

STRUGAL

More than just a **good product**

STRUGAL INDUSTRY

CONTENTS

STRUGAL GROUP	STRUGAL GROUP				
	360° SERVICE				
	STRUGAL PRESENCE				
CAPACITY					
R&D					
SECTORS					
MANUFACTURE	MANUFACTURE				
	ALUMINIUM EXTRUSION				
	LACQUER				
	ANODISED				
	CUTTING AND MACHINING				
	DECORATIVE SUBLIMATION				
	THERMAL BRIDGE BREAK				
	ACCESSORIES				
	COIL COATING				
	CUSTOMISED PACKAGING				
LOGISTICS					
INDUSTRY 4.0					
CERTIFIED QUALITY					
SUSTAINABLE STRUGAL					

STRUGAL GROUP

More than

1.500

PROFESSIONALS

Spread across our headquarters, production sites, sales offices and distribution centres.

For more than 5 decades, STRUGAL has not stopped growing. Our national and international expansion has been driven by a single objective: to raise the quality and innovation of our projects, of your projects.

The growth of our factories not only means an increase in production capacity, but also a continuous contribution to the economic development of various regions.

Our commitment has always been to efficiency, because by optimising our processes, we also improve yours.

At STRUGAL we guarantee you exclusive quality results, conceived and brought to fruition just for you.

We wish to continue to grow alongside you.



We address every stage, from the initial idea to the delivery of the product.

Excellence in the end result is much more than the sum of its parts. That is why we guarantee a **360° service**, whereby we at STRUGAL get involved and supervise the entire industrial process, from the initial spark of inspiration to the delivery of the final product.

The entire manufacturing process is carried out in our facilities and under the STRUGAL guarantee.

Our commitment is to you, but also to our environment and to sustainable industrial growth that creates opportunities for all.

Working with STRUGAL also means communicating with a single contact person assigned to your project. This is because clear and simple communication always makes things easier.

We have established ourselves as a benchmark both in Spain and internationally. Our track record speaks of innovation, quality and confidence.



CUSTOMISATION

We offer tailor-made solutions for each project, guaranteeing the exclusivity of our solutions, finishes and textures.



PRODUCTION

360° service: design, extrusion, finishing, machining and distribution.



TECHNICAL CONSULTANCY

Our team of technical specialists in industrial design work hand-in-hand with you to guarantee the results you are looking for.



TECHNICAL CAPACITY

Our extrusion plants and production centres are equipped with the most advanced technology and machinery on the market.



DELIVERY TIMES

Our capacity and optimised production processes guarantee your delivery, where you need it, when you need it.



WARRANTY

Our R&D Area, together with the Quality
Department, carry out rigorous checks to ensure that your expectations are met.

STRUGAL Presence



We are present in over 30 countries with production plants located in Spain and Africa.

We have a large team distributed among 22 work centres, 10 production centres, and an extensive sales network both nationally and internationally to serve you with proximity and dedication.

PRODUCTION CENTRES, in-house Technology Centre and international presence

- STRUGAL SEVILLE
- NAZAN ALUMINIUM
- **STRUGAL** GLASS

- STRUGAL MOROCCO
- NAZAN PVC
- ALUDOORS

- **STRUGAL** SOLAR
- NAZAN SOLAR
- STRUGAL ACCESSORIES

. . .

 \bullet

 \bullet

■ STRUGAL COMPOSITE PANEL

America

Netherlands Antilles - Brazil - Chile - Colombia Costa Rica - Ecuador - United States French Guiana - Jamaica - Mexico - Panama - Peru Dominican Republic - Uruguay

• • • • •

 $\bullet \bullet \bullet \bullet$

• •

. . .

• • •

• • •

Africa

Algeria - Cameroon - Côte d'Ivoire - Guinea Equatorial - Morocco - Mauritania - Republic of Cape Verde - Senegal - Tunisia

Europe

• •

Germany - Austria - Spain - France - Italy Poland - Portugal - United Kingdom

. . .

.

• •

. .

. . .

. . . .

• •

• •

Asia

United Arab Emirates - South Korea

Oceania

New Caledonia



PRODUCTION CAPACITY

We are leaders in the aluminium extrusion industry. Our experience, capacity and track record allow us to make your goals a reality.

We can handle everything from profile extrusion to EPDM manufacturing, plastic injection, recycling, lacquering, anodising, thermal breakage, decorative sublimation, extruded profile machining, polymer extrusion, zamak and aluminium injection casting, manufacturing of accessories, rubbers, polyamides, metal coil stamping... we are more than prepared to face any challenge.

The combination of highly specialised equipment, state-of-the-art technology and machinery allows us to manufacture a wide range of customised products and satisfy even the most demanding requirements.

At STRUGAL, excellence is our standard.

