



***Different Vision,  
Creative Solutions.***







*2024 Product Catalogue*

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## | About Us

Since 2012, Omnis Kompozit has been supplying proven quality raw materials and state-of-the-art machinery to the Fiber Reinforced Polymer (FRP) and Glass Fiber Reinforced Concrete (GRC) industries. With representation of nearly 30 brands, Omnis Composite family stands among the most dynamic and innovative players in its sector with the principle of

*“Different Vision, Creative Solutions.”*

Omnis Kompozit team provides a wide range of services, not only with multi-functional raw materials and additives for the polymer industry but also with machinery for FRP and GRC applications.

The fundamental aim of our qualified team, is to collaborate in many ways both domestically and internationally and always to maintain the highest level of customer satisfaction.

For GRC (Glass Fiber Reinforced Concrete) production is widely used in construction and precast sectors; in addition to the supply of concrete additives such as Alkali Resistant (AR) glass fiber reinforcements, mold release agents for concrete, acrylic polymer, and water reducers, from stock; Omnis Kompozit family, devoted to sustainability and the green environmental movement, is the largest supplier of expanded glass bead products in Turkey. The expanded glass bead product is a recyclable and ecological material frequently found in green building projects as an insulation material in the construction sector. Omnis Kompozit represents this unique environmental friendly product in Turkey and in eight countries in its neighboring geography.

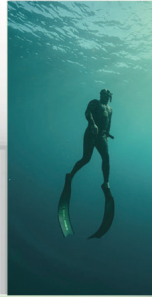
As a member of the Turkish Composite Manufacturers Association (TCMA), Omnis Kompozit has created a new story in polymer composite industry by always investing in innovation, production, producers, and consumers.

# Sectors |

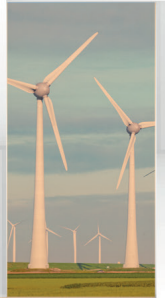
Since 2012, Omnis Kompozit has been offering innovative and high-quality raw materials for a wide array of industries, including transportation, construction, energy, sports, entertainment, maritime, and aviation. Constantly progressing, the products under the Omnis Kompozit umbrella continues to advance to bring high-performance composite solutions to an even broader range of sectors.



