



CARBONVENETA
TECNOLOGIA NEI COMPOSITI

Carbon fiber profiles

www.carbonveneta.com



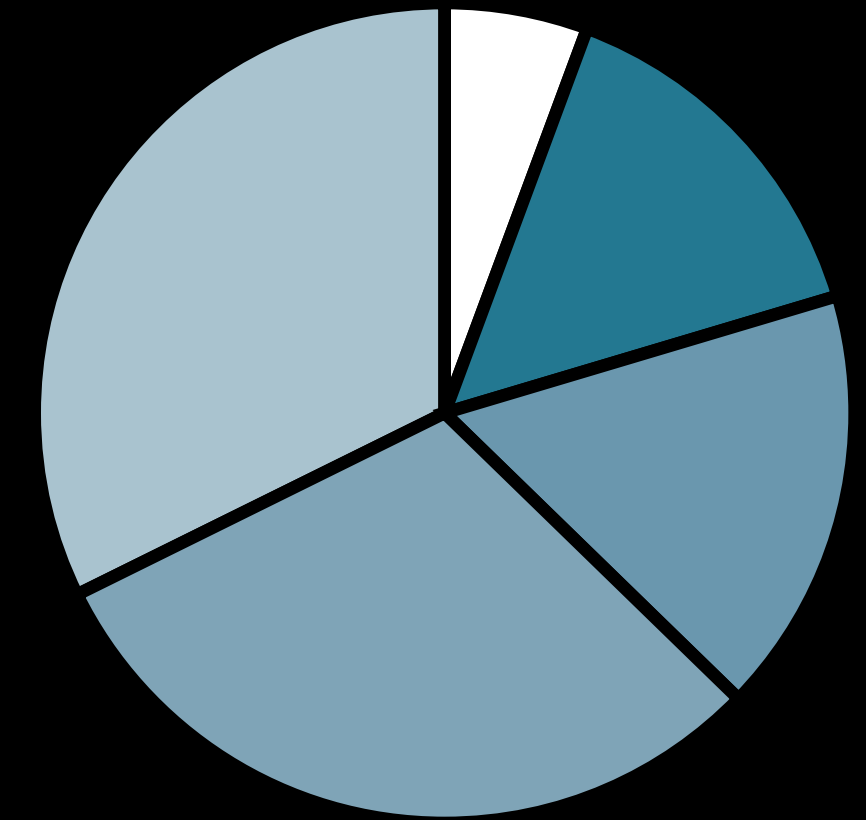
CARBONVENETA
TECNOLOGIA NEI COMPOSITI

2009
Foundation year

2 business units

We manufacture
CARBON FIBER PULTRUDED PROFILES

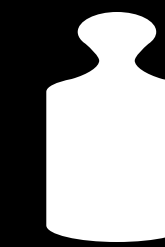
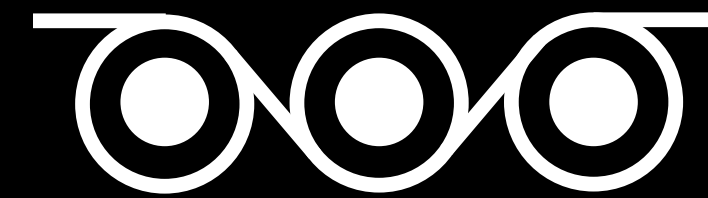
- Management
- Accounts
- Warehouse
- Engineering
- Manufacturing



Applications

Structural reinforcement	Industrial automation	Agriculture	Orthopedics
Wind energy	Applications		Cinema and generic stands
Robotics	Applications		Optical instruments
Aviation & aerospace	Marine	Hobby & sports	Automotive

