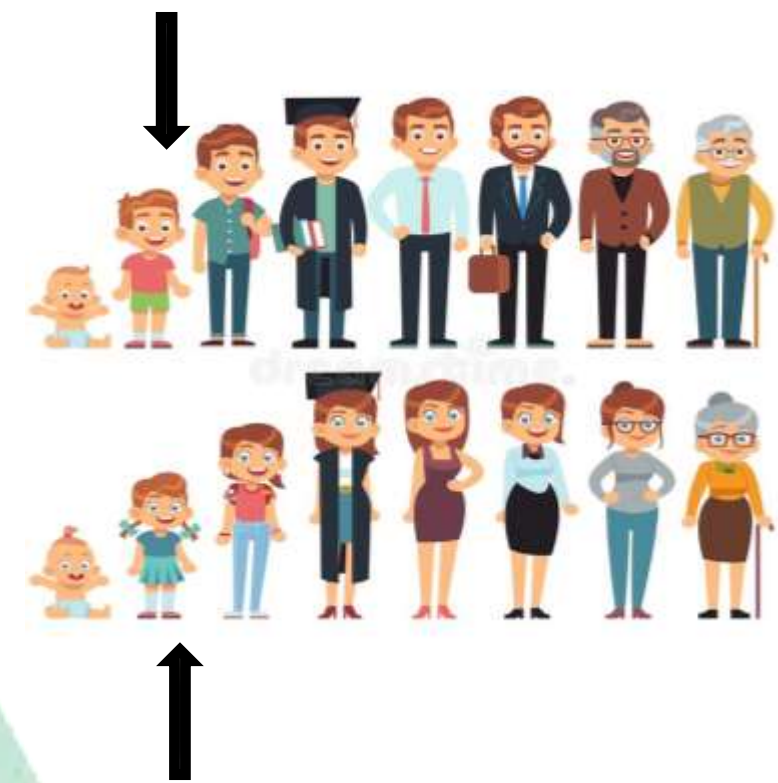


ADVANCED COMPOSITES SOLUTIONS



OUR YOUNG HISTORY: **WHO WE ARE**

Fibertech Group Srl was founded early in the year 2015 by Michele Valentini, who decided to bring together people and their knowledge and experience in this initiative aimed at the design, production and marketing of innovative composite materials with a high technical content.



The two arrows show the age of Fibertech in the world of composite solutions. We are a young Company, but we are extremely passionate about what we do. Fibertech strongly believes in technical and commercial relationships with other companies in the composite Sector. Everyone can only grow together.





