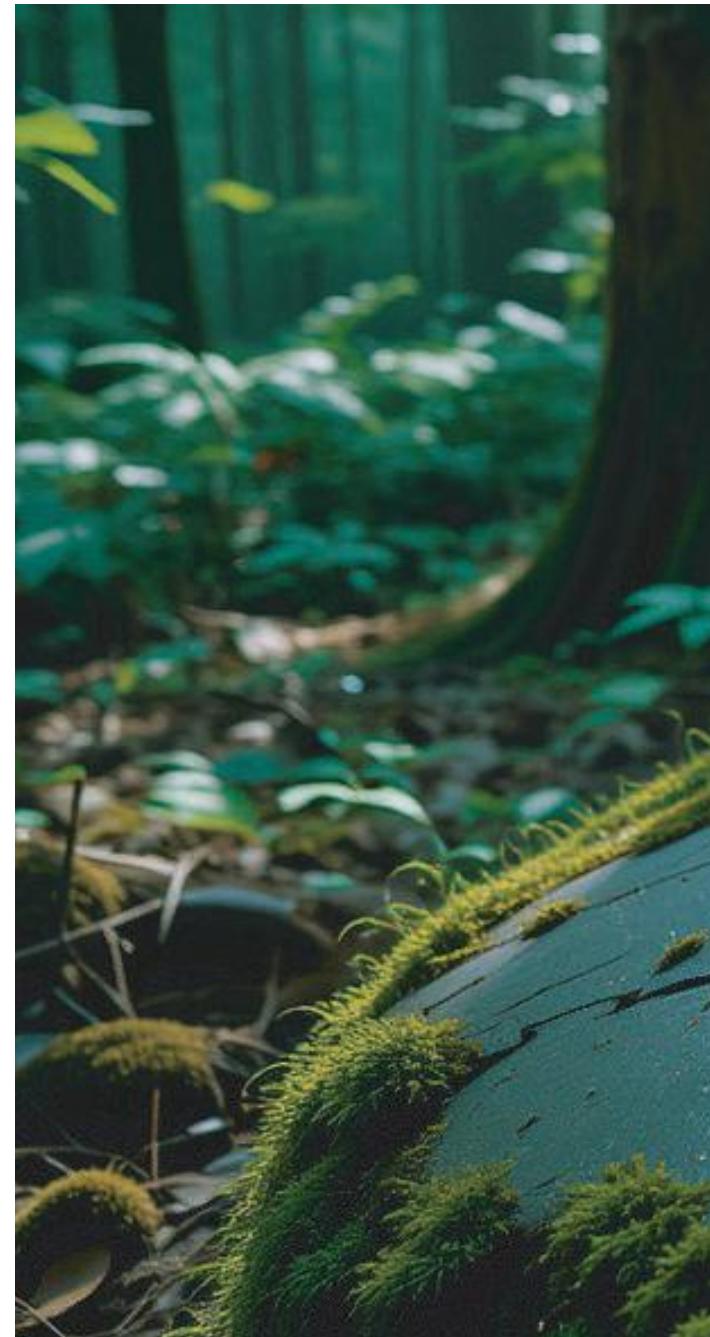


To further protect health and the environment, we use a chrome-free aluminum pre-treatment process. This method is important because it avoids the use of harmful chrome chemicals, which can be dangerous to both people and the environment. By using safer alternatives, we are supporting our commitment to overall safety and sustainability.



Environment

In addition to using aluminum as an environmentally friendly metal. We're committed to minimizing our environmental impact by upcycling aluminum scrap, reducing waste, recycling materials and decarbonizing our processes by using energy-saving technologies to support a sustainable future.





Upcycling

We efficiently manage aluminum scrap by upcycling it into valuable die casting products. Through advanced techniques, collected scrap is meticulously sorted, processed, and transformed into high-quality aluminum products. This practice not only reduces waste but also conserves natural resources and minimizes environmental impact. By integrating upcycling into our operations, we uphold our commitment to sustainable manufacturing practices, ensuring that every resource is utilized responsibly and efficiently.