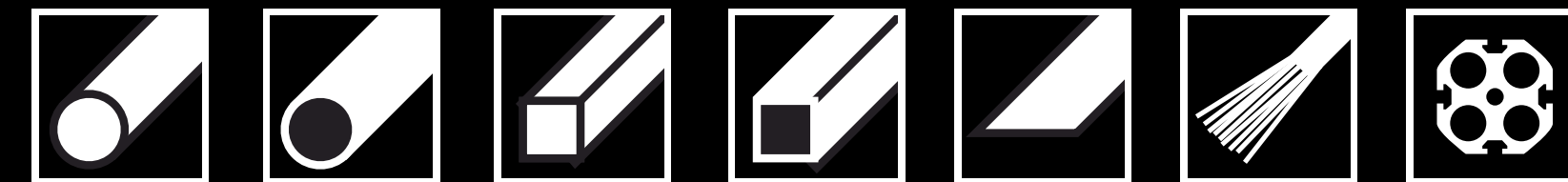
7 pultrusion lines



production capacity

80
tons / year

7 product families



3 major international references

60% export

Who we are?








Carbonveneta is a Business Unit of
Carbonveneta Tecnologia nei Compositi – Nestech
and it is your partner in the manufacturing of carbon fiber pultruded profiles.

What we do?

WE MANUFACTURE EXCLUSIVELY **CARBON FIBER PULTRUDED PROFILES**

Our production is entirely carried out within our own factory and is divided into five product families:

-  **Plates for Structural reinforcement**
-  **Profiles with full section**
-  **Open profiles - tubes**
-  **Joints and accessories**
-  **Levitus® System**

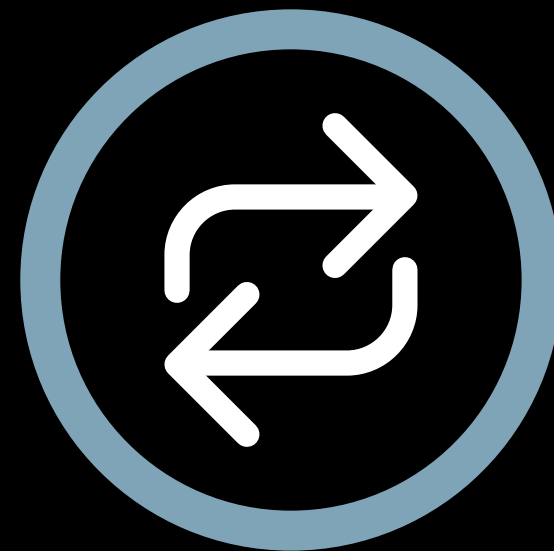


Our mission

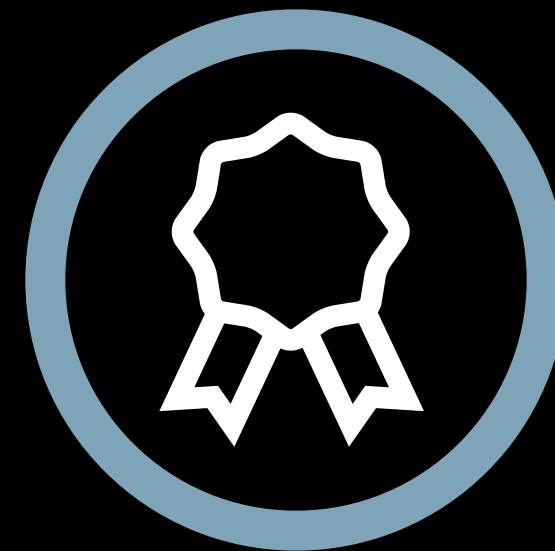
Manufacture a product with the following features:



High performances



Repeatable



Certifiable



Traceable



Competitive

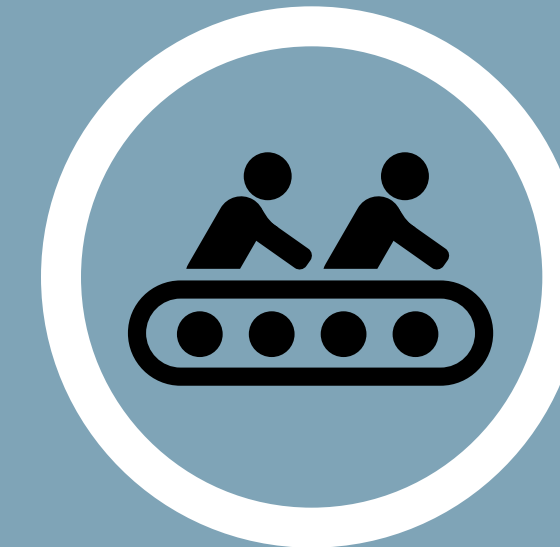
Manufacturing steps



**Purchase top quality
yarns and resins**



**Analysis and customization
of customer requests**



**100% own internal
manufacturing**

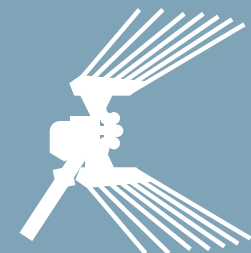
Applications



**STRUCTURAL
REINFORCEMENT**



**INDUSTRY
AUTOMATION**



AGRICULTURE



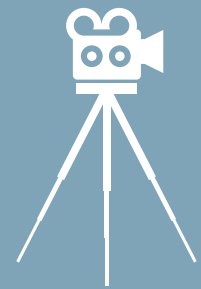
ORTHOPEDICS



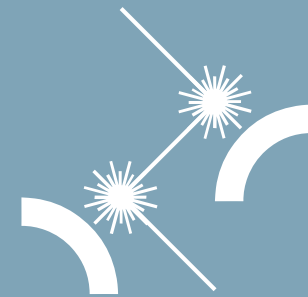
ROBOTICS



WIND ENERGY



**CINEMA AND
GENERIC STANDS**



**OPTICAL
INSTRUMENTS**



**AVIATION &
AEROSPACE**