275.00Cm² PRODUCTION CENTRES

ALUMINIUM EXTRUSION PRESSES 64,000 Tn/year DECORATIVE SUBLIMATION PLANTS 900,000 Bars/year

CUTTING CENTRES

MACHINING CENTRES

LACQUERING PLANT
13 million Bars/year
6 million Pieces/year ANODISING PLANTS
1,7 million Bars/year

BREAK LINES 1 million Bars/year BUFFERS WAREHOUSES 1 million Kg/stock





R&D

+200

SPECIALISED TECHNICIANS

At STRUGAL we believe that only by investing in the most qualified team can we obtain the results we expect.

We have a team of more than 1,500 professionals,

with more than 200 specialised technicians including architects, engineers and laboratory technicians, distributed among 10 production plants and 22 work centres.

Our engineering and architecture team, specialised in the development of profiles and customised parts, offers you a permanent technical service. We work in collaboration with each client to optimise time and resources.

In addition, we manage the entire aluminium production cycle, offering fully finished high-value profiles.

Our highly trained staff is coupled with state-ofthe-art technology. The result? Significant time and cost savings for your company.

We carry out **customised industrial design** and offer technical assistance and specialised training.



Our ability to provide you with specific answers extends to all sectors of industry and any sector requiring the manufacture of profiles and parts.

We cover everything from large industrial projects to more modest initiatives.



AUTOMOTIVE



ARCHITECTURE



AERONAUTICS



AIR CONDITIONING



COOLING



DOMESTIC APPLIANCES



ELECTRONICS



RENEWABLE ENERGIES



INFRASTRUCTURES



FURNITURE



TRANSPORT

For STRUGAL, every project is unique, and adaptability is the key to success in today's industry.







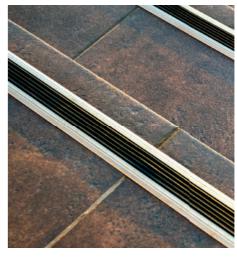
























All processes are carried out entirely in-house.

At STRUGAL we are involved in a wide variety of industrial sectors. We design and manufacture from extruded profiles to any part or profile, in different sizes and materials. Our constant investment in technology and state-of-the-art machinery is a great commitment to the present and the future.

You know your needs better than anyone, we know how to materialise your ideas. Our experience and dedication allow us to transform your concepts into tangible realities, adapting to your specifications. From the design phase to the final implementation, we work with you to ensure that every detail is perfect. We don't just want to meet your expectations, we want to exceed them.

Let us be the partner that turns your visions into successful and lasting projects.

Our ability to achieve exactly what you need makes all the difference. **Your satisfaction is key.**

Present in every process

ALUMINIUM EXTRUSION

We take aluminium extrusion to new limits. **Overcoming** barriers.

LACQUERING

Special colours, metallic and textured.

ANODISING

Electro-colouring, electrograting, matt, gloss and highgloss.

CUTTING AND MACHINING OF EXTRUDED PROFILE

We mould your ideas. Precision and design in every project.

THERMAL BRIDGE RUPTURE

Maximum thermal efficiency in all your profiles.

DECORATIVE SUBLIMATION

Perfect balance between strength and personalisation.

ACCESSORIES AND CUSTOMISED PARTS

Versatility and functionality in the production of customised parts.

COIL COATING

Durability and weatherproofing with an extensive range of colour and finish options.

CUSTOMISED PACKAGING

Care and guaranteed safety during the transport and delivery process.

ALUMINIUM **EXTRUSION**



We have achieved a new level in aluminium extrusion.

We take aluminium extrusion to new limits. Overcoming barriers. We know everything there is to know about aluminium, its properties, lightness, corrosion resistance, and recyclability. As a result, we create competitive profiles and components for various industrial sectors.