**Aerospace**



**Sports and Leisure**



**Energy**

**Marine**



**Architecture and Design**



**Vehicles and Transportation**



**Urban Furniture**





**Water Parks**

**Engineering  
Plastics**



**Chemical Storage  
and Infrastructure**



**Building  
Construction**



**Caravan -  
Tiny House**

**CFRP Structural  
Strengthening**

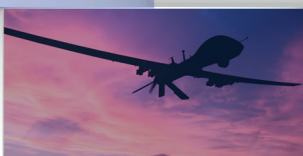


**Insulation  
Applications**



**Defense  
Industry**

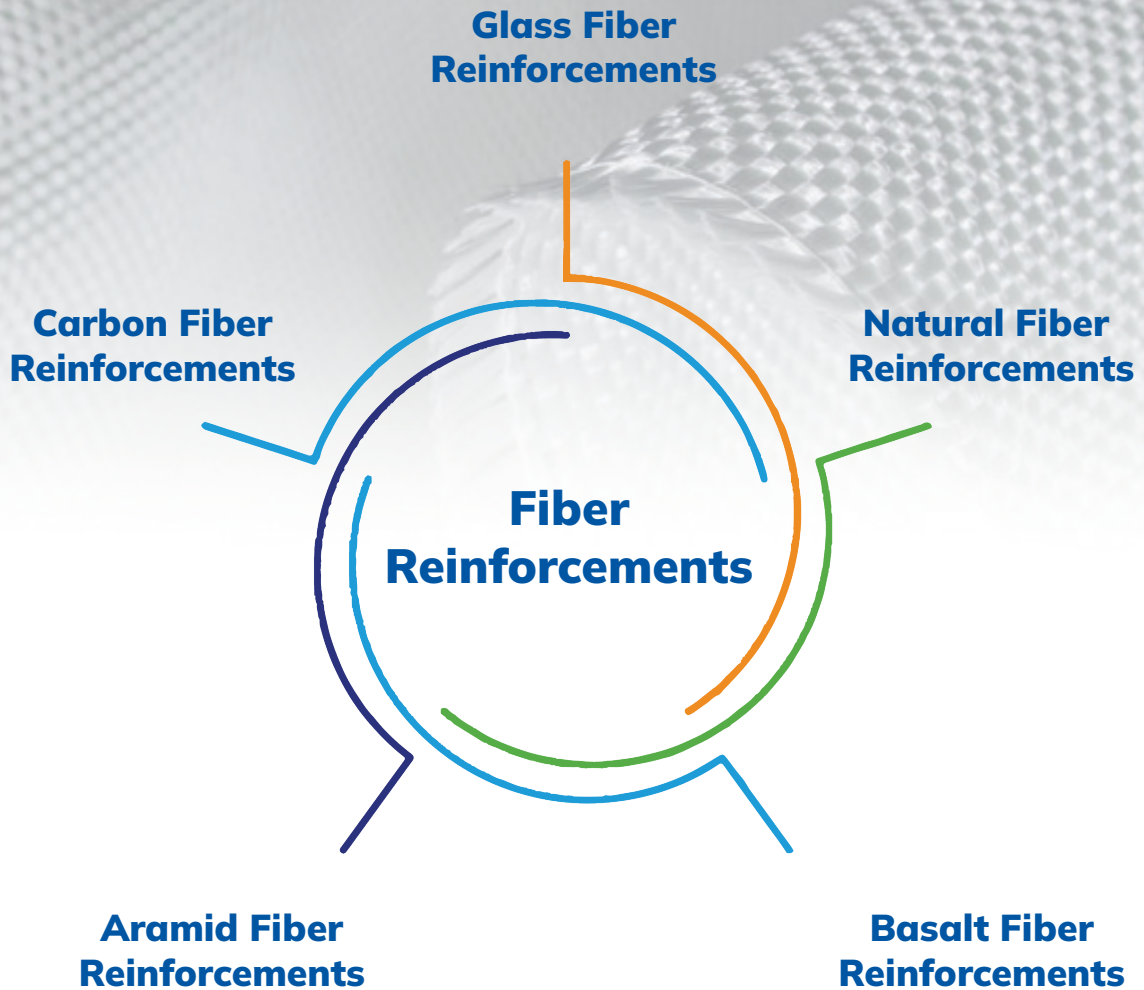
**Unmanned  
Aerial Vehicles**



**Cultured  
Marble /  
Solid  
Surfaces**



# Fiber Reinforcements |



Fiber reinforcements, when combined with matrix resins, serve as the primary carriers of mechanical performance for composites, adding strength, hardness, and toughness to the created part. Apart from widely used glass, carbon, and aramid as reinforcements materials, there are also natural fibers like basalt, hemp, or flax can be used in creating composite solutions.. The utilization of fiber reinforcements in polymer composites has revolutionized the engineering and manufacturing industries, giving rise to a new class of material with a high strength-to-weight ratio. They are supplied in forms such as rovings, chopped strands, mats, fabrics, weaves, and multiaxial fabrics.



# Glass Fiber Reinforcements

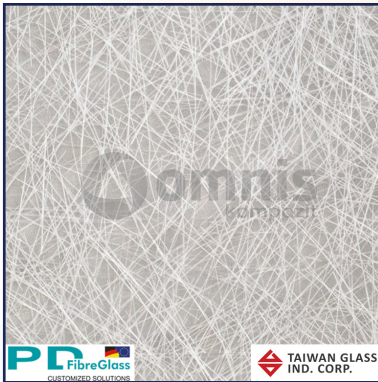


## General-Purpose Glass Fiber Mat

**Manufacturer:** ŞİŞECAM

• Emulsion and powder binder-containing mats produced from E-Glass are developed for traditional hand lay-up applications, offering homogeneous weight distribution, easy wet-out, low resin consumption, minimum roll-out, and good tensile properties.

- Emulsion Binded 300-375-450-600 g/m<sup>2</sup>
- Powder Binded 300-375-450-600 g/m<sup>2</sup>
- Combination Mat

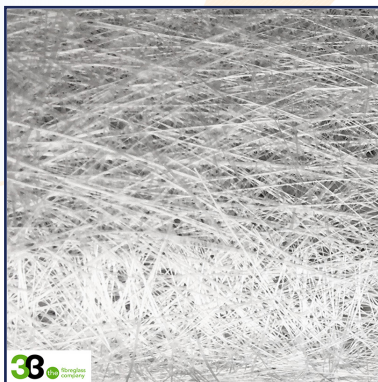


## Light Weight Glass Fiber Mat

**Manufacturer:** PD FIBRE GLASS, TAIWAN GLASS

• PD FIBRE GLASS, TAIWAN GLASS  
• This mat product is produced from E-Glass with powder binding. It is preferred for applications requiring low fiber density and can be used as a preliminary mat layer before applying high grammage mat after gelcoat application.

- 65-80-100-150-225 g/m<sup>2</sup>



## Continuous Fiber Mats

**Manufacturer:** 3B FIBERGLASS

• Continuous Fiber Mats are a non-woven, multilayered mat type made from uninterrupted E-CR glass fibers. The glass fibers are bonded to each other using a silane-based binder. Available in two separate binders - powder or liquid. Continuous Fiber Mats, especially used in pultrusion, closed molding, infusion, and injection processes, are categorized based on lay-up, hardness, wet-out time, and strength values for both types of binders.

# Glass Fiber Reinforcements |



## Single-End Glass Fiber Roving

**Manufacturer:** ŞİŞECAM, CPIC FIBERGLASS

- The single-end roving product is manufactured from E and ECR Glass fibers. It possesses good dissolvability, excellent processability, non-fuzziness, fast and complete wet-out, and high mechanical strength properties, suitable for roving winding and pultrusion. Its silane-based binder is compatible with polyester, vinyl ester, and epoxy resins.

- 300- 600-1200-2400-4800 Tex Single-End E-Glass Fiber Roving (ŞİŞECAM)
- 300-600-1200-2400-4800-9600 Tex Single-End ECR-Glass Fiber Roving (CPIC FIBERGLASS)



## Multi-End Choppable Glass Fiber Roving

**Manufacturer:** ŞİŞECAM

- Choppable Glass Fiber Roving is produced by winding bundles of E-Glass fiber strands into a spool as a thread (roving). It is designed for general-purpose choppable roving applications such as spray up and SMC processes, offering even dissolution, good choppability, proper fiber distribution, rapid wet-out, very low static electricity, very low fuzz, high mechanical performance, and good surface performance. SMC-BMC production methods are among the fastest methods used in composite material production. Due to investment costs, it is preferred for high-volume composite part production (such as engine covers, sewer covers, electrical panels, service trays).

- KCR2 – 2400 Tex Roving
- SMC3 – 2400 Tex Roving



## Single-End Glass Fiber Roving Compatible with Long Fiber Thermoplastics (LFT)

**Manufacturer:** TAIWAN GLASS

- Single-end E-Glass fiber rovings suitable for Long Fiber Thermoplastic (LFT) production are available in 1200 and 2400 tex variants compatible with PA, PP, and PC resins.