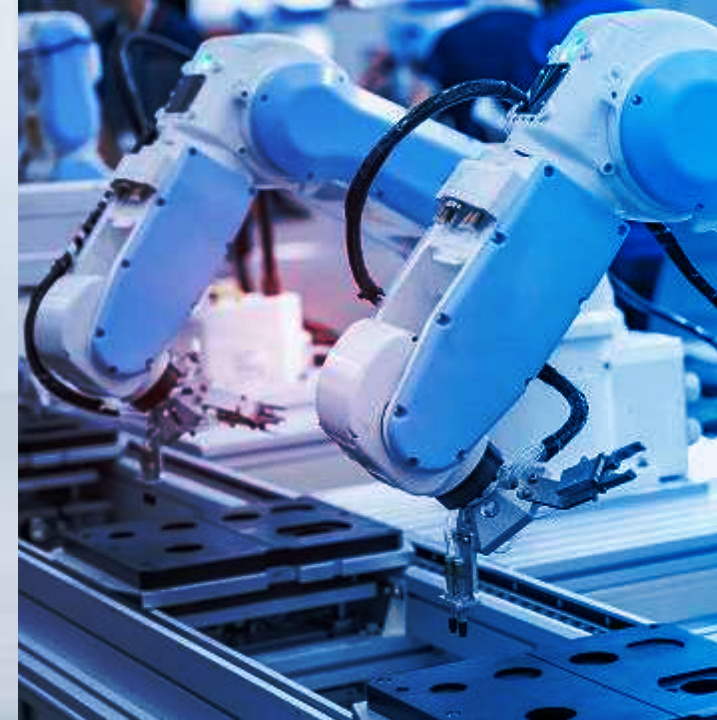
MARINE



HOBBY & SPORTS



AUTOMOTIVE

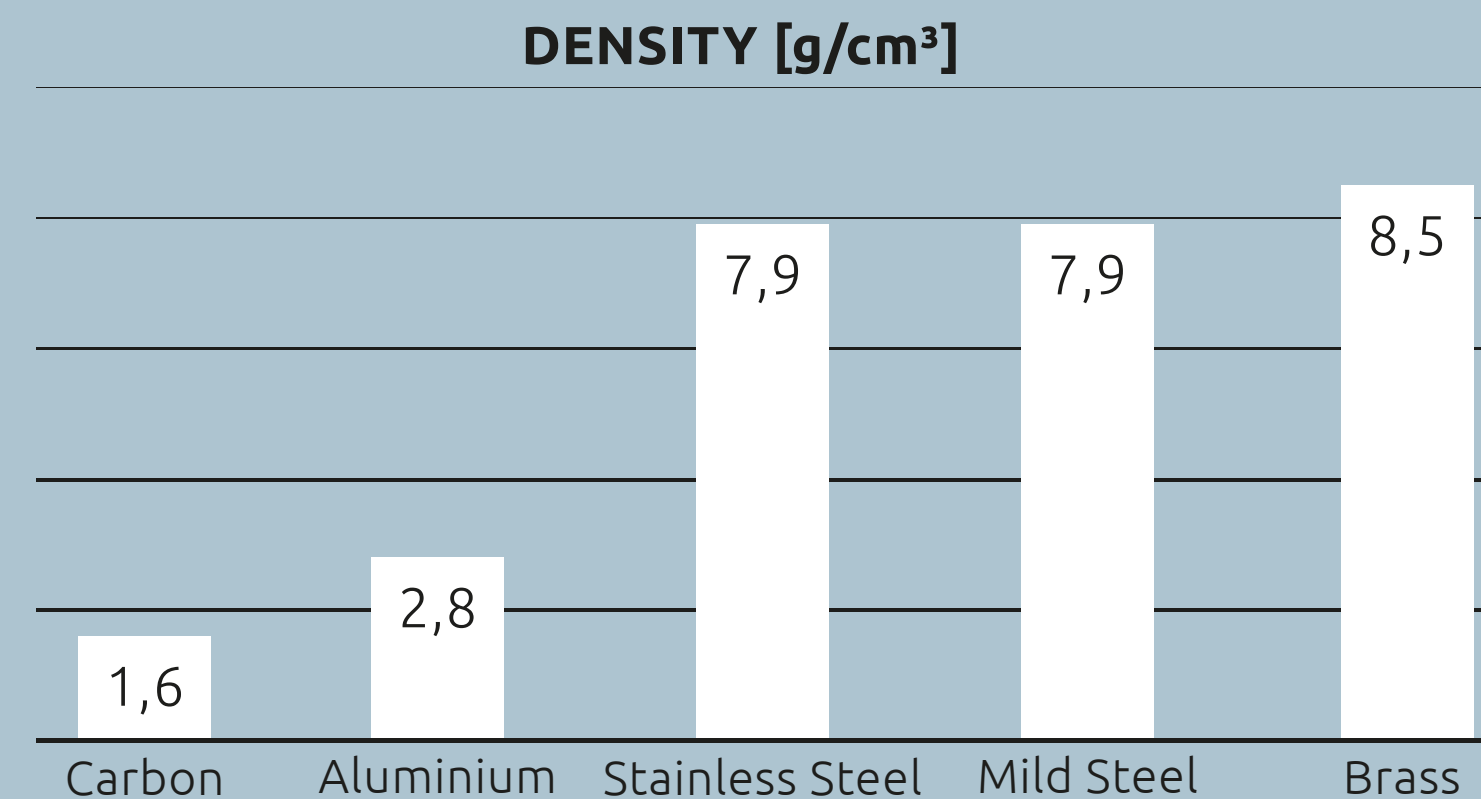


General features

- Pultruded carbon fiber profile with epoxy resin matrix with high tensile and flexural strength
- Excellent stiffness / weight ratio
- Resistant to chemical corrosion and saline environment
- Very stable to temperature variations and resistant to friction and wear
- Easily applicable to wood, metals and concrete
- Paintable
- Usable up to 110 °C
- Standard elastic modulus 170 GPa
- High elastic modulus 210/250 GPa
- Standard tensile strength 2,500 Mpa