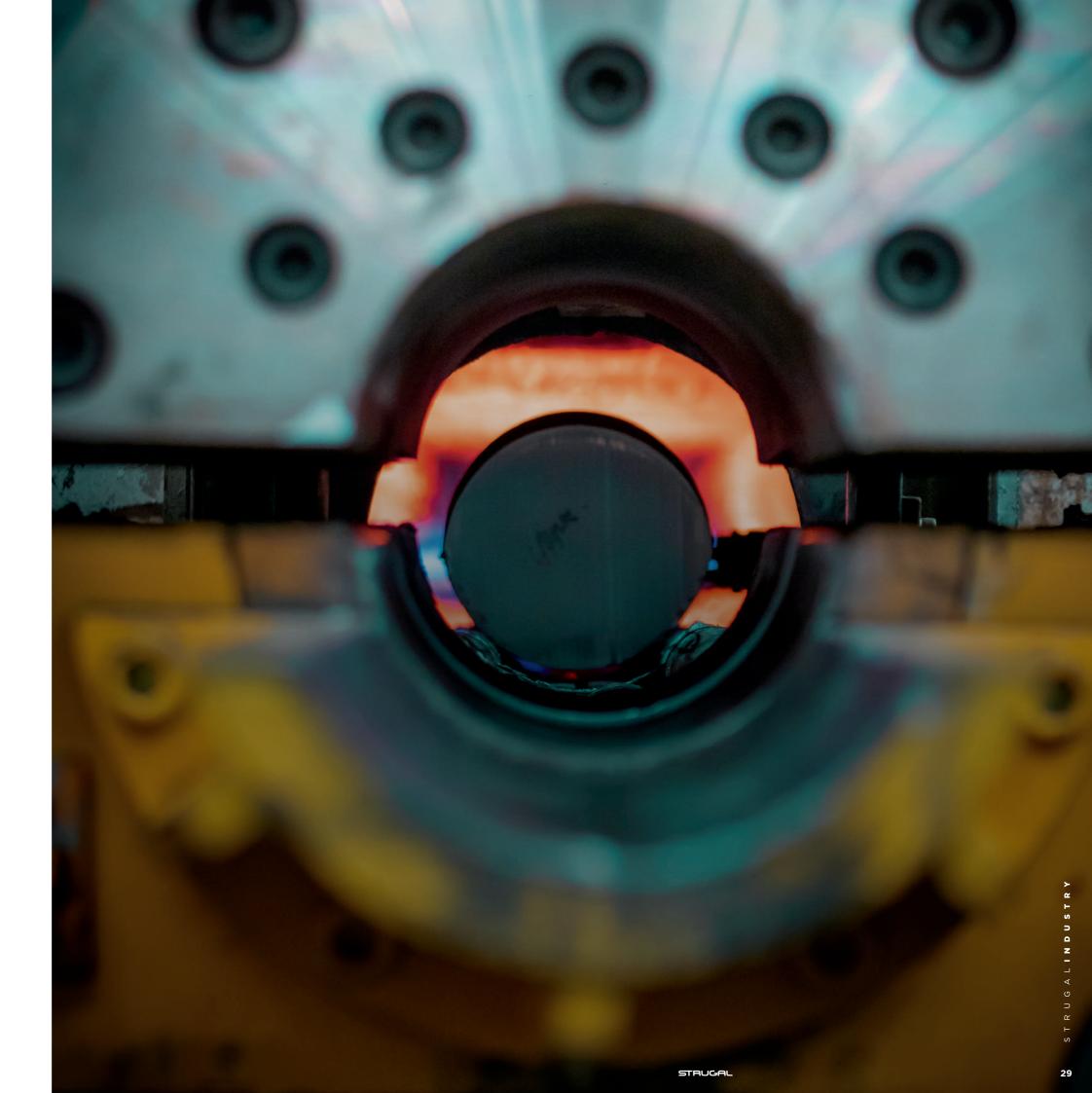
Our process ensures aluminium of high purity and durability, perfect for any project with a commitment to sustainability and efficiency.

Our high annual production capacity allows us to supply aluminium to a wide range of customers with wildly differing needs. We can offer bespoke solutions to empower any business regardless of its size.

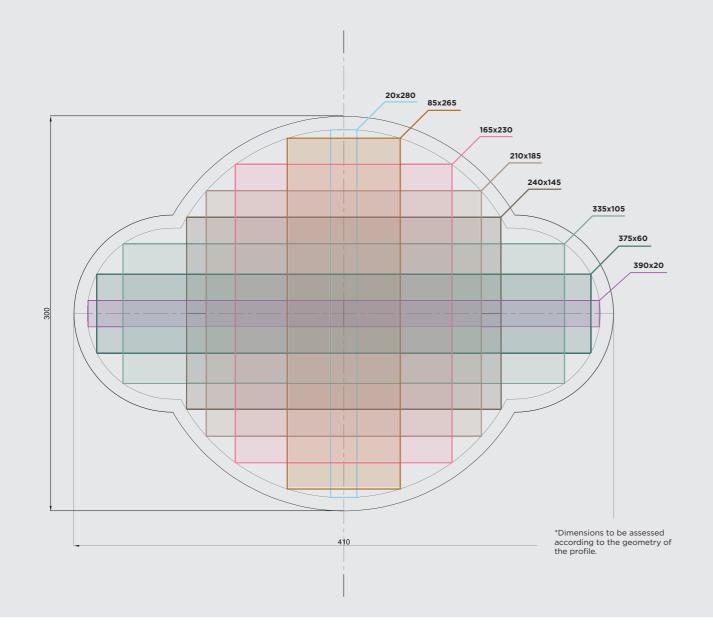
Type:

7 aluminium extrusion presses from 16 MN to 33 MN

Annual production capacity: 64,000 Tn / year



DIMENSIONAL DRAWING OF PROFILES



PRESSES

		16 MN	18 MN	22 MN	27 MN	33 MN	
PROFILE WEIGHT (Kg/ml)	Minimum	0,07	0,07	0,7	1	1,5	
	Maximum	1,8	1,8	5	6,5	8,5	
Alloys		6060 6063 6005 6463 6061 6082 6106					
Extrusion plants		7 presses					
Maximum extrusion ler	14 m						
Production capacity	64,000 Tn / year						

Note: Please consult us for heavier profiles.