- For PA Resin: TGI 474
- For PP Resin: TGI 442

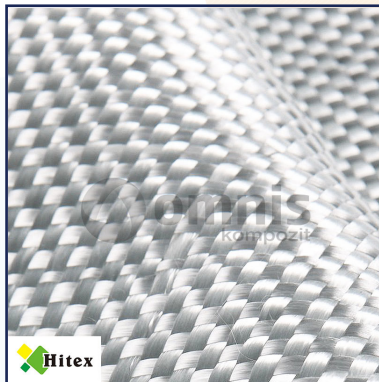
# | Glass Fiber Reinforcements



## High ZrO<sub>2</sub> Content AR Glass Fiber Roving

**Manufacturer:** HUIERJIE, NIPPON ELECTRIC GLASS

- Glass Fiber Reinforced Concrete (GRC) is formed by reinforcing a high-performance cement-based composition with 'alkali-resistant glass fiber.' Thanks to the zirconium (ZrO<sub>2</sub>) on the AR (alkali-resistant) glass fiber, it provides corrosion resistance against alkalis and acids within the cement, serving as reinforcement without eroding in the cement. The alkali-resistant glass fiber prevents the spread of surface cracks that occur in concrete. Additionally, it offers high tensile strength alongside the compressive strength typical concrete possesses. The strength of the fiber is three times that of steel and its flexibility is four times. Chopper and spray GRC machines are used to simultaneously apply the fiber and GRC concrete mix onto the mold.

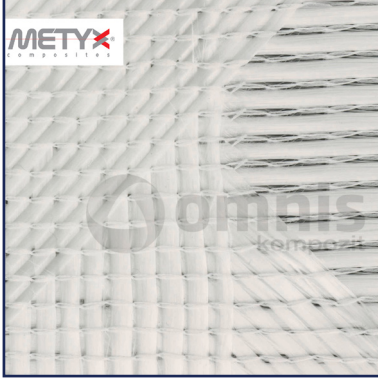


## Glass Fiber Weave

**Manufacturer:** HITEX

- Fabrics produced using E-Glass rovings are classified as woven, whereas those made from E-Glass yarns are referred to as weave fabrics. The choice between weaving or woven fabric is made based on the intended application.
- 100 g/m<sup>2</sup> Weaven Fabric (Plain-Twill)
- 135 g/m<sup>2</sup> Weaven Fabric (Plain)
- 160 g/m<sup>2</sup> Weaven Fabric (Twill)
- 200-300 g/m<sup>2</sup> Woven Fabric (Plain-Twill)
- 500-800-1000 g/m<sup>2</sup> Woven Fabric

# Glass Fiber Reinforcements |



## Multi-Axial Glass Fiber Fabrics

**Manufacturer:** METYX

• High-performance multi-axial fabrics are produced by combining one or more unidirectional fiber layers in different orientations and weights. They are commonly used in the production of large-scale composite parts where mechanical performance is expected.

- UD 300-600 g/m<sup>2</sup> / LT 0/90: 300-600-850 g/m<sup>2</sup>
- X+45/-45: 300-400-450-600-800-936 g/m<sup>2</sup>
- XT -45/90/+45: 800 g/m<sup>2</sup> / XL 0/-45/+45: 800 g/m<sup>2</sup>
- Q 0/-45/90/+45: 625-850-1200 g/m<sup>2</sup>



## Glass Fiber Chopped Strand for PA and PP Resins

**Manufacturer:** SİŞECAM

• The chopped strand products, manufactured from E-glass, are specifically designed for reinforcing PA (polyamide) and PP (polypropylene) resins in extrusion applications for compounding. These products exhibit even fiber distribution and high integrity, excellent flow properties, good processability, stable color characteristics, along with high mechanical performance.

- For PA Polyamide Resin Reinforcement: 4-4.5 mm
- For PP Polypropylene Resin Reinforcement: 4-4.5 mm
- DE1 for water-based processes: 6-9-12 mm
- PH2 for phenolic friction materials: 3-4.5 mm



## Surface Veil

**Manufacturer:** FREUDENBERG, METYX

• Surface veils are non-woven reinforcements typically used to achieve smooth and resin-rich protective surfaces, especially in filament winding and pultrusion processes. When applied in molds, they are used as the first fiber layer right after the gel coat and prevents the pattern of subsequent higher-weight reinforcements to be visible through the gel coat surface.

- C Glass 26 g/m<sup>2</sup> Surface Veil
- Polyester Surface Veil 35-50 g/m<sup>2</sup>

# | Glass Fiber Reinforcements



## Woven Glass Fiber Tape

**Manufacturer:** HITEX

• The warp and wefts are woven straight at 0 and 90 degrees with the same strength values as standard weave fabrics weighing 200 g/m<sup>2</sup>. Produced in ready-to-use stitched strip form on both sides to prevent unraveling and fraying at the edges of the fabric resulting from cutting the standard fabrics. They can be used as flange reinforcement or contour fibers at mold edges.

- 200 g/m<sup>2</sup> Glass Fiber Tape Width: 25 mm - 50 mm



## Metycore RTM Fiber

**Manufacturer:** METYX

• Metycore RTM fiber is a type of fiber designed between two layers of glass fiber mats for RTM (Resin Transfer Molding) production, featuring easy mold conformability and excellent resin flow. It is designed with a polypropylene flow medium.

- 300M / 180PP1 / 300M
- 450M / 180PP1 / 450M
- 600M / 180PP1 / 600M
- 300M / 250PP1 / 300M
- 450M / 250PP1 / 450M
- 600M / 250PP1 / 600M



## Glass Fiber Chopping

**Manufacturer:** TAIWAN GLASS

• Produced by chopping bundles of E-glass with an applied binder suitable for use in thermoset and thermoplastic resin systems. These chopped fiber products, compatible with thermoset and thermoplastic resins, are added at a rate between 10% to 30% and are used to enhance properties such as heat resistance, impact resistance, hardness, and flexibility according to specific requirements.

