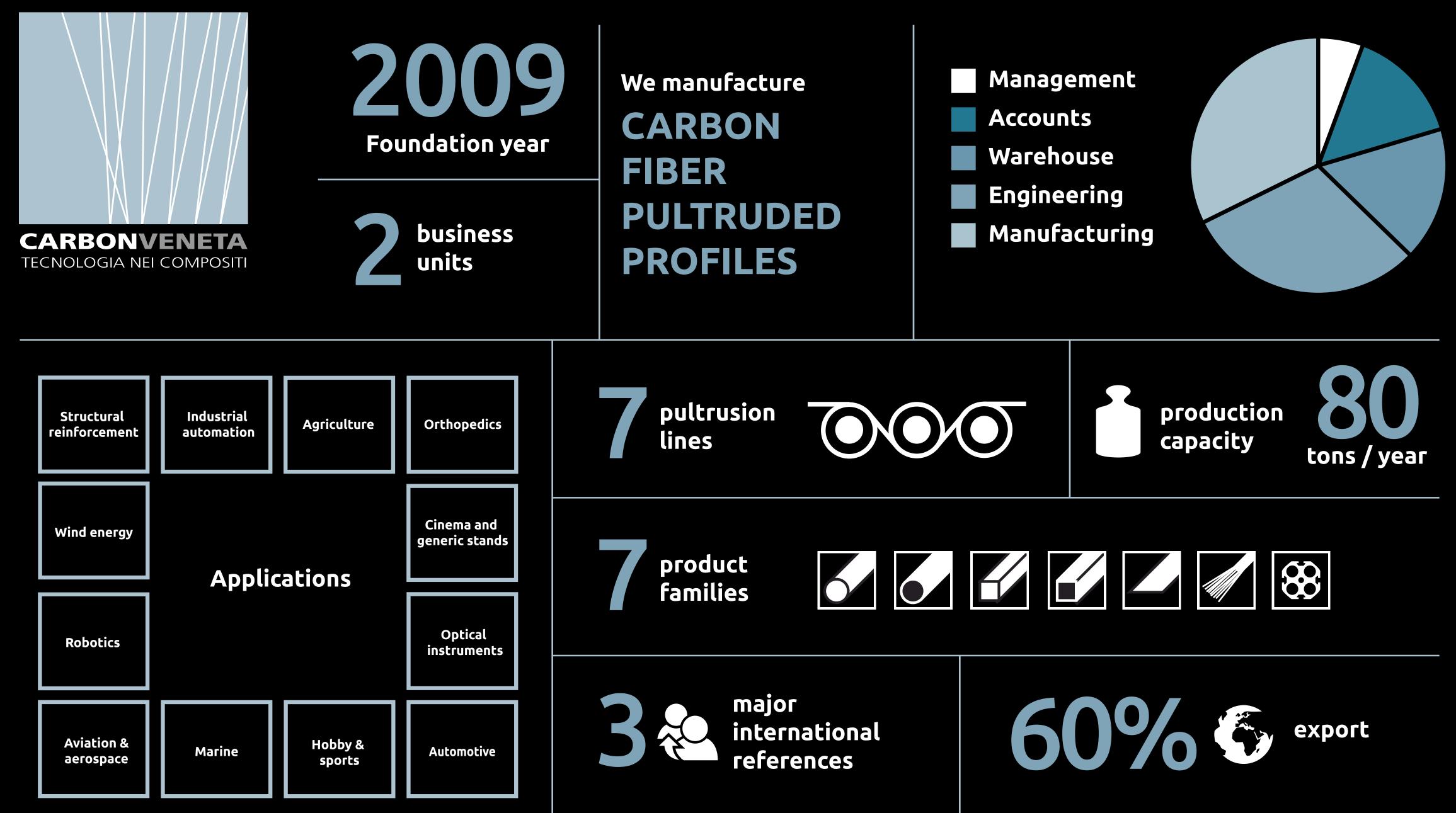


www.carbonveneta.com

### CARBONVENETA TECNOLOGIA NEI COMPOSITI

## Carbon fiber profiles





## Who we are?



Carbonveneta is a Business Unit of **CARBONVENETA NESTECH SRL** and it is your partner in the manufacturing of carbon fiber pultruded profiles.