MINIMUM THICKNESSES (mm)

		TUBULAR PROFILE			FLAT PROFILE		
		6,060 6,063	6,082	6,005	6,060 6,063	6,082	6,005
	100	1,0	2,0	1,5	1,2	1,5	1,0
CIRCUMSCRIBED	200	1,8	2,8	2,2	1,5	2,2	1,8
CIRCLE (mm)	300	2,4	3,5	2,9	2,1	2,9	2,4
	400	3,2	4,4	3,8	2,8	3,8	3,2

LACQUER



Our commitment to exclusivity is absolute.

Our products are custom designed and available in a wide range of colours and textures, including RAL chart options, NCS chart and special metallic and textured colours.

The durability and aesthetics of our products go hand in hand.

Type:

4 lacquering plants:

3 for vertical lacquering 1 for horizontal lacquering

Production capacity:

13 million Bars/year 6 million Pieces/year

Lacquering length:

Maximum: 7,500 mm Minimum: 4,000 mm

Diameter: maximum dimensions:

200 x 250 x 7,500 mm

Finishes:

Glossy - Matt - Textured

A wide range of colours:

RAL Chart - NCS Chart Special Colours Metallic - Textured





ANODISED



Electrocolouring

Shot blasting - High gloss shot blasting - Shine.

Anodising on aluminium profiles improves corrosion resistance, product life, maintenance and adhesion. All of this is undertaken safely, with respect for the environment.

Type:

2 anodising plants:

Annual production capacity:

1,700,000 Bars/year

Maximum anodised length:

7,000 mm

Colours: Electrocolouring

Gold - Stainless steel - Bronze

Silver - Black

Anode layer:

Up to 25 microns

Physical treatment:

Burnished - Matt - High gloss - Shine

CUTTING AND MACHINING

Aluminium profile



We mould your ideas.







Precision and design in every project.

Cutting lines, clipping, pantographs, etc.

Tipología:

- 15-axis double-head cutting line
- 1 automatic cutting line
- 1 CNC long 3-axis workpiece
- 1 CNC long 5-axis workpiece
- 15-axis small part CNC
- 1 Clipped centre
- 1 Mat insertion line
- 2 Lamination lines

CUTTING

Length:

Maximum 10,530 mm | Minimum 5* mm Width: 500** mm | Height: 150** mm

MACHINING

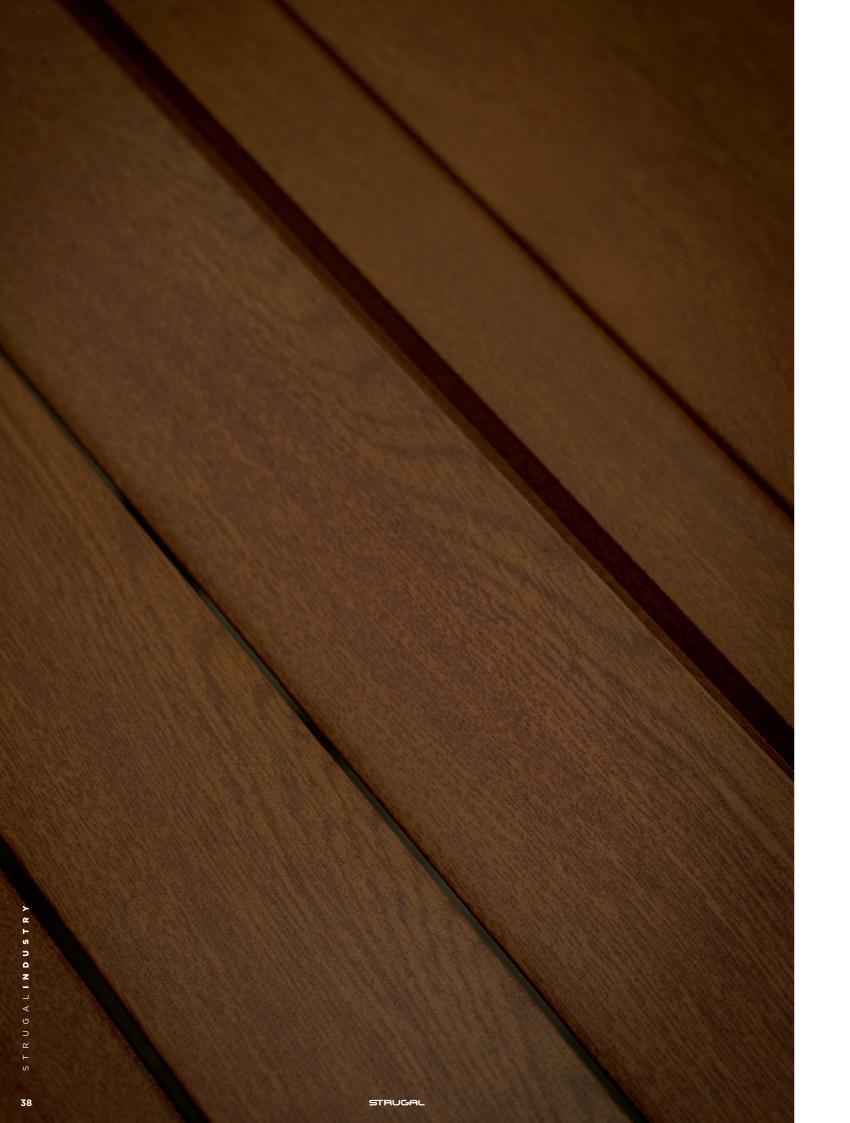
Length:

Maximum 12,600 mm | Minimum 5*mm Width: 550 mm | Height: 350 mm

*Ultra-short from 0 mm in increments.