Technical information

	DENSITY	METAL / CARBON RATIO
Carbon	1,6 g/cm ³	1,00
Aluminium	2,8 g/cm ³	1,75
Stainless Steel	7,9 g/cm ³	4,94
Mild Steel	7,9 g/cm ³	4,94
Brass	8,5 g/cm ³	5,31





Plates for Structural reinforcement

Profiles with full section

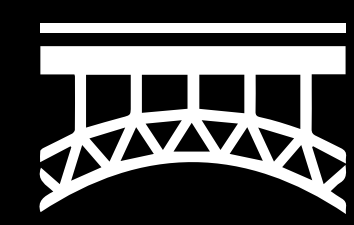
Open profiles - tubes

Joints and accessories

LAMINATES

APPLICATION EXAMPLES

- Concrete Reinforcement
- Anti-seismic structures
- Excellent in general renovation
- Horizontal or oblique reinforcement for beams, slabs, roofs, domes
- Cantilever reinforcement for terraces or similar
- Vertical reinforcement for plinths and columns supporting walls



Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

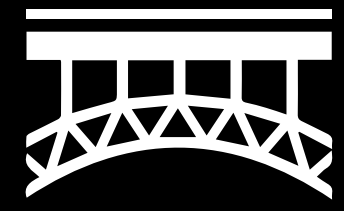
Joints and accessories



RODS

APPLICATION EXAMPLES

- Concrete Reinforcement
- Anti-seismic structures
- Excellent in general renovation
- Horizontal or oblique reinforcement for beams, slabs, roofs, domes
- Cantilever reinforcement for terraces or similar
- Vertical reinforcement for plinths and columns supporting walls



Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories



LINKERS

Preformed connectors
for structural reinforcement

APPLICATION EXAMPLES

- Single or double sided reinforcement of concrete and brick walls
- Renovation of old buildings, historic centers, tunnels, bridges, retaining walls, industrial buildings

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories

FULL RECTANGULAR PROFILES

APPLICATION EXAMPLES

- Machine frames
- Parts or frames for various equipment
- Light and high resistance shelving
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletisers, trash shifters, grippers
- Sailing, marine

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories



FULL RECTANGULAR PROFILES

CUSTOM PROFILES

APPLICATION EXAMPLES

- Machine frames
- Parts or frames for various equipment
- Light and high resistance shelving
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletisers, trash shifters, grippers
- Sailing, marine

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories

FULL RODS

APPLICATION EXAMPLES

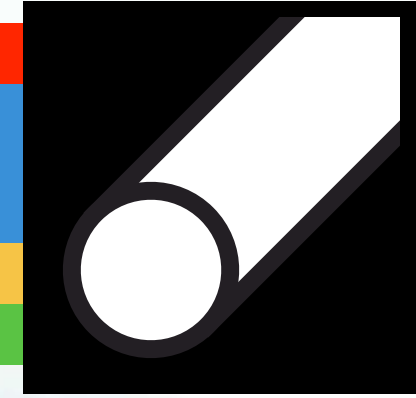
- Rotating shafts and rollers for small automatic machines
- Concrete Reinforcement
- Drones
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletizers, trash shifters, grippers
- Orthopedic fixators
- Olive harvesters
- Arrows for bows
- Reinforcement for fabrics and sails
- Yarn combs