- For PBT-PET Polybutylene Terephthalate and Polyethylene Terephthalate Resin Reinforcement
- For PBT-ABS Polybutylene Terephthalate and Acrylonitrile Butadiene Styrene Resin Reinforcement
- For POM Polyoxymethylene Resin Reinforcement
- For PC Polycarbonate Resin Reinforcement
- For PS-PVC Polystyrene and Polyvinyl Chloride Resin Reinforcement
- For BMC Dough Reinforcement: 3-6-12 mm

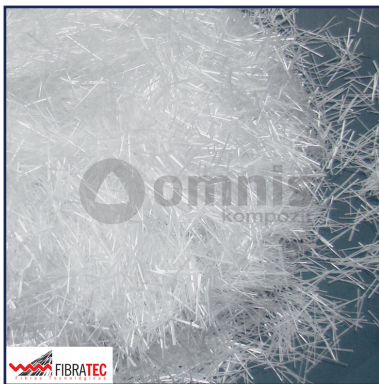
# Glass Fiber Reinforcements |



## High ZrO<sub>2</sub> Ratio AR Glass Fiber Chopping

**Manufacturer:** NIPPON ELECTRIC GLASS

- For glass to maintain its mechanical performance without undergoing chemical deformation in alkaline environments within concrete, it needs to contain a minimum of 16% zirconium. High-performance AR alkali-resistant glass fiber chopping can be used as concrete reinforcement to serve as reinforcement, prevent or shorten expansion cracks in concrete.
- NEG ARG Fiber ACS13PH901X

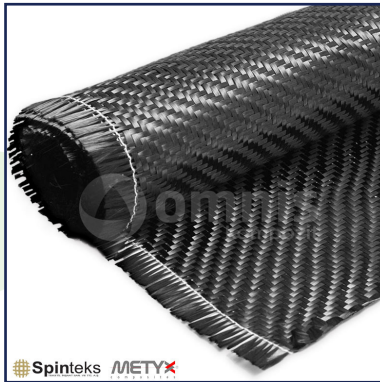


## FibraTec V12 Chopped AR Glass Fiber

**Manufacturer:** FIBRA TEC

- The V-12 Ground Fiber provides high flexibility, crack resistance, and tensile strength against fatigue resulting from dynamic and thermal loads on concrete. While V-12 Ground Fiber ensures rapid and homogeneous distribution in all directions within the concrete, steel mesh reinforcement is limited to providing strength only equivalent to its thickness. The specific gravity of AR glass fiber being similar to concrete prevents surface marking and sinking into the base.

# | Carbon Fiber Reinforcements



## Carbon Fiber Woven Fabric

**Manufacturer:** METYX, SPINTEKS

• Carbon fiber woven fabrics are produced in Plain and Twill patterns by weaving 1K, 3K, 12K, 24K yarns. Product widths vary between 100-125-150 cm for rolls.

- 100 g/m<sup>2</sup> Woven Fabric (Twill)
- 200 g/m<sup>2</sup> Woven Fabric (Plain-Twill)
- 245 g/m<sup>2</sup> Woven Fabric (Plain-Twill)
- 400 g/m<sup>2</sup> Woven Fabric (Plain-Twill)
- 600 g/m<sup>2</sup> Woven Fabric (Plain-Twill)
- 230 g/m<sup>2</sup> Patterned Woven Fabric



## Multi-Axial Carbon Fiber Fabric

**Manufacturer:** METYX

- CUD 300-600 g/m<sup>2</sup>
- CX +45/-45: 300-400-600 g/m<sup>2</sup>
- CLT 0/90: 500 g/m<sup>2</sup>
- CQ 0/-45/90/+45: 800 g/m<sup>2</sup>

# Carbon Fiber Reinforcements |



## Carbon Fiber Chopped Strands

**Manufacturer:** HITEX

- Fully compatible with both Thermoset and Thermoplastic resins. Specifically used as a carbon fiber component reinforcement and filler material in compression molding and injection molding applications. Can be sprinkled or laid in molds to impart a forged carbon appearance onto surfaces or parts, then combined with epoxy resin.
- Consists of carbon chopped into lengths of 3-6-12-24 mm.



## Carbon Fiber Tape

**Manufacturer:** HITEX

- Plain carbon tapes and unidirectional UD (Unidirectional) carbon tapes are produced in ready-to-use narrow tape form on both sides to prevent fraying and unraveling of the fabric edges resulting from cutting standard fabrics. They are designed for reinforcement use.
- Plain Weave Tape 320 g/m2 Width: 50 mm
- UD Unidirectional Tape 180 g/m2 Width: 50 mm



# | Aramid Fiber Reinforcements

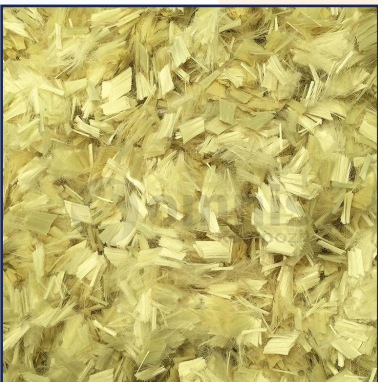


## Aramid Fiber Woven Fabric

**Manufacturer:** HITEX

- Woven fabrics made from para-aramid yarns can be used in ballistic applications. They are employed as reinforcements in applications requiring high impact resistance and shock absorption.

- 110 g/m<sup>2</sup> Twill
- 200 g/m<sup>2</sup> Plain
- 230 g/m<sup>2</sup> Twill
- 400 g/m<sup>2</sup> Twill



## Aramid Fiber Chopped Strands

**Manufacturer:** HITEX

- Aramid fibers are used as chopped reinforcements for their high strength, heat resistance, flame retardancy, abrasion resistance, and impact absorption performance characteristics.

- Chopped aramid fibers in lengths of 6 - 12 mm
- Used in epoxy and phenolic resin reinforcements.