Upcycling is a crucial step in our commitment to sustainability, setting the stage for our broader efforts towards decarbonization and reducing our overall environmental footprint.



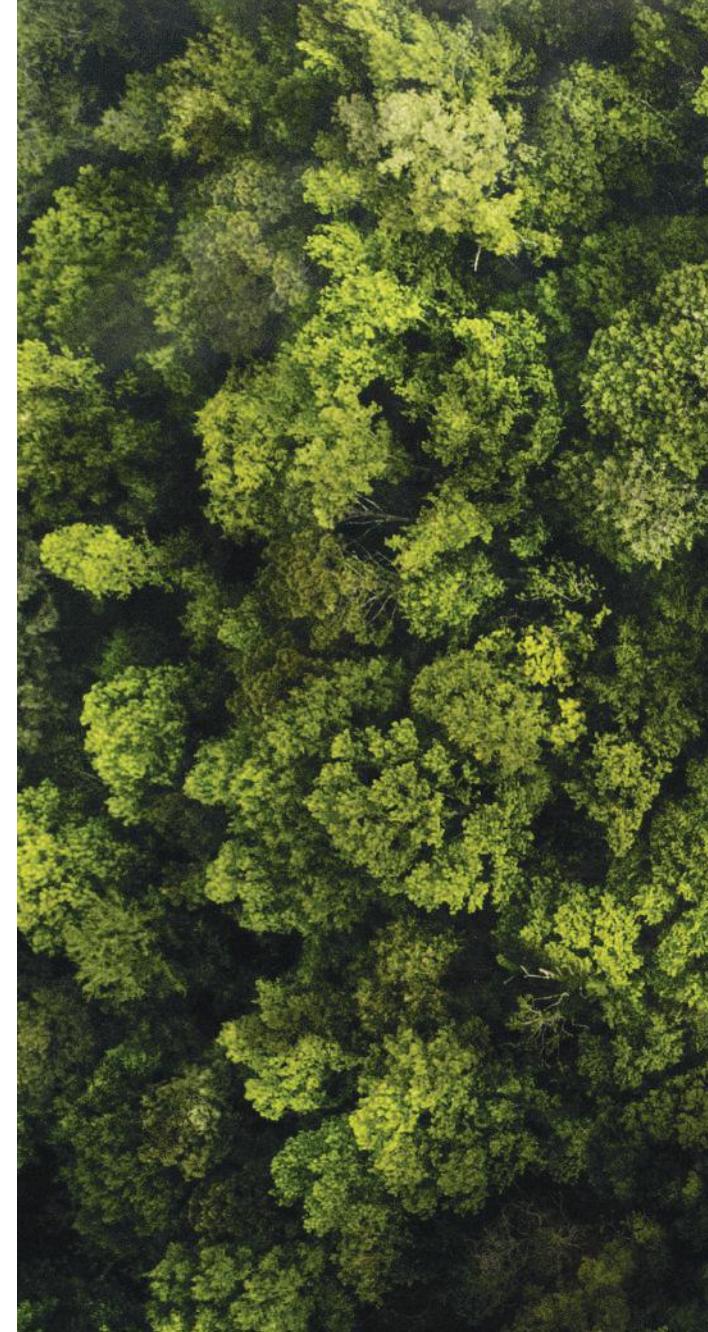
Decarbonization

We take our role in addressing climate change seriously, making it a priority to reduce carbon dioxide (CO₂) and greenhouse gas emissions. As part of this responsibility, we continuously invest in machinery upgrades to align with decarbonization goals.