** Please consult us concerning specific profile shapes and cutting grades.





DECORATIVE **SUBLIMATION**



Perfect balance between resilience and customisation.

Decorative sublimation on aluminium beads offers new aesthetic possibilities. Our goal is clear — if you can imagine it, we can create it.

This option brings more customisation and durability to your projects.

This process enhances the appearance of aluminium profiles, making them an ideal choice for structures for which a neat yet strong aesthetic is sought. Functionality need not be at odds with beauty.

Type:

4 decorative sublimation plants

Production capacity:

9,000,000 Bars/year

Length:

Maximum 7.000 mm Minimum 4.000 mm

Width:

200 mm

High:

150 mm

Finishes*:

Ember / Oak / Sapelly / Pine Walnut / Teak / Wengue

 $^{^{*}\}mbox{We adapt to the client's needs.}$

THERMALBRIDGE BREAK



Maximum thermal efficiency in all your profiles.

Maximum thermal efficiency in all your profiles. Thermal breaks are a key innovation in the design of aluminium profiles for industrial applications, significantly improving the energy performance of structures and buildings. This technological advance involves the insertion of an insulating material between the inner and outer layers of the aluminium profile, drastically reducing heat transfer and eliminating thermal bridges. As a result, higher energy efficiency, reduced condensation, and superior interior thermal comfort are achieved.

Thermally broken profiles are ideal for sustainable construction, providing not only long-term economic benefits but also contributing to environmental protection.

Greater comfort and energy savings, providing added value to your projects.

Type:

3 assembly lines

Production capacity: 1,000,000 Bars/year

Length: 7.000 mm **Width:** 240 mm **High:** 230 mm







ACCESSORIES

Customised manufacturing



Versatility, functionality

and specialisation of customised parts.

What do you need? We can do it.

We specialise in the manufacture of accessories and customised small parts and customised small parts, made of various materials such as aluminium, metal, zamak, brass and steel.

At the same time, we are experts in the manufacture of products using extrusion processes, plastic injection moulding, aluminium and zamak die casting, metal stamping and profile machining.

If you are looking for quality, we employ exhaustive control checks to guarantee it. Constant supervision and control.

Type:

- 5 5-axis small part CNC
- 1 6-axis long part CNC
- 2 small part cutting lines
- 6 small workpiece machining centres
- 5 automated vibrating lines
- 6 robotic grinding and polishing cells

Production capacity:

100 million polyamides | annually 80 million joints | annually

200 thousand hardware components | daily

COIL COATING



Precise and personalised aesthetics.



Protection system against corrosion.

Our products feature a robust corrosion protection system.

We work with continuous painted aluminium sheets to form coils, shafts and sheets that can be up to 2,05 m wide. This allows us to offer a wide range of possibilities for various industrial and construction applications.

Production capacity:

5 million m² composite panel annually

Coils:

Thickness: 0,2 - 2 mm Width: 60 - 2,050 mm

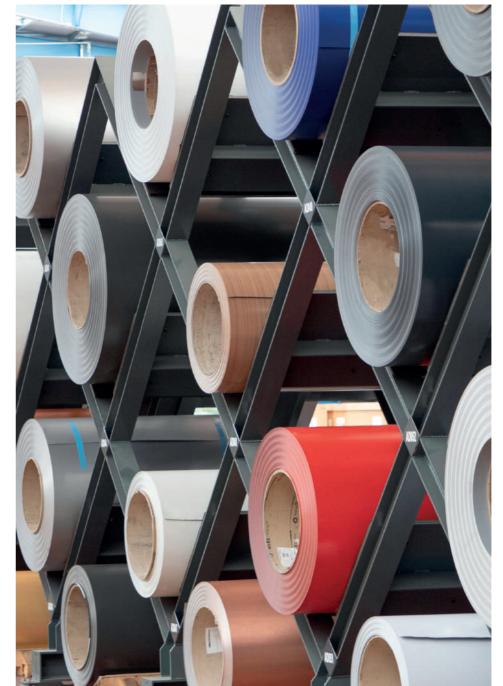
Strapping:

Thickness: 0,2 - 2 mm Width: 60 - 800 mm

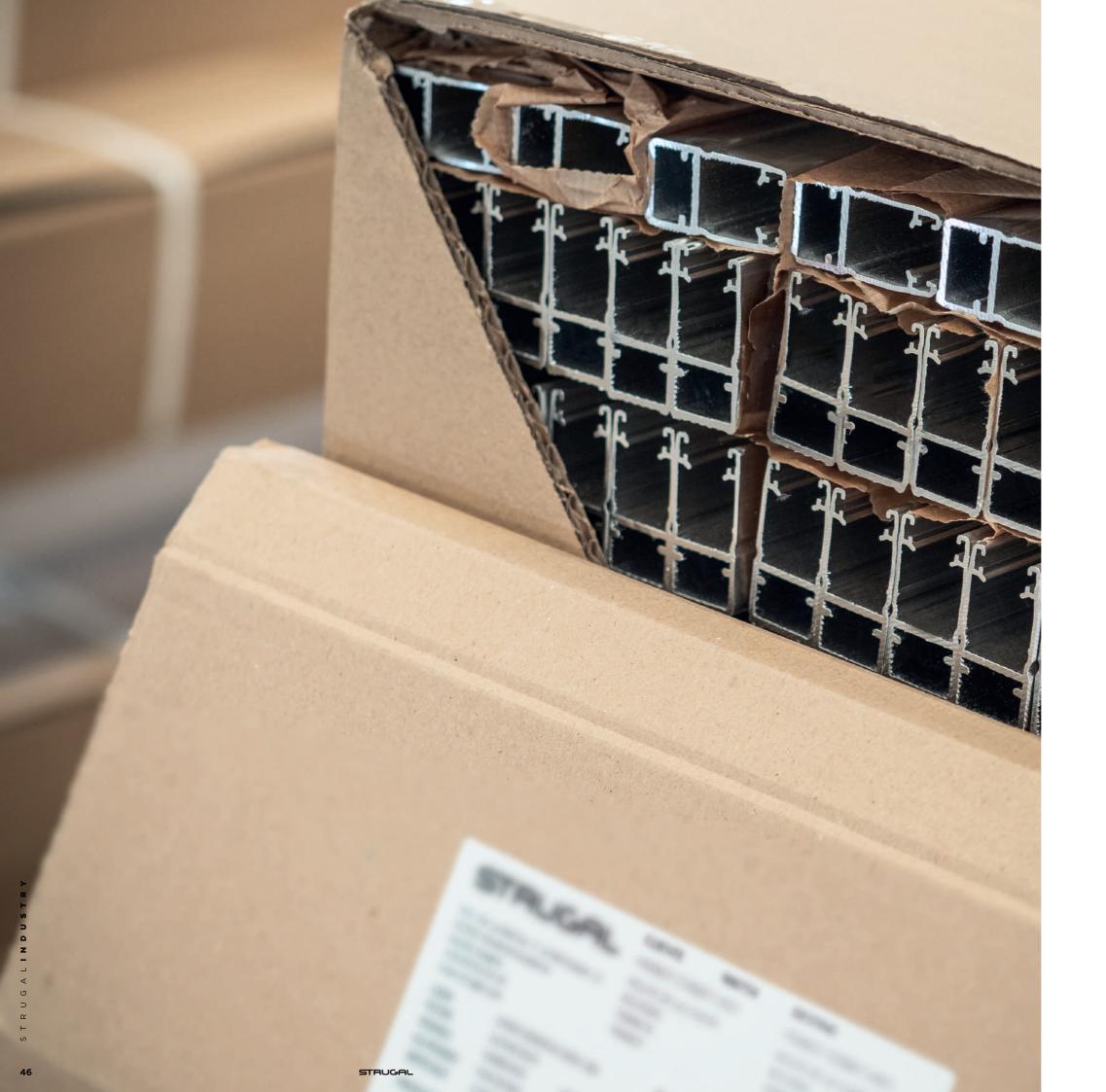
Sheet:

Thickness: 0,2 - 2 mm Width: 800 - 2,000 mm Length: 1,000 - 4,000 mm









CUSTOMISED **PACKAGING**



A guarantee of safety and

excellence for your products.

In our factories, customised packaging is a top priority. Each product receives unique treatment, guaranteeing its safety and protection during transport. Tell us your needs and we will design the shipment accordingly.

Human care, the highest quality materials and the most innovative logistics software allow us to monitor your products in real time.

Your goods arrive at their destination in perfect condition.