# Basalt Fiber Reinforcements |



## Single-End Basalt Yarn

**Brand:** OMNIS KOMPOZIT

- Basalt filaments of 600, 1200, 2400, and 4800 tex are produced from continuous, uninterrupted fibers. Single-end filaments are utilized in areas requiring resistance against corrosive environments in concrete, polymer mixtures, and composite applications. Suitable for pultrusion, winding and weaving.



## Basalt Fiber Chopped Strands

**Brand:** OMNIS KOMPOZIT

- Lengths available in 3, 4.5, 6, 12, and 25 mm. Longer cuts are possible upon request.
- Fiber thickness of 13 or 17 microns
- Suitable for Bulk Molding Compound (BMC) production for functional and structural applications
- Suitable for concrete reinforcement
- Compatible with epoxy resin reinforcement
- Suitable for PP, PA, PBT/PET thermoplastic resin reinforcement

# | Natural Fiber Reinforcements



## **Natural Fiber Reinforcements** **UD (Unidirectional) Flax Fiber Prepreg**

**Brand:** OMNIS KOMPOZIT

- Flax Prepreg fabrics are suitable for all thermoforming processes. There is no need to add extra thermoplastic polymer film/powder during thermoforming. They are shaped through molding after being heated under a heater.
- 100 - 400 g/m<sup>2</sup> Thermoplastic-based unidirectional flax prepreg
- Unidirectional flax prepreg in strip form with widths of 6 - 12.7 - 25 mm



## **Flax Fiber Woven Prepreg**

**Brand:** OMNIS KOMPOZIT

- Unlike UD Prepregs, weaving flax fibers biaxially provides the fabric prepreg with orthotropic mechanical and thermal properties. It is suitable for all thermoforming molding processes.
- 300-400 g/m<sup>2</sup> Thermoplastic-based twill or plain woven flax prepreg

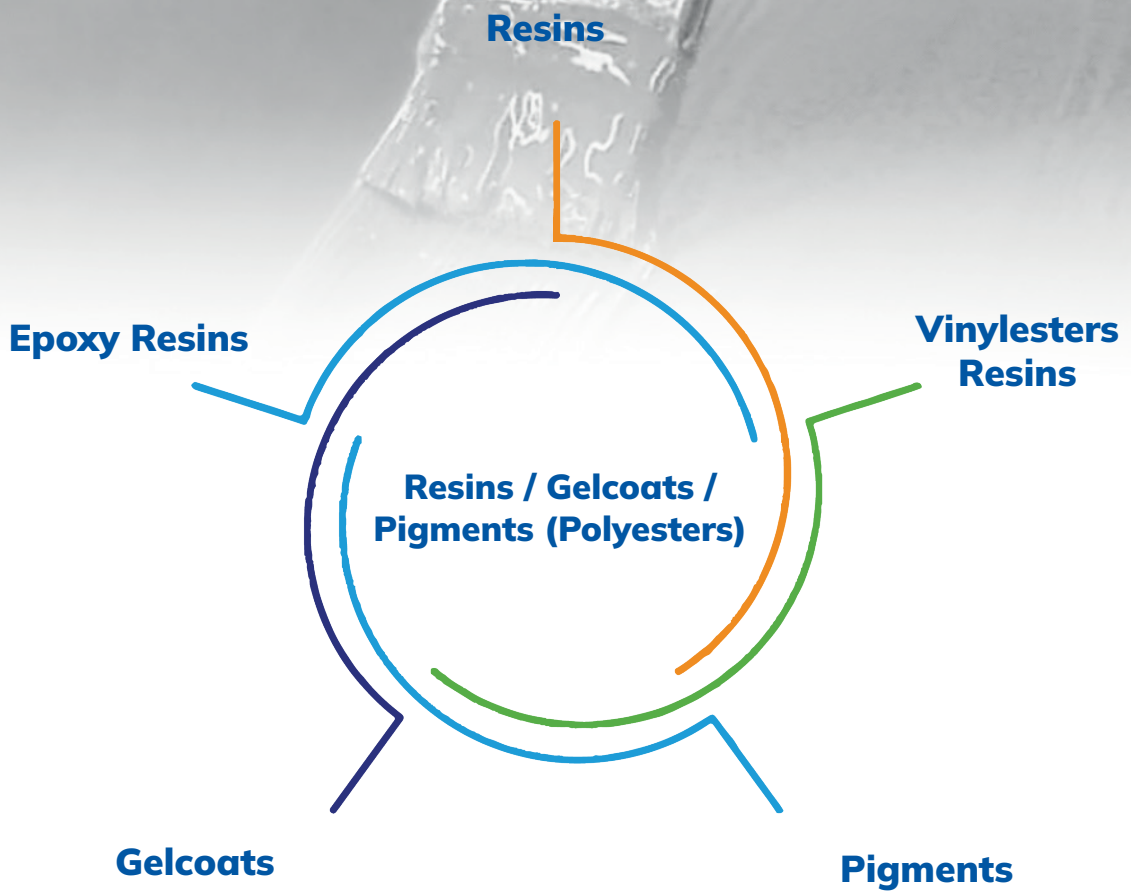


## **Flax Fiber Woven Fabric**

**Brand:** OMNIS KOMPOZIT

- Natural fiber reinforcements, characterized by being carbon-neutral, recyclable and 40% lighter than glass fiber, are designed to be compatible with other composite reinforcements such as non-woven glass or carbon reinforcements, woven fabrics, sandwich core materials, and more.
- Twill or plain woven flax fiber woven fabric

# Resins / Gelcoats / Pigments |



Thermoset resins serve as the primary matrix materials for polymer composites due to their excellent mechanical properties, thermal stability, and chemical resistance. Unlike thermoplastics, which can be melted and reshaped without losing their chemical properties, thermoset resins complete irreversible chemical reactions by forming a network of cross-links during curing. Gelcoats serve as the outermost layer of the matrix resin, acting as a thin shell to protect the part from UV rays, moisture, and external environmental conditions, providing a glossy, shiny appearance to the surface. Pigments, on the other hand, undertake the role of coloring agents for gelcoats and resins.