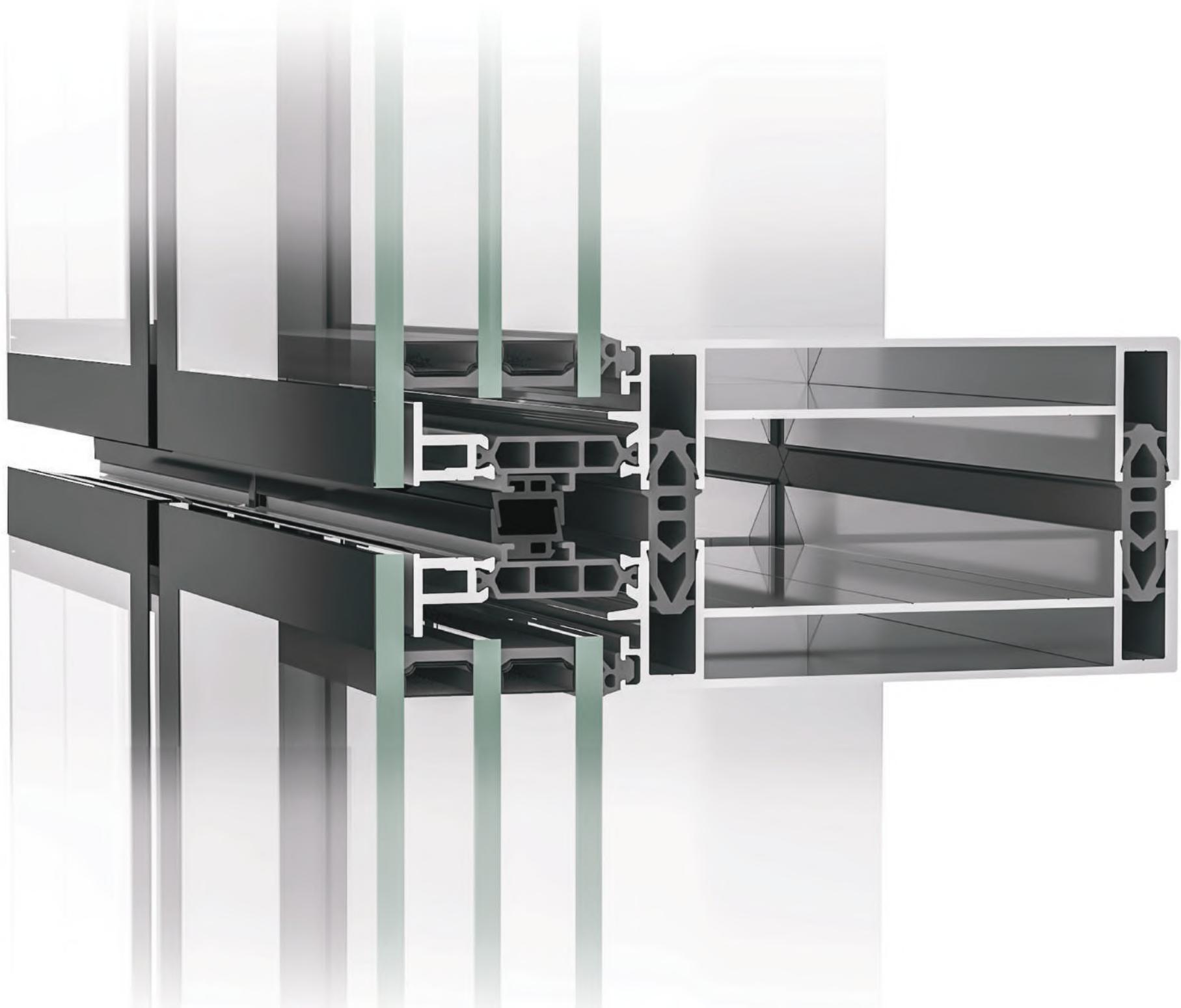
The natural energy efficiency of aluminum is enhanced by our use of cutting-edge, energy-saving technologies. We employ energy-efficient aluminum billet heating furnaces that produce very low emissions, and we've invested in advanced inverters for our main pumps to further reduce energy consumption.

In our powder coating line, we've introduced modern curing ovens and highly insulated chemical pretreatment tanks, which help us conserve significant amounts of energy. Our dedication to sustainability also extends to our wastewater management, where we use advanced treatment systems to transform wastewater from our finishing processes into reusable water for industrial applications, reducing waste and lowering our environmental impact.

Throughout our facility, we've transitioned to LED lighting, which is 80-90% more energy efficient than traditional bulbs. To complement these efforts, we've installed a new solar power station, boosting our use of renewable energy and decreasing reliance on conventional fuels.









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