WHERE

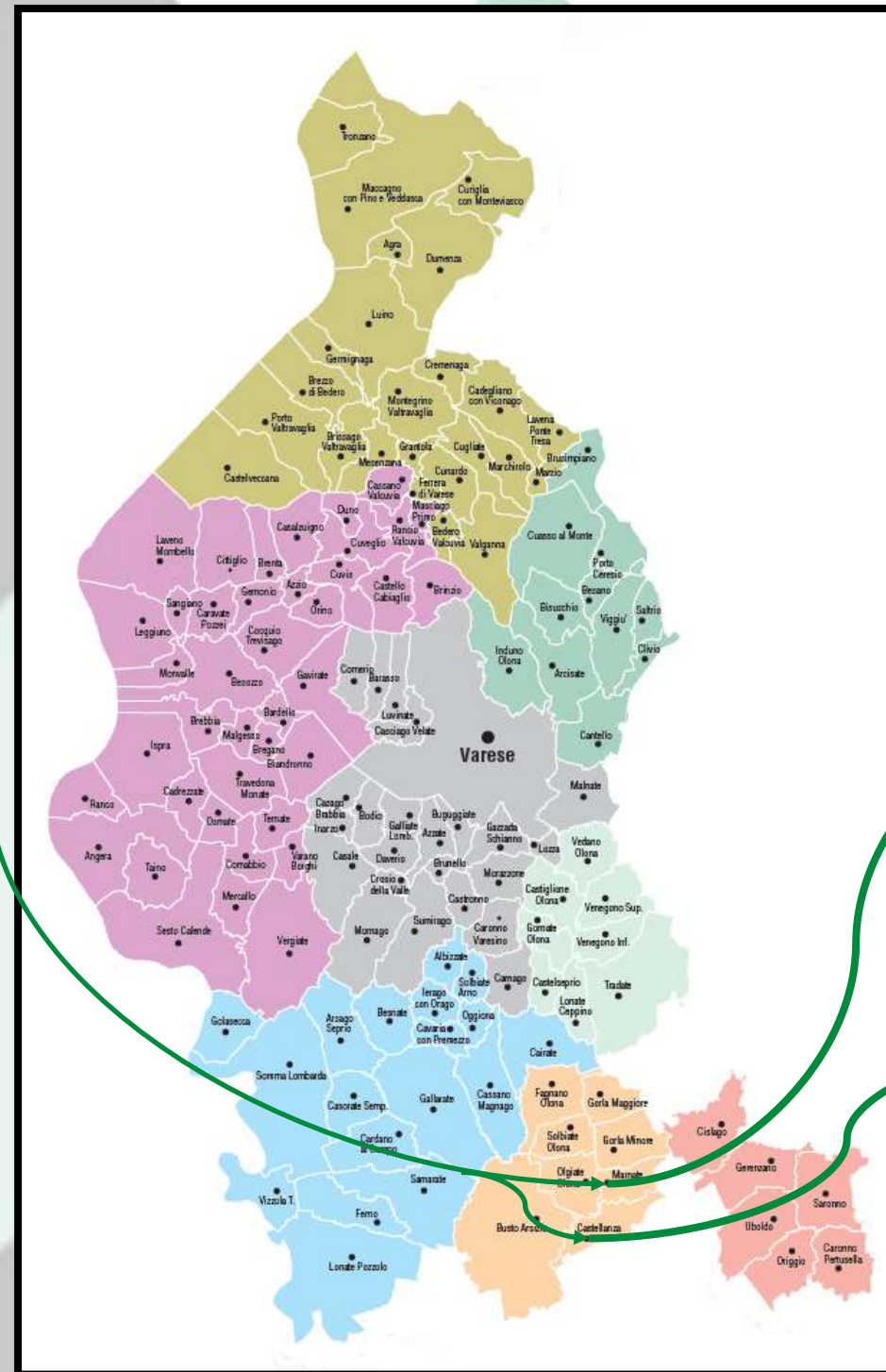


IS LOCATED

Lombardia



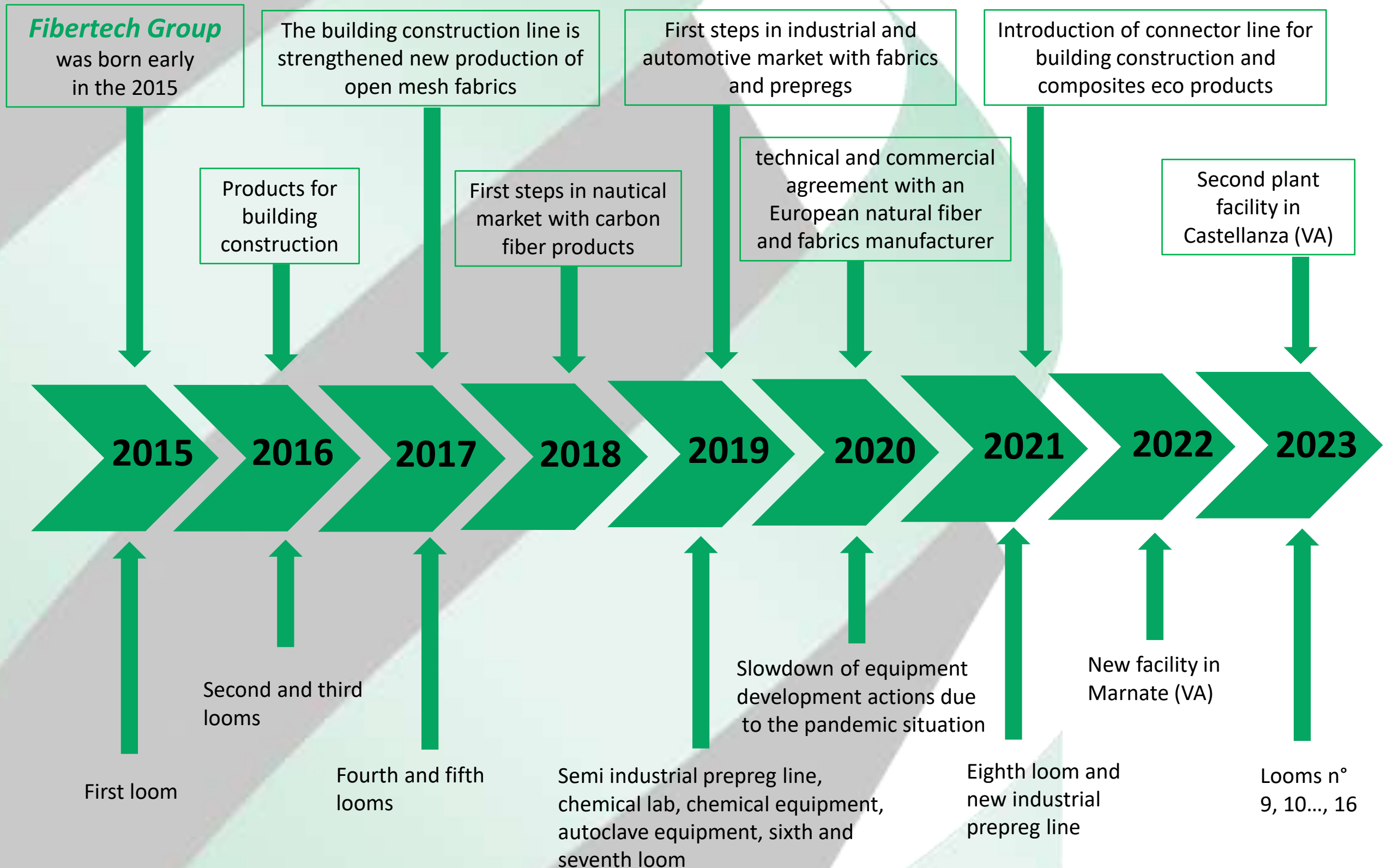
Italia



Province of
Varese,
Marnate

Province of
Varese,
Castellanza

OUR TECHNICAL PROGRESS THROUGH THE YEARS



OUR GROWTH IN NUMBERS

TURNOVER



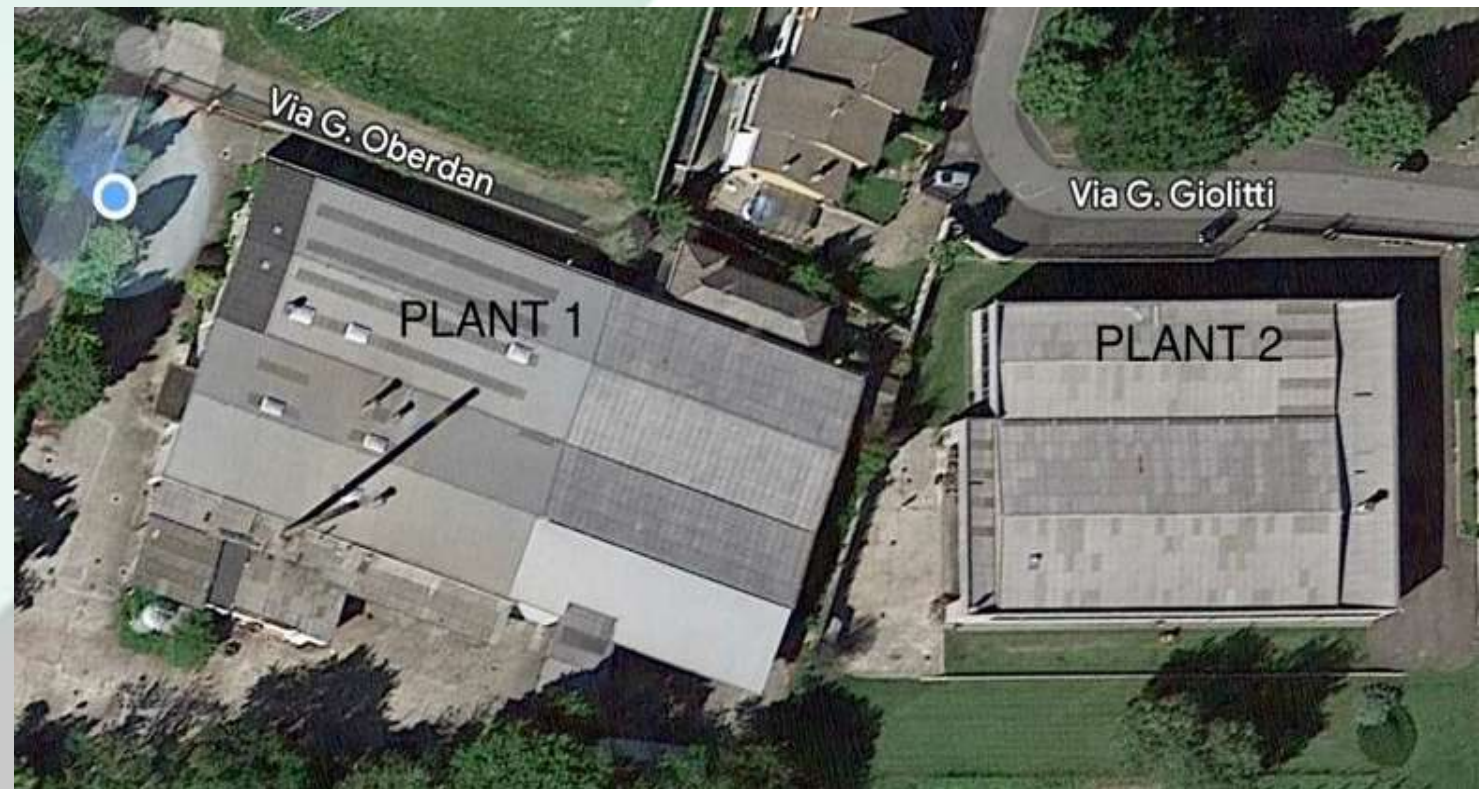
EMPLOYEES





OUR FACILITIES, PLANT 1 : **MARNATE**

- 600 m2 prepreg department with a new hot melt line, room left for the second hot melt line;
- 240 m2 chemical department (3 reactors, 2 cowless stirrers, 1 milling equipment);
- 100 m2 chemical lab;
- 1600 m2 warehouse;
- 400 m2 covered yard;
- 4000 m2 uncovered yard;
- 1 guest house annexed.
- And a new recent addition...



OUR NEW FACILITY, PLANT 2: **CASTELLANZA**

- 1600 m2 weaving department with 16 looms
- 200 m2 offices
- 200 m2 maintenance department
- 3000 m2 uncovered yard



OUR **FIBERLAB**

FiberLab, our R&D Laboratory, is the heart of our studies on composite materials.

DSC (Differential Scanning
Calorimetry)

Spectrophotometer

Multifunction rheometer

Dynamometer

Autoclave



OUR PREPREG LINE

High volume prepreg production at DOI controlled:

- 900 linear meter in 8 hours of 200 gsm prepreg
- 600 linear meter in 8 hours of 400 gsm prepreg
- 600 linear meter in 8 hours of 600 gsm prepreg



REINFORCING CONNECTORS

Reinforcing connectors find their use in building consolidation.

They are made with technical fiber such as Carbon, Glass, Aramid fibers.

We can define them like a soft poltrusion bar ready to be impregnated directly on the construction site.