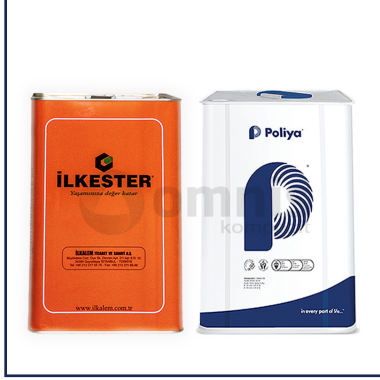


## Hand Lay-Up / Spray-Up Type Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- CE 92 N8 - Orthophthalic - General Purpose - Industrial
- CE 188 N8 - Orthophthalic - General Purpose – Hand lay-up/Spray-up Type Marine Polyester - Industrial
- POLİPOL 3401 - Orthophthalic - General Purpose - Industrial
- POLİPOL 3401-TA - Orthophthalic – Thixotropic, Accelerated - Hand lay-up/Spray-up Type
- POLİPOL 339-TA - Orthophthalic - Thixotropic, Accelerated - Hand lay-up/Spray-up Type
- POLİPOL 351 – Orthophthalic - General Purpose – Medium-High Reactivity
- POLİPOL 383T - Isophthalic NPG – Thixotropic – Hand lay-up/Spray-up Type Marine Polyester
- POLİPOL 4445 - Orthophthalic - Hand lay-up/Spray-up Type Marine Polyester
- İLKESTER P-192 - Orthophthalic - Hand lay-up/Spray-up Type
- İLKESTER P-192-TA - Orthophthalic – Thixotropic, Accelerated - Hand lay-up/Spray-up Type
- İLKESTER P-159 – Orthophthalic – Eco Hand lay-up/Spray-up Type
- İLKESTER P-145-TA – Orthophthalic – Thixotropic, Accelerated - Eco Hand lay-up/Spray-up Type
- İLKESTER P-116 - Orthophthalic - Hand lay-up/Spray-up Type - High Performance
- İLKESTER P-1016 – Orthophthalic – Thixotropic - FRP Type – High Performance
- İLKESTER P-1017 ETPS – Orthophthalic – Accelerated – Low Styrene Emission – Hand lay-up/Spray-up Type
- İLKESTER P-140 ETPS-20 – Orthophthalic - Thixotropic, Accelerated – Low Styrene Emission – Hand lay-up/Spray-up Type
- İLKESTER P-423 TA – Orthophthalic - Thixotropic, Accelerated – High HDT – Hand lay-up/Spray-up Type

# Polyester Resins |



## **RTM / Infusion / Vacuum Injection Type Polyester Resins**

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 336 - Orthophthalic - RTM Type
- POLİPOL 335 - Orthophthalic - RTM / Infusion Type
- POLİPOL 334 - Isophthalic - RTM / Infusion Type
- POLİPOL 338-A - Isophthalic - Accelerated - RTM / Infusion Type
- POLİPOL 3382 - Isophthalic - High HDT - RTM / Infusion Type
- POLİPOL 3567 - DCPD - Low Shrink - RTM / Infusion Type
- POLİPOL 3387-ZERO - DCPD - Zero Shrinkage RTM / Infusion Type
- POLİPOL 3876 - HET, Isophthalic - Non-Flammable - Transparent
- İLKESTER P-4150 LMR - Orthophthalic - Accelerated - RTM Type (T:10-15 mm)
- İLKESTER P-466 LMR - Orthophthalic - RTM Type
- İLKESTER P-471 LMR - Orthophthalic - RTM Type
- İLKESTER P-2150 LMR - Isophthalic - Accelerated - RTM Type (T:3-5 mm)
- İLKESTER IR-20 LMR - Isophthalic - Accelerated - RTM Type
- İLKESTER IR-472 LMR - Isophthalic - RTM Type
- İLKESTER IR-474 LMR - Isophthalic - RTM / Infusion Type
- İLKESTER INR-470 LMR - Isophthalic, NPG - High HDT - RTM Type

# | Polyester Resins



## Casting Type Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- CE 80 N8 - Orthophthalic - Economical Casting Type
- POLİPOL 3455 - Orthophthalic - Casting Type
- POLİPOL 353 - Orthophthalic - High Filling Capacity - Casting Type
- POLİPOL 3813 - Isophthalic, NPG - Solid Surface - Casting Type
- POLİPOL 383-G - Isophthalic, NPG, Acrylic - Solid Surface - Acrylic Modified - Casting Type
- İLKESTER P-053 - Orthophthalic - Casting Type
- İLKESTER P-059 - Orthophthalic - Economical - Casting Type
- İLKESTER P-055 - Orthophthalic - High Filling Capacity - Casting Type
- İLKESTER P-104 - Orthophthalic - Transparent - Casting Type
- İLKESTER P-403-H20 - Orthophthalic - Transparent - High Filling Capacity - Casting Type



## Moulding Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 320 TA - Orthophthalic - Thixotropic, Accelerated
- POLİPOL 321 ZERO - Isophthalic - Zero Shrink - Thixotropic, Accelerated
- İLKESTER 455 TA - Orthophthalic - Thixotropic, Accelerated
- İLKESTER 456 NS - Isophthalic - Zero Shrink - Thixotropic, Accelerated

# Polyester Resins |



## Flame Retardant Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 305 – HET – Transparent
- POLİPOL 311-DT – Isophthalic – Thixotropic – Filled
- POLİPOL 314-DT – HET – Thixotropic – Filled – High Mechanical Performance
- POLİPOL 340-FRT – Orthophthalic – Halogen-Free – Thixotropic – Filled – High Performance
- POLİPOL 345-FR – Isophthalic – Halogen-Free – Thixotropic – Filled – High Performance – EN 45545-2
- İLKESTER FR-50 – Halogen-Free – Accelerated – EN 45545-2
- İLKESTER FR-489 – HET, Neo UV
- İLKESTER FR-491 – Halogen-Free – Thixotropic – Accelerated
- İLKESTER FR-495 – HET