Type:

Plasticising

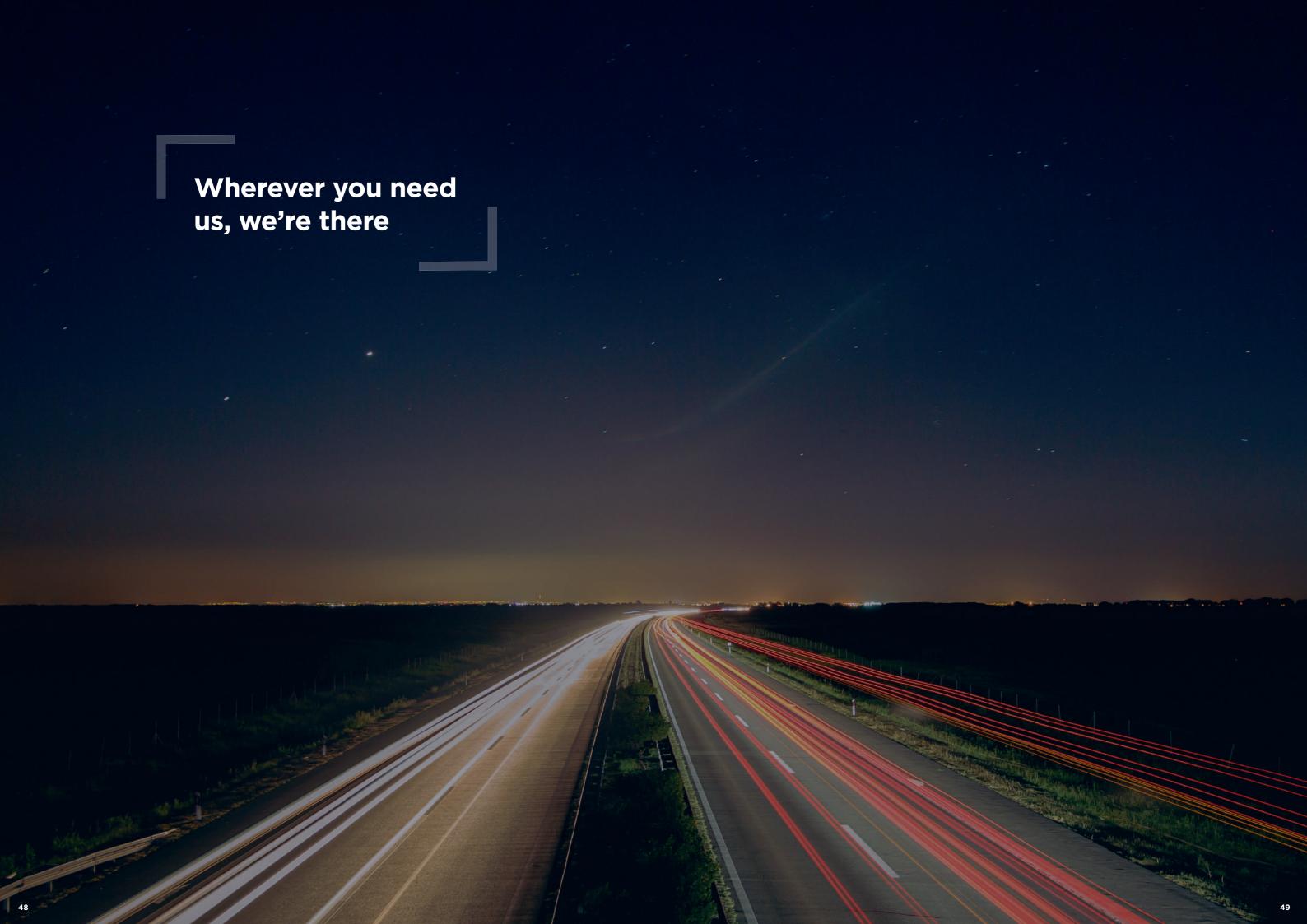
Shrink-wrapping

Cardboard Box

Ues Palletised

Production capacity:

2,650,000 Bars/year



Logistics

16
LOGISTICS CENTRES
Spain and Portugal

+50

PROPRIETARY VEHICLES

Our extensive and strong logistics network is the last link in the chain, offering our customers a comprehensive service.

We have more than 16 distribution centres, together with a wide range of trucks and an intelligent storage system to guarantee commitment and compliance with deadlines when delivering goods.

Quality is the basis, but **meeting** deadlines is essential.





Industry 4.0



Monitored control system.



Logistics management software for cargo control and customised delivery.



Real-time monitoring

at each stage of production.

INDUSTRY 4.0 is a new concept in the integration of advanced technology in all stages of our production processes.

Our automated systems guarantee accurate and reliable traceability. High efficiency at all times.

The digitalisation of each stage of the production cycle enables us to foresee, detect and rigorously correct possible faults and increase our efficiency, improving the quality of our production both in the end product and in all the manufacturing phases.

We optimise every step of the manufacturing process, resulting in a more competitive end product.