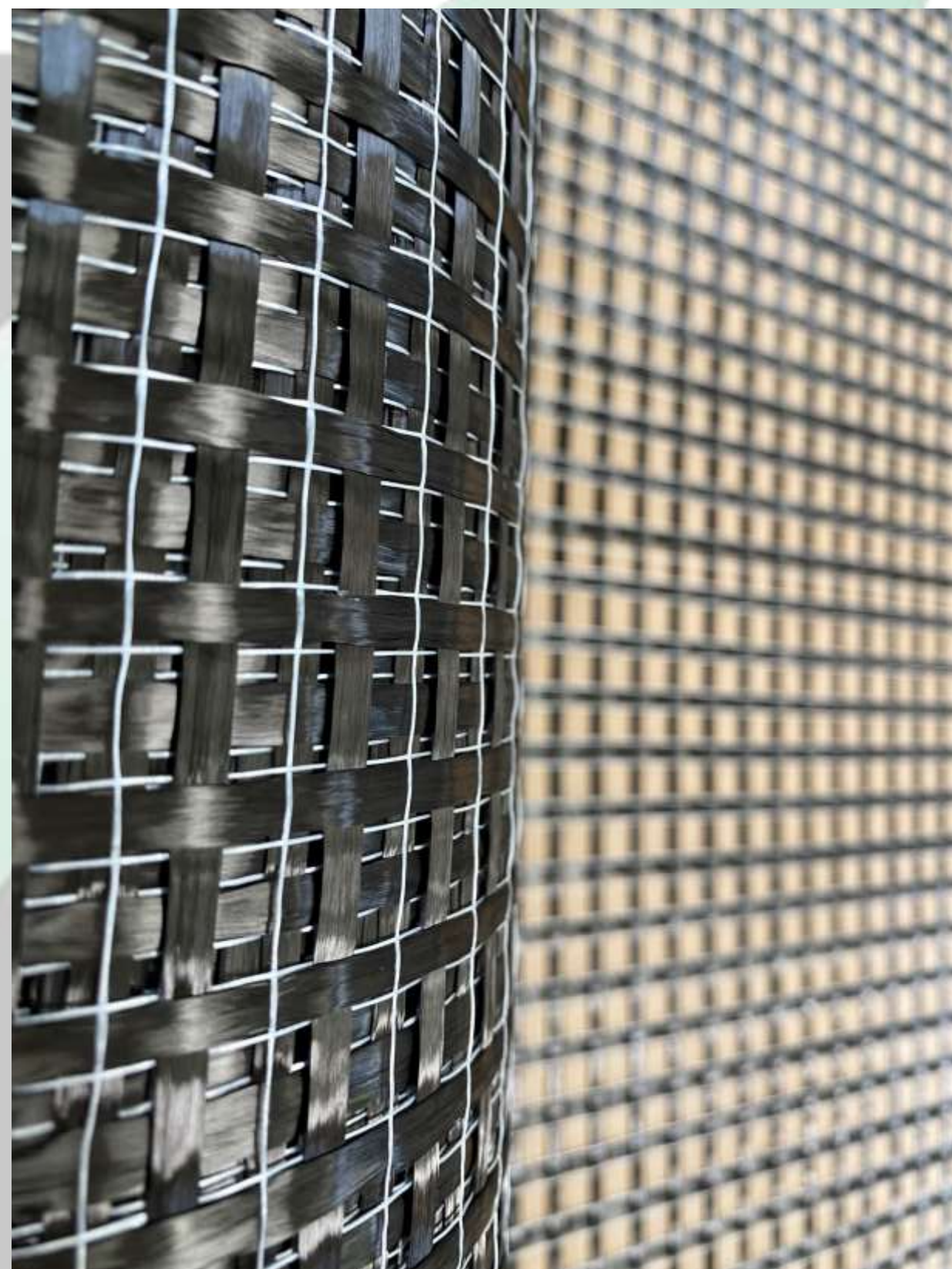


THERMO FIXED **UNIDIRECTIONAL** **CARBON FABRICS**

These technical fabrics, under the general name **CVU/.../THT**, are made by Carbon fiber in warp (95-96% by weight) and by thermal fusible yarn in weft (4-5% by weight).

CVU/.../THT fabrics are available in standard and high modulus Carbon fiber, weight from 150 gsm to 1000 gsm, wide from 10 cm to 100 cm.

Unidirectional fabrics in glass fiber are also produced by request. Building construction is the main market of these fabrics but also the industrial and automotive.