## SMC-BMC Type Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 347- Orthophthalic
- POLİPOL 3417-V – Orthophthalic – High Surface Quality
- POLİPOL 382 – Isophthalic, NPG – High Chemical Resistance
- POLİPOL 3418 – Full Maleic
- İLKESTER 547- Orthophthalic
- İLKESTER P-1186 - Orthophthalic – High Surface Quality
- İLKESTER P-1186 PLUS - Orthophthalic – High Surface Quality – Specially for Paintable Surfaces
- İLKESTER P-1158 - Full Maleic
- İLKESTER INR-545 - Isophthalic, NPG – High Chemical Resistance



# | Polyester Resins



## Pultrusion Type Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 351-I – Orthophthalic – Medium-High Reactivity
- POLİPOL 3872-I – Isophthalic – Chemical Resistant
- POLİPOL 3870-I – Isophthalic – High Reactivity - Chemical Resistant
- POLİPOL 3801 – Isophthalic – High HDT – Chemical Resistant
- İLKESTER P-55 – Orthophthalic
- İLKESTER IR-55 – Isophthalic



## Filament Winding Type Polyester Resins

**Manufacturer:** POLİYA

- POLİPOL 3562 – Orthophthalic
- POLİPOL 3872-I – Isophthalic – Chemical Resistant
- POLİPOL 388 – Isophthalic – Internal Surface, Linear Polyester
- İLKESTER IR-55 – Isophthalic
- İLKESTER IR 100 – Isophthalic – FRP Type



## Paste Type Polyester Resins

**Manufacturer:** POLİYA

- POLİPOL 4344 ABP – Orthophthalic – Amine Accelerated – Fast Curing Marble Adhesive
- POLİPOL 436 ABP – DCPD – Amine Accelerated – Paste Type (flexible)
- POLİPOL 440 ABP – DCPD - Amine Accelerated – Paste Type (hard)
- İLKESTER PM-220 – Abrasive Type – Stone Abrasion
- İLKESTER PM 245 – Akemi Type – Stone Adhesion
- İLKESTER PM 246 – Akemi Type – Stone Adhesion

# Polyester Resins |



## Continuous Laminating Type Polyester Resins

**Manufacturer:** POLİYA

- POLİPOL 351-I - Orthophthalic – Medium-High Reactivity
- POLİPOL 361-L – Orthophthalic, Acrylic – Light Transmitting – UV Enhanced – Acrylic Modified
- POLİPOL 3872-I – Isophthalic – Chemical Resistant – Filament Winding
- POLİPOL 763 – DCPD
- POLİPOL 765 – DCPD – High Surface Quality
- POLİPOL 309 – HET – High Performance – Non-Flammable – Transparent
- İLKESTER P-192 BS – Orthophthalic
- İLKESTER IR-3020 BS – Isophthalic



## Polyester Resins for Acrylic Backing Applications

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 341-TA-D30/D40-WHITE – Orthophthalic – Thixotropic – Accelerated – Filled – White
- POLİPOL 341-TA-WHITE – Orthophthalic – Thixotropic – Accelerated – Unfilled – White
- İLKESTER P-475 - Orthophthalic – Acrylic - Thixotropic – Accelerated – Filled(%35) – White
- İLKESTER P-470 - Orthophthalic – Thixotropic – Accelerated – Unfilled – White
- İLKESTER P-452-ED - Orthophthalic – Thixotropic – Accelerated – Filled – White

# | Polyester Resins



## Chemical Resistant Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- CE 266 – Isophthalic – Hand lay-up/Spray-up Type
- POLİPOL 3872 – Isophthalic
- POLİPOL 381 – Isophthalic, NPG
- POLİPOL 391 – BPA – Bisphenolic
- İLKESTER IR 100 – Isophthalic – Hand lay-up/Spray-up Type
- İLKESTER IR 3020 BS – Isophthalic – Accelerated
- İLKESTER INR 551 ETPS – Isophthalic, NPG – Low Styrene Emission – Thixotropic – Accelerated
- İLKESTER INR 354 – Isophthalic, NPG – Sheet Polyester



## Button Type Polyester Resins

**Manufacturer:** POLİYA, İLKESTER

- POLİPOL 3541 – Orthophthalic – Spray Type
- POLİPOL 3541 T - Orthophthalic – Bar Type
- POLİPOL 3542 – Orthophthalic – High Performance – Spray Type
- POLİPOL 3542 T – Orthophthalic – High Performance – Bar Type
- İLKESTER P-128D – Orthophthalic – Roller Casting – Eco
- İLKESTER P-107D – Orthophthalic – Roller Casting – Eco
- İLKESTER P-405D – Orthophthalic – Roller Casting
- İLKESTER P-104D – Orthophthalic – High Performance – Roller Casting
- İLKESTER P-1007D – Orthophthalic – Bar Casting – Eco
- İLKESTER P-4004D – Orthophthalic – High Performance – Bar Casting

# Polyester Resins |



## Polyester Resins for Engineering Castings

**Manufacturer:** POLIYA

- POLİPOL 357 – Orthophthalic – Quartz Composite Stone Type
- POLİPOL 359 – Orthophthalic – Quartz Composite Stone Type
- POLİPOL 3958-L – Special – Weather Resistant - Quartz Composite Stone Type



## Furniture Type Polyester Resins

**Manufacturer:** İLKESTER

- İLKESTER P 1020 – Gloss Type Polyester
- İLKESTER P 1002 – Polyester Filling Varnish
- İLKESTER P 2002 – Polyester White Primer
- İLKESTER LAK 1030 – Enamel Polyester
- İLKESTER LAK 1030 T – Thixotropic – Enamel Polyester