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

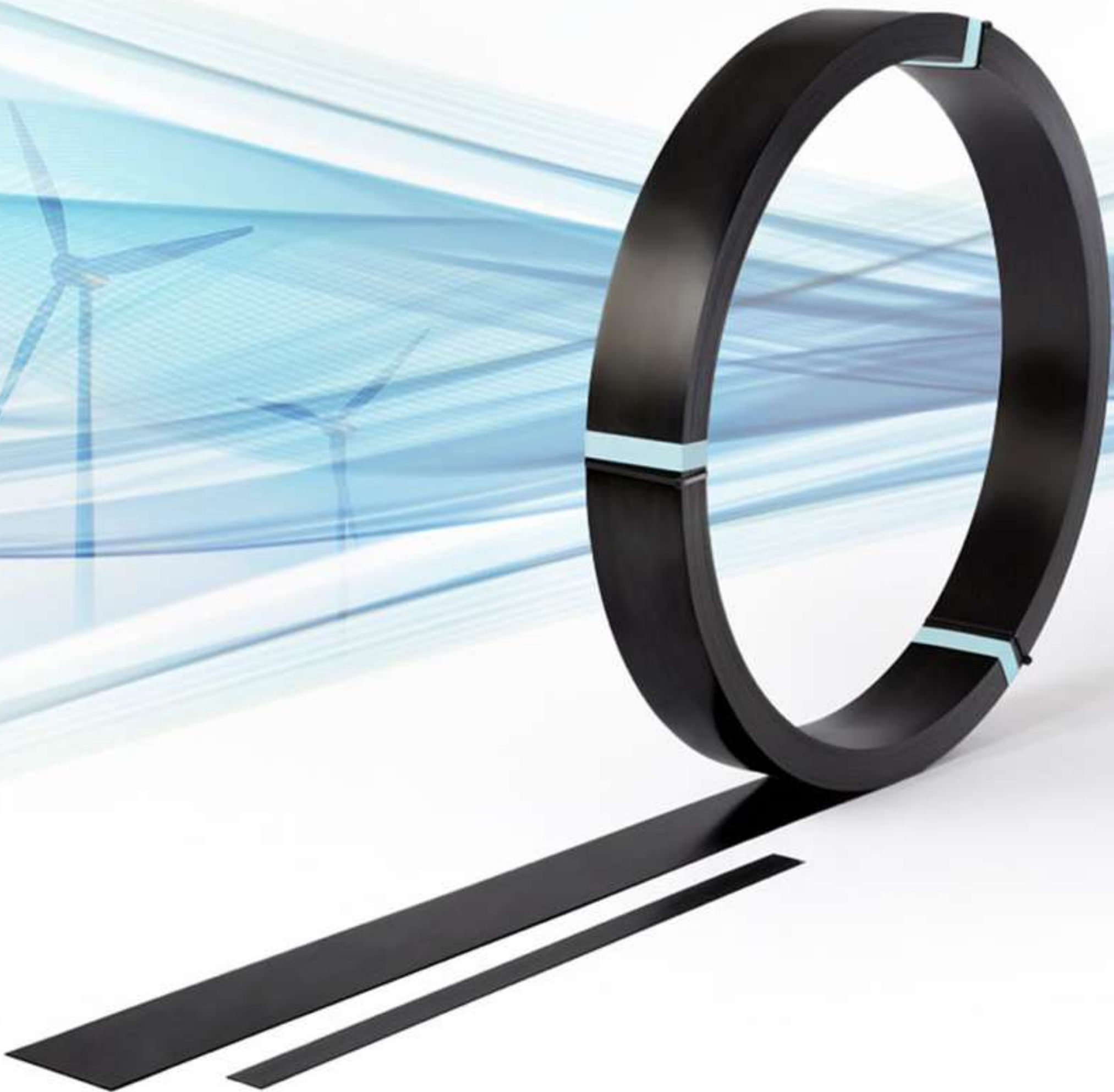
Joints and accessories



PLANKS FOR SPAR CAPS

APPLICATION EXAMPLES

- Components for rotor blades of wind turbines



Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories

ROUND TUBES

APPLICATION EXAMPLES

- Machine frames
- Modular structures, racks, gazebos
- Parts or frames for various equipment
- Light and highly resistant shelving
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletisers, stacker translators, grippers
- Sailing, marine

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories

SQUARE TUBES

APPLICATION EXAMPLES

- Machine frames
- Modular structures, racks, gazebos
- Parts or frames for various equipment
- Light and highly resistant shelving
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletisers, stacker translators, grippers
- Sailing, marine

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

Joints and accessories

RECTANGULAR TUBES

APPLICATION EXAMPLES

- Machine frames
- Modular structures, racks, gazebos
- Parts or frames for various equipment
- Light and highly resistant shelving
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletisers, stacker translators, grippers
- Sailing, marine