## NOUR DARTNER IN THE DESIGN AND DEVELOPMENT OF FLOOTDIG MOTORS

YOUR PARTNER IN THE DESIGN AND DEVELOPMENT OF ELECTRIC MOTORS

## 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<sup>®</sup> System

#### CARBONVENETA TECNOLOGIA NEI COMPOSITI



# Ourmission

Manufacture a product with the following features:



# Manufacturing steps

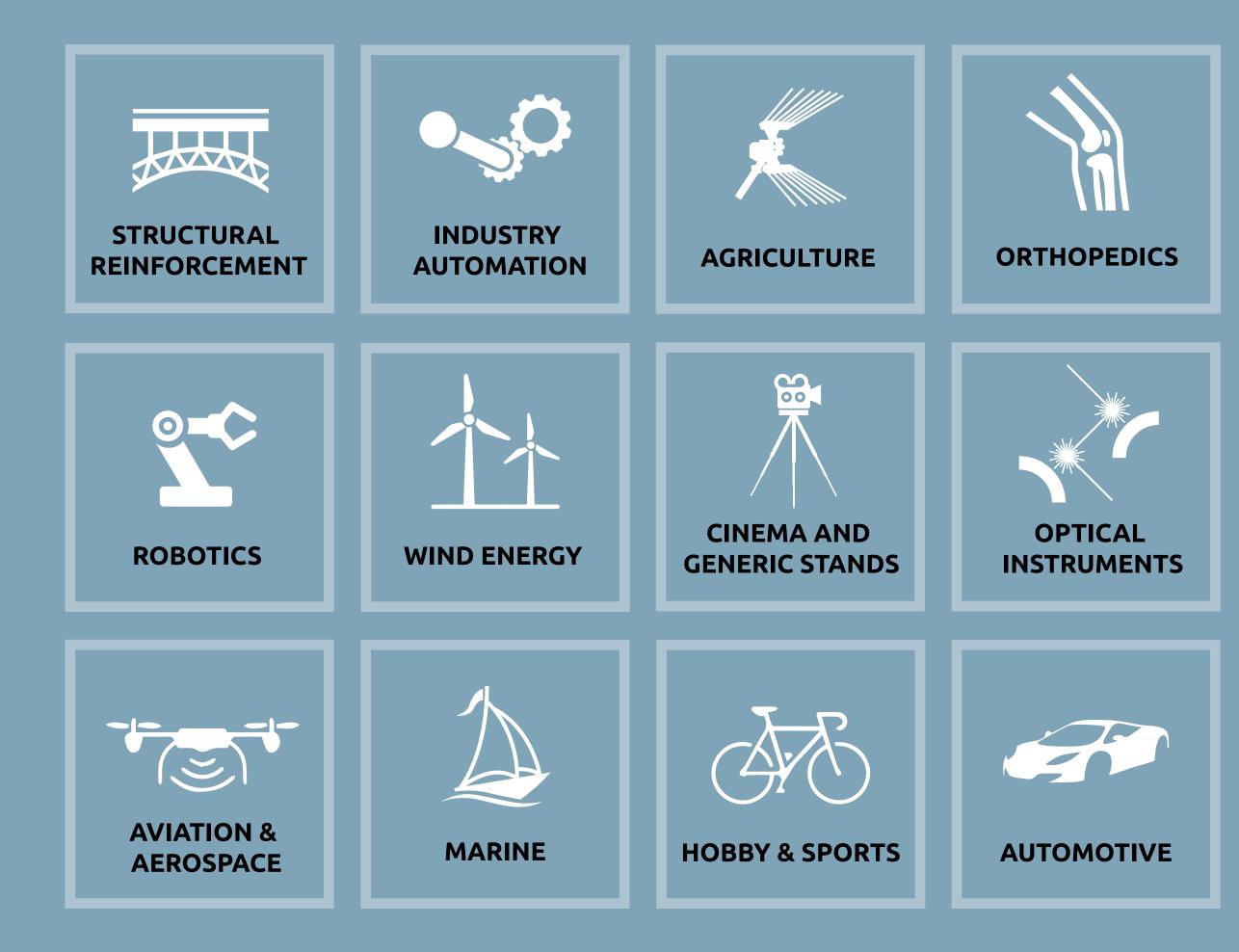


yarns and resins





## Applications













# 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

CARBONVENETA **TECNOLOGIA NEI COMPOSITI** 

## Technical information

	DENSITY	METAL / CARBON RATIO
Carbon	1,6 g/cm³	1,00
Aluminium	2,8 g/cm³	1,75
Stainless Steel	7,9 g/cm³	4,94
Mild Steel	7,9 g/cm³	4,94
Brass	8,5 g/cm³	5,31

#### DENSITY [g/cm<sup>3</sup>]







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





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





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



### Profiles with full section

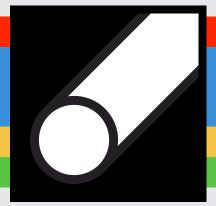
Open profiles - tubes Joints and accessories



# 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



### Profiles with full section

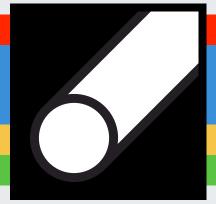
Open profiles - tubes Joints and accessories