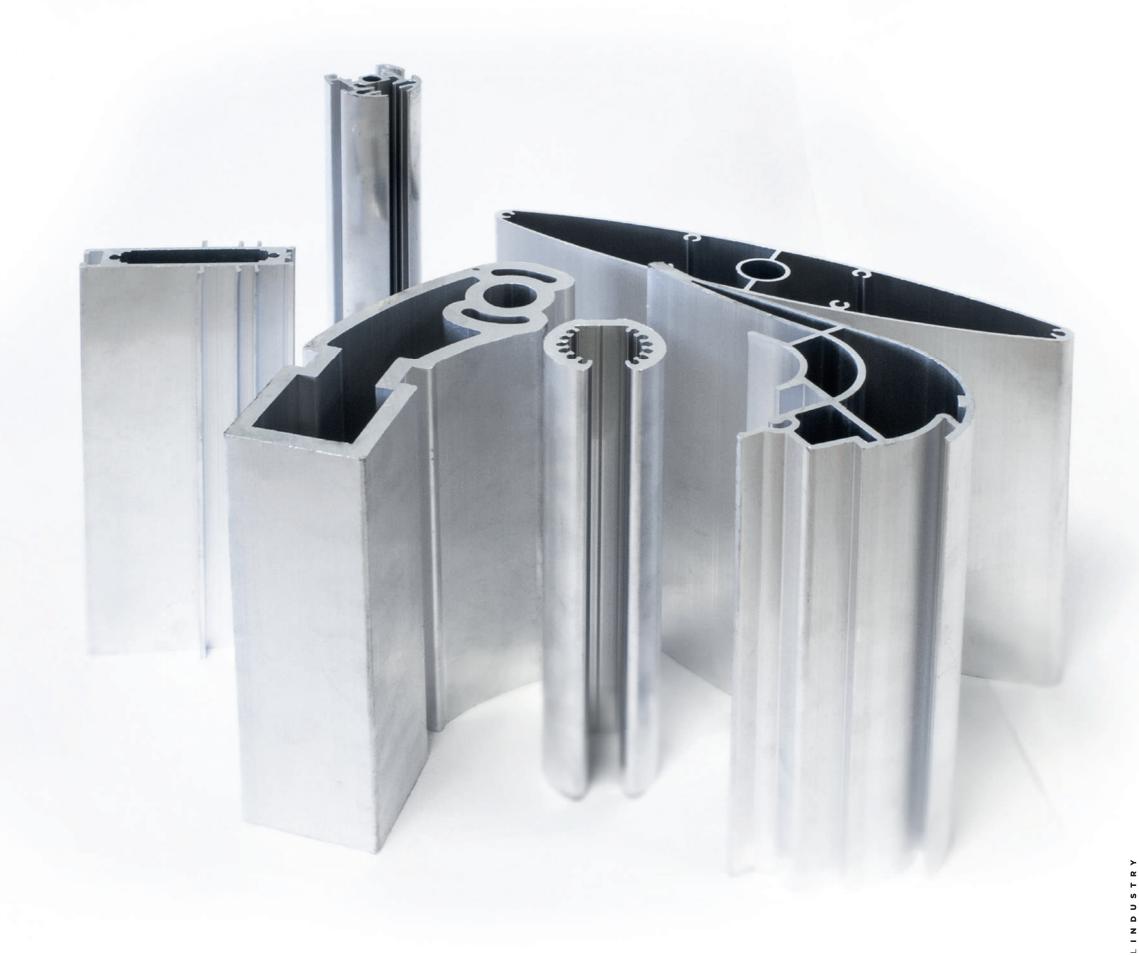
We are at the forefront of technology, consolidating our leadership in the aluminium sector.

Certified quality

We are very self-demanding. We work with a vision of excellence, quality and high performance. We carry out research processes in our own testing laboratories and certify our solutions in addition to external accredited bodies.

We base our quality management system on full traceability of our raw materials, and on constant review and improvement of our operations.

> We bring a new meaning to the concept of quality. Sustainable. Proven. Traceable. The basis and, at the same time, the ultimate goal of our work.

















STRUGAL









Smelting

We use electrolysis to separate the aluminium atoms from the oxygen atoms in the alumina. The process is energy-intensive, so we are constantly working on improving it to reduce our carbon footprint every day.

Extrusion

Extrusion makes it possible to give aluminium virtually any conceivable shape. We manufacture a wide range of smelting products, from standard to customised profiles. We have been market leaders for 50 years, adapting to the needs of each customer.

Final product

Right from the smelting stage, we strive to transform the metal into products worthy of the STRUGAL quality seal. Each step of the process is tailored to our customers' specifications, thereby ensuring the best possible product efficiency and customer satisfaction.

Recycled

Aluminium recycling is central to our sustainability strategy, since it only requires 5% of the energy needed for primary metal production. This enables us to procure tonnes of aluminium scrap every year.

Life cycle

At STRUGAL, we control the entire aluminium life cycle, from production to the final product. Characterised by its recyclability and infinitely reusable nature, aluminium is converted into 100% recycled products, ensuring maximum quality and sustainability at every stage.

STRUGAL All data included in this catalogue is for informational purposes only. The company is therefore not responsible for possible printing errors or other technical and typographical errors. STRUGAL reserves the right to modify the information provided. Total or partial reproduction of this document is prohibited, unless expressly authorised by STRUGAL. The latest version of this catalogue can always be found on our website: https://www.strugal.com/es.