Plates for Structural reinforcement

Profiles with full section

Open profiles - tubes

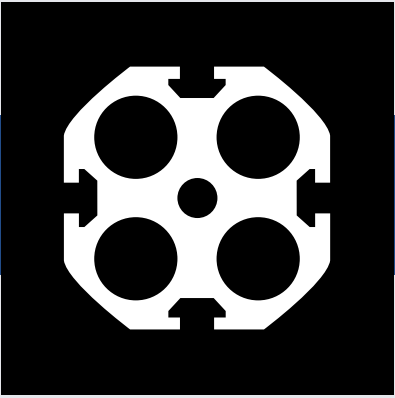
Joints and accessories



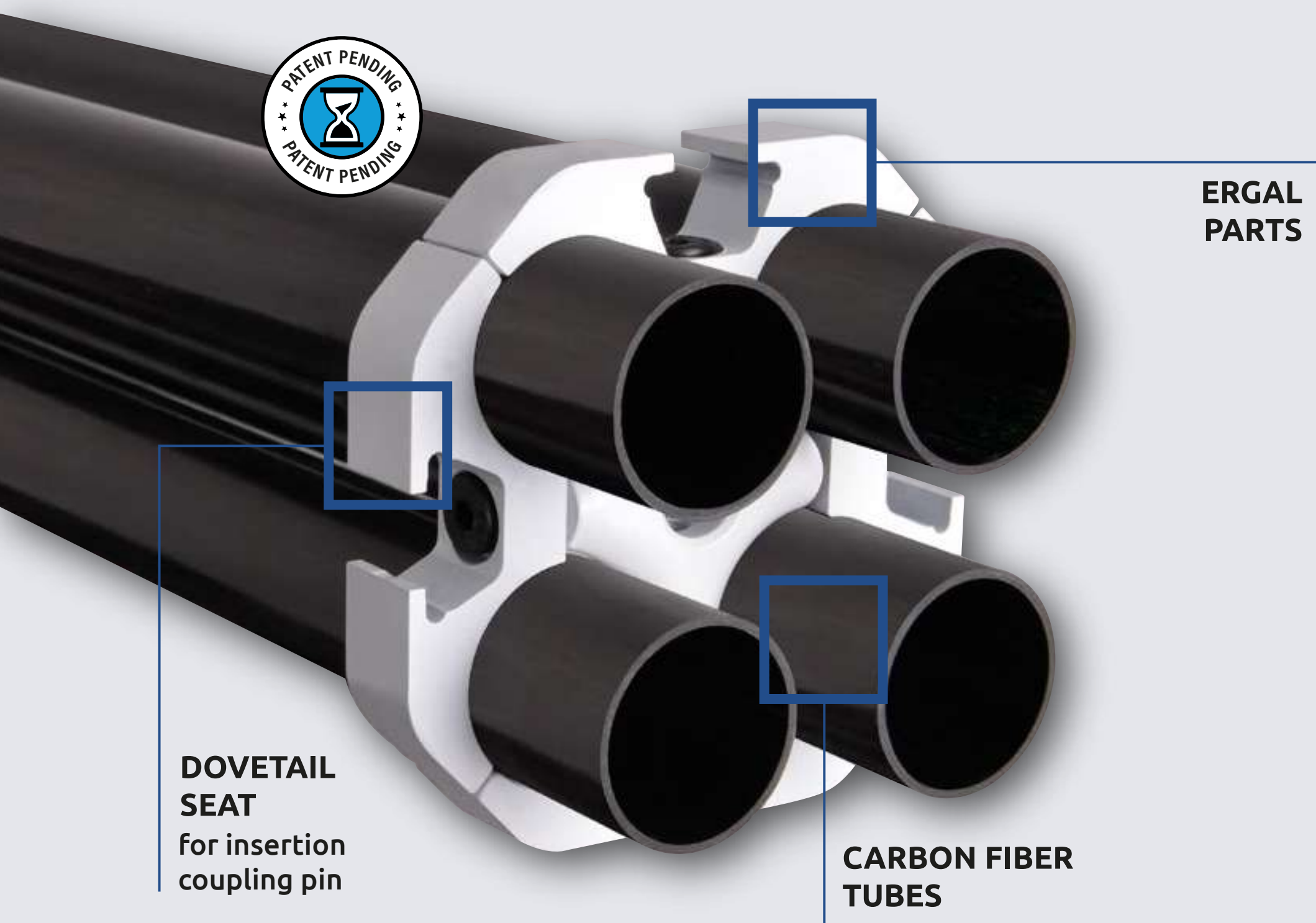
JOINTS AND ACCESSORIES

APPLICATION EXAMPLES

- Machine frames
- Modular structures, racks, gazebos
- Parts or frames for various equipment
- Light and highly resistant shelving
- Robotic manipulators
- Optical, metrological and printing machines
- Automatic warehouses, shelves
- Multiaxial robots, palletisers, stacker translators, grippers
- Sailing, marine



Levitus® System



LEVITUS®

the strength of lightness

**A revolutionary connection system
in carbon fiber tubes and Ergal parts**

WEIGHT -85% compared to equivalent aluminum profiles

APPLICATIONS

- Gripper heads • Manipulators
- Robots • Cartesian Systems
- Palletizers • Die-cutting machines • Packaging machines
- Laser systems • Paper machines
- Wrapping machines • Handling systems
- Structures • Design • Paddocks
- Trusses • Antennas • Cranes

Plates

Width mm	Thickness mm	Smooth	Best grip surface
150	1,6	✓	–
150	1,4	–	✓
120	2,8	✓	–
120	2,6	–	✓
120	1,6	✓	–
120	1,4	✓	✓
120	1,2	–	✓
100	1,6	✓	–
100	1,4	✓	✓
100	1,2	–	✓
80	1,6	✓	–
80	1,4	✓	✓
80	1,2	–	✓
60	1,5	✓	–
60	1,4	–	✓
50	1,6	✓	–
50	1,4	✓	✓
50	1,2	–	✓
40	3	✓	–
30	1,6	✓	–
30	1,4	–	✓
20	1,4	✓	–

Round tubes

Ø OD mm	Ø ID mm	Thickness mm
60	55	2,5
50	46	2
40	36	2
32	28	2
30	28	1
30	25	2,5