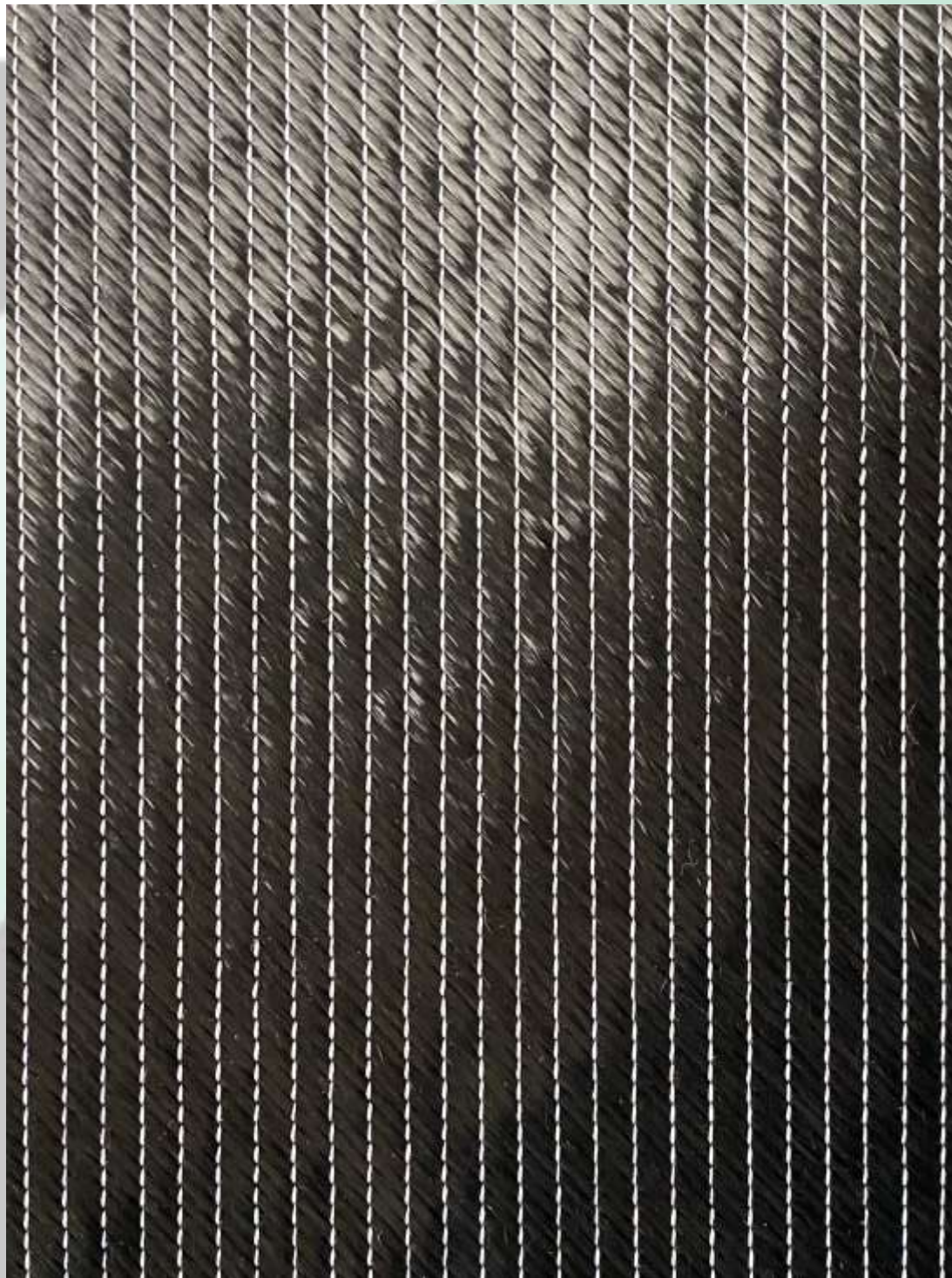
OPEN MESH FABRICS

Like reinforcing connectors, **Open mesh fabrics** find their use in building consolidation.

They are made with technical fiber such as Carbon, Glass, Aramid and Zylon fibers.

Open mesh fabrics have the same functionality of classic metallic grid but performances to weight much higher.

Fibertech Group is exploring their use also in classic composites construction through open mesh Prepreg.



MULTIAXIAL FABRICS

Multiaxial fabrics are offered by Fibertech from 100 gsm to 1000 gsm in weight.

Fibers can be laid with angles of 0° , 90° , $+45^\circ$, -45° , $+60^\circ$, -60° and playing with these angles, it is possible to create Biaxial, Triaxial, Quadriaxial fabrics obtaining final laminates with an increased degree of isotropy in the plane.

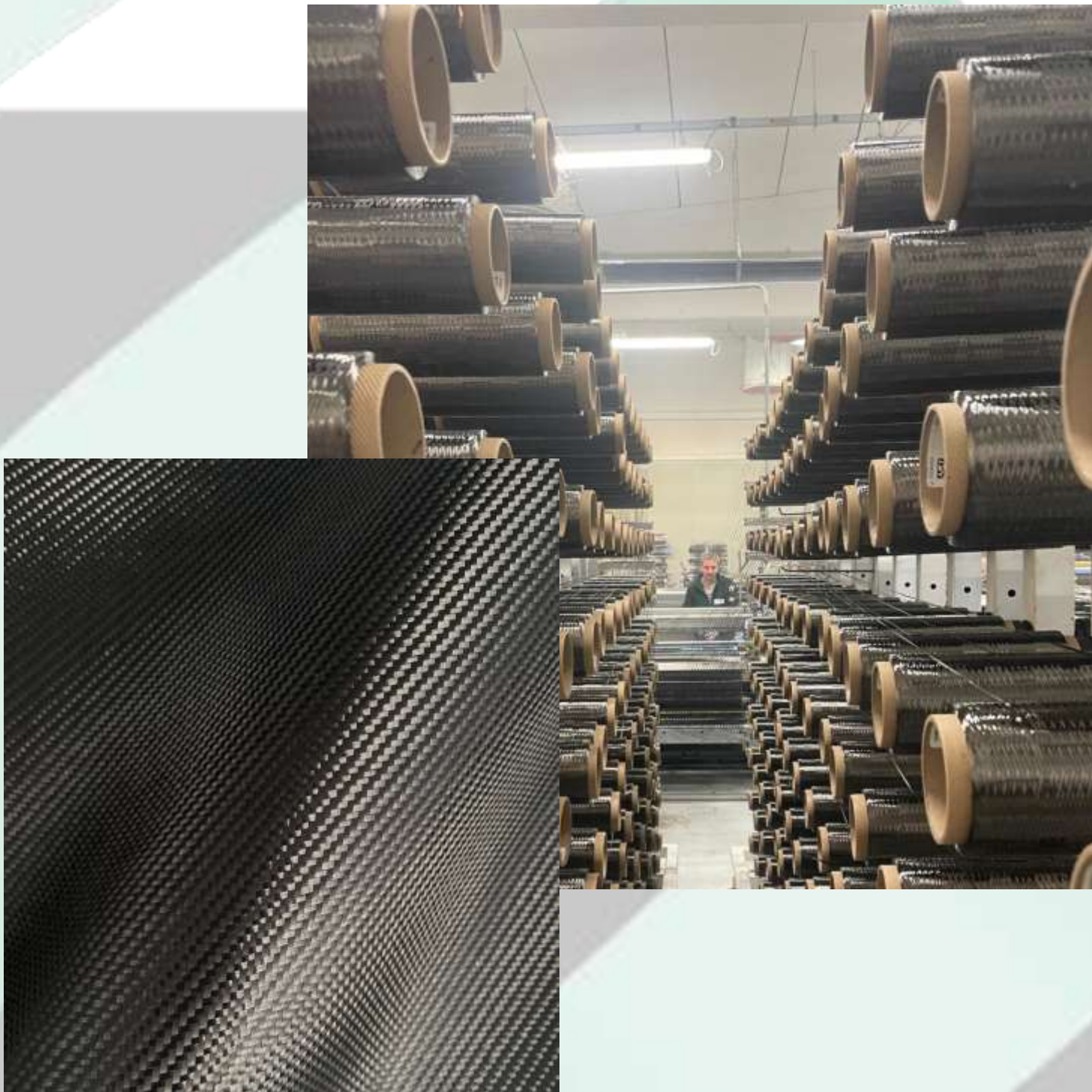
These products find an extensive application in the Marine sector.