# 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



### **Profiles with full section**

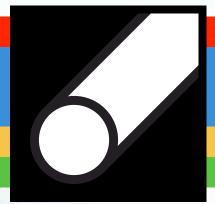
Open profiles - tubes Joints and accessories



# 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



### Profiles with full section

Open profiles - tubes Joints and accessories



# PLANKS FOR SPAR CAPS

## **APPLICATION EXAMPLES**

• Components for rotor blades of wind turbines

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

Profiles with full section

### **Open profiles - tubes**

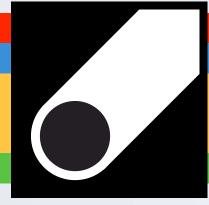
Joints and accessories



# 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



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



Profiles with full section

Open profiles - tubes

#### Joints and accessories

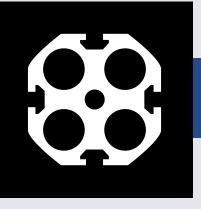




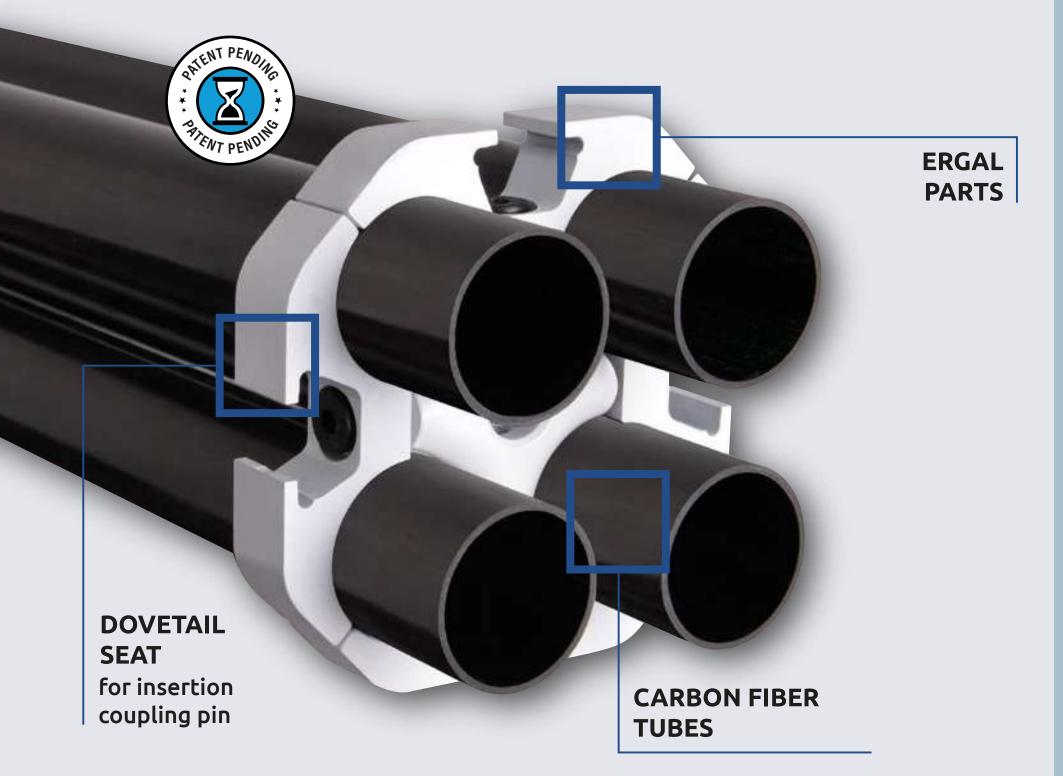
# JOINTS AND ACCESSORIES

## **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<sup>®</sup> System





## LEV/ITUS® 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	ØODn
	150	1,6	$\checkmark$	—	60
	150	1,4	-	$\checkmark$	50
_	120	2,8	~	—	40
_	120	2,6	_	✓	32
_	120	1,6	~	_	30
_	120	1,4	~	✓	30
_	120	1,2	_	✓	30
_	100	1,6	<b>\</b>	_	28,8
_	100	1,4	<b>\</b>	✓	25
-	100	1,2	_	✓	25
_	80	1,6	<b>\</b>	_	20
_	80	1,4	~	✓	15
	80	1,2	_	✓	10
	60	1,5	<b>\</b>	_	29,8
	60	1,4	_	✓	
	50	1,6	<b>\</b>	_	_
_	50	1,4	~	✓	Fu
_	50	1,2	_	✓	
_	40	3	<b>\</b>	_	
_	30	1,6	<b>√</b>	_	
	30	1,4	_	~	
_	20	1,4	~	_	

## Dimensions

#### **Round tubes**

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

Ømm	
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



# Sustainability



### 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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