30	22	4
28,8	24,6	2,1
25	23	1
25	20	2,5
20	14	3
15	8	3,5
10	7,4	1,3
29,8	26	4

Full rods

Ø mm
30
25
20
15
12
10
8
6
5
4,5
4

Square and Rectangular tubes

Width mm	Height mm	Thickness mm
50	50	2,8
50	20	3
40	40	2,6
30	30	2,5
30	30	int. Ø 25

Full rectangular profiles

Width mm	Height mm
50	6,5
43,4	13,7
40	3
30	8
30	5
30	4
30	1,4
30	1,6
25	5
25	6
25	15
29,5	6
20	1,5
19,5	5
19,5	8
15	6
10	4
8	5
12	6,1

Dimensions

Sustainability



**Sustainable
innovation**

ESG POLICY: environmental, social, governance

The core of our company mission is based on a deep commitment to sustainability, which actually drives to our plan dedicated to promoting eco-sustainable practices.

Our commitment to sustainability is based on three fundamental pillars: environment, society and governance.

We are committed to reducing the environmental impact of our business through the adoption of cutting-edge technologies and eco-sustainable practices. In parallel, we actively collaborate with local communities, promoting social projects and ensuring an ethical and inclusive working environment, so that our economic growth is associated with the values of social and environmental responsibility.

*The change for the future
is green: our sustainable
commitment*

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Certificate No. 200324-2016-AQ-ITA-ACCREDIA
Design and manufacture of carbon fiber pultruded profiles (EA 17)