CONVENTIONAL FABRICS

Fibertech Group is able to propose **conventional crimp fabrics** in Carbon, Glass, Aramid, Zylon fibers and hybrid fabrics starting from 90 gsm to 1200 gsm in several weaving styles.

Thermo fixed carbon UD, 95% carbon and 4 % of thermo fixing fiber, are also proposed.

Beside to these standard fabrics there is our Carbon Shine Reflection line, made with Carbon fiber and metallized polymers fibers in several colours.





PREPREGS

The prepregs offered by Fibertechgroup are divided in two main classes based on epoxy formulations:

- 16 hot melt epoxy formulations for standard fabrics impregnation and natural fiber impregnation, under NATURALIPREG brand. These formulations are suitable for: Tooling, nautical, cosmetic, structural, flame retardant, Vacuum Bag Only, high Tg applications. Adhesive film and Class A film are included.
- 7 hot melt epoxy formulations for recycled carbon non woven textile. These formulations are suitable for: Tooling under MAGMA line brand; cosmetic, structural, high Tg applications under PAGLIETTA line.

RESIN MATRIX SYSTEMS

AESTHETIC & STRUCTURAL EPOXY PREPREG

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HEMT3	Automotive Industrial Sporting goods	Autoclave, vacuum bag, wrapping	80 - 140°C	12h - 1,5h	115 - 125°C	Yes	Yes
HEMT4	Automotive Industrial Sporting goods	Autoclave, vacuum bag, wrapping	80 - 140°C	12h - 1,5h	135 - 145°C	Yes	Yes
HEMT7	Automotive Industrial Sporting goods	Autoclave, vacuum bag, wrapping	80 - 140°C	12h - 1,5h	160 - 170°C	Yes	Yes
HEMT9	Automotive Industrial	Autoclave, hot press	80 - 140°C	12h - 1,5h precure 1h 180°C postcure	190 - 200°C	Yes	Yes

HIGH STRUCTURAL EPOXY PREPREG

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
SEMT1	Automotive Industrial Sporting goods	Autoclave, vacuum bag, wrapping	80 - 140°C	12h - 1,5h	115 - 125°C	No	HIGH

* Suggested moulding equipment

** Minimum and maximum curing temperatures

*** Suggested curing time based on Fibertech internal tests

**** Laboratory measurement performed on 200 g/sqm fabric fully cured

RESIN MATRIX SYSTEMS

LOW TEMPERATURE EPOXY PREPREG

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HELT1	Nautical , Industrial, Automotive, Sporting goods and Prototyping	Autoclave and vacuum bag	65 - 125°C	15h - 1h	115 - 125°C	Yes	Yes
HELT2	Nautical, Industrial, Automotive, Sporting goods and Prototyping	Autoclave and vacuum bag	65 - 125°C	15h - 1h	105 - 115°C	No	HIGH

AUTOCLAVE NON ISOTHERMAL CURING CYCLE

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HEMP4	Automotive Industrial	Autoclave non isothermal curing cycle	Ramp up from 25°C to 145°C then ramp down to 25°C	1,5°C/min ramp up 2,5°C/min or more ramp down	115 - 125°C	Yes	Yes

* Suggested moulding equipment

** Minimum and maximum curing temperatures

*** Suggested curing time based on Fibertech internal tests

**** Laboratory measurement performer on 200 g/sqm fabric fully cured

RESIN MATRIX SYSTEMS

FLAME RETARDANT EPOXY PREPREG

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HAFR 2	Automotive, Industrial, UL94V0 certified	Autoclave	135°C	1,5h	120 - 130°C	Yes	Yes

OUT OF AUTOCLAVE EPOXY PREPREG

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HEVT2	VBO and high quality surface demand for nautical sector	Vacuum bag	80°C voids extraction phase 135°	2 - 4 (OR 12h) 1 h	105- 110°C	Yes	Yes
HEMT8	VBO and high quality surface demand	Vacuum bag and Autoclave	80°C voids extraction phase 135°	2 - 4 (OR 12h) 1 h	110 - 120°C	Yes	Yes

* Suggested moulding equipment

** Minimum and maximum curing temperatures

*** Suggested curing time based on Fibertech internal tests

**** Laboratory measurement performer on 200 g/sqm fabric fully cured

RESIN MATRIX SYSTEMS

FAST CURE EPOXY PREPREG

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HEMT4 SPEED	Automotive Industrial Sporting goods	Hot press and Autoclave	140 - 150°C	10min - 6min	140 – 150°C	Yes	Yes
HEMT5 SPEED	Automotive Industrial Sporting goods	Hot press and Autoclave	140 - 150°C	10min - 6min	130 - 140°C	Yes	Yes

PREPREG FOR TOOLING

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
TOOL 1	Tooling	Autoclave	55 - 90°C precure 180 - 200 postcure	15h - 2h 6h - 4h	205 - 215°C	NO	Yes
TOOL 2	Tooling / prototyping	Autoclave	65 precure 180 postcure	16h 4h	200 - 210°C	No	Yes

* Suggested moulding equipment

** Minimum and maximum curing temperatures

*** Suggested curing time based on Fibertech internal tests

**** Laboratory measurement performed on 200 g/sqm fabric fully cured

RESIN MATRIX SYSTEMS

EPOXY PREPREG FOR RECYCLED CARBON FIBER



Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HETNT resin for recycled carbon fiber	Automotive, Industrial, Sporting goods and prototyping	Autoclave and vacuum bag	80 - 125°C	12h - 1h	110 - 115°C	Yes	Yes
HETNT FAST resin for recycled carbon fiber	Automotive, Industrial, Sporting goods and prototyping	Hot Press	140 – 150 °C	10 min – 6 min	120 - 125°C	Yes	Yes
HETNT LT1 resin for recycled carbon fiber	Automotive, Industrial, Sporting goods and prototyping	Autoclave and vacuum bag	65 - 125°C	16h – 1h	110 - 115°C	Yes	Yes
HETNTP resin for recycled carbon fiber	Automotive Industrial	Autoclave non isothermal curing cycle	Ramp up from 25°C to 145°C then ramp down to 25°C	1,5°C/min ramp up 2,5°C/min or more ramp down	120 - 130°C	Yes	Yes

Recycled carbon fiber products: commercialized in Europe by



Tel. +39 0331 1227009 e-mail. info@recarbon.it

Via G. Mameli 16 – 21052 Busto Arsizio (VA) – Italia

web. www.recarbon.it

* Suggested moulding equipment

** Minimum and maximum curing temperatures

*** Suggested curing time based on Fibertech internal tests

**** Laboratory measurement performer on 200 g/sqm fabric fully cured

RESIN MATRIX SYSTEMS

EPOXY PREPREG FOR RECYCLED CARBON FIBER

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
HETNT HT resin for recycled carbon fiber	Automotive, Industrial, Sporting goods and prototyping	Autoclave	80-130°C precure 180 postcure	15h - 2h 1h - 1,5h	180 - 190°C	NO	Yes
MAGMA VSV resin for recycled carbon fiber	Tooling	Autoclave	55 – 80°C precure 180 - 200 postcure	15h - 2h 6h - 4h	210°C	NO	Yes
MGM ETN resin for recycled carbon fiber High Shelf Life	Tooling	Autoclave	65 – 80°C precure 180 - 200 postcure	15h - 5h 4h - 2h	220°C	No	Yes

EPOXY FILM

Resin Type	Application field	Application technology*	Temperature curing range**	Curing Time***	Maximum Tg Tan Delta peak by DMA****	Cosmetic application	Toughened
ADF 1	Adhesive film	Autoclave and vacuum bag	65 – 120 °C	16h – 1,5h	105 - 110°C	NO	Yes
ADFE	Expanding syntactic film	Autoclave and vacuum bag	130°C	1h	110°C	NO	Yes
FSCA	Sandable surfacing film for class A paint	Autoclave	80 – 140 °C	12h – 1h	155 - 160°C	Gray color, tuneable on request	Yes

* Suggested moulding equipment

** Minimum and maximum curing temperatures

*** Suggested curing time based on Fibertech internal tests

**** Laboratory measurement performer on 200 g/sqm fabric fully cured

NATURALIPREG

NATURAL FIBERS PREPREG LINE



PAGLIETTA

RECYCLED CARBON FIBER PREPREG LINE



MAGMA

TOOLING RECYCLED CARBON FIBER PREPREG LINE







Thank you for your attention



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