## Bisphenol-A Based Epoxy Vinyl Ester Resins

**Manufacturer:** POLİYA, İLKESTER

- POLİVES 701 – High Chemical Resistance – Performance
- POLİVES 702 – RTM / Infusion Type
- POLİVES 711 – High Chemical Resistance – High Performance
- POLİVES 711-I – RTM / Infusion Type – High Performance
- POLİVES 701 TA – Hand lay-up/Spray-up Type – Thixotropic – Accelerated – Performance
- POLİVES 711 TA - Hand lay-up/Spray-up Type – Thixotropic – Accelerated – High Performance
- POLİVES 701 ABP – Amine Accelerated – High Chemical Resistance – Performance
- POLİVES 711 ABP – Amine Accelerated – High Chemical Resistance – High Performance
- POLİVES 710 – Hand lay-up/Spray-up Type – Flame Retardant
- İLKESTER PV-300 – Performance
- İLKESTER PV-300 TA – Thixotropic – Accelerated Performance
- İLKESTER PV-290 PS – Grid Casting Type - Performance
- İLKESTER PVM-300 – Anchor Type - Performance

# Epoxies |



## **ERA 4000 General-Purpose Lamination Epoxy Resins**

**Manufacturer:** TEKNO MARİN

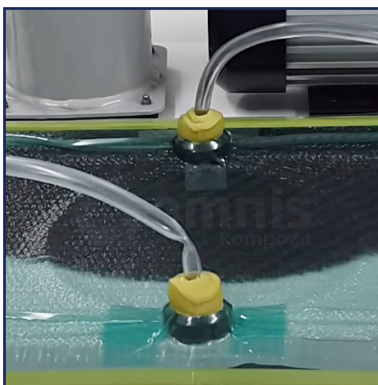
- A two-component general-purpose lamination epoxy that does not contain solvents.
- ERA 4000 Classic
- ERA 4000 Viscoplus – Epoxy gel coat
- ERA 4000 Fully Transparent



## **Hexion Performance Epoxy Resins**

**Manufacturer:** HEXION

- Does not contain solvents or fillers. Offers a wide pot life range due to different component B. Suitable for processing with glass, carbon, and aramid fiber reinforcements under high static and dynamic loads.
- LR635 / LH637 – DNVGL Certified – Performance Lamination Epoxy – Slow Curing
- LR635 / LH636 - DNVGL Certified – Performance Lamination Epoxy – Fast Curing



## **Vacuum Infusion / RTM Epoxy Resins**

**Brand:** OMNİS KOMPOZİT

- Designed for processing in flow parameters for infusion and RTM applications
- KP 410 – Low Viscosity – Infusion / RTM Type Performance Epoxy



## Basic Purpose Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 206 – Orthophthalic – General Purpose
- POLİJEL 208 – Orthophthalic – General Purpose
- İLKESTER G7/G307 – Orthophthalic – General Purpose
- İLKESTER G908 – Orthophthalic – General Purpose



## Performance Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 211 – Orthophthalic, NPG – Performance
- POLİJEL 212 – Orthophthalic, NPG, Acrylic – Performance
- POLİJEL 210 – Isophthalic – Performance
- İLKESTER GN317/GN417 - Orthophthalic, NPG, Acrylic – Performance
- İLKESTER GN 911 - Orthophthalic, NPG, Acrylic – Performance



## High-Performance Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 213 – Isophthalic, NPG, Acrylic – High Performance
- POLİJEL 215 – Isophthalic, NPG, Acrylic – Marine - High Performance
- İLKESTER GIN 4013/GIN 3013 - Isophthalic, NPG, Acrylic – High Performance
- İLKESTER GIN 413/GIN 313 - Isophthalic, NPG, Acrylic – High Performance
- İLKESTER GIN 915 - Isophthalic, NPG, Acrylic – Marine - High Performance
- İLKESTER GIN 354 - Isophthalic, NPG, Acrylic – High Performance Surface

# Gelcoats |



## Tooling Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 220 - Isophthalic, NPG – Mold Making
- POLİJEL 240 - Allylic – Mold Repair Topcoat
- POLİJEL 272 - Vinylester – High-Performance Mold Making
- POLİJEL 291 – BPA – High Thermal and Chemical Resistance
- İLKESTER GM 340 – Isophthalic, NPG – Mold Making
- İLKESTER GM-341 – Vinylester – Zero Shrink Mold Making
- İLKESTER G316/R – Mold Protection



## Sanding / Primer Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 209Z – Orthophthalic, Filled – Sandable
- POLİJEL P-2089Z - Orthophthalic, Filled – High Heat Resistant Sandable
- POLİTİX Performance Marine – Vinylester - High-Performance Marine Putty
- POLİTİX Spray Marine – Allylic – Spray Type Marine Putty
- İLKESTER G318/G18 - Orthophthalic, Filled – Sandable
- İLKESTER G909Z - Orthophthalic, Filled – Sandable



## Barriercoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL BC – Vinylester – High Hydrolytic Resistance
- POLİJEL BC782 – Vinylester – High Surface Quality Flexibility
- İLKESTER GVE344 – Epoxy, Vinylester – Brush Type
- İLKESTER GVE5 – Epoxy, Vinylester – Spray Type





## Flame-Retardant Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 250 – HET – Flame Retardant Filled Gray
- POLİJEL 254 – HET – Flame Retardant Filled Gray
- POLİJEL 340FR – Orthophthalic – Flame Retardant Halogen-Free High-Performance
- POLİJEL 258 – HET – Flame Retardant High-Performance Gray
- POLİJEL 245 – Isophthalic – Flame Retardant Halogen-Free High-Performance EN:45545-2
- İLKESTER GFR4/GFR40 – Orthophthalic – Flame Retardant Halogen-Free DIN 5510-2
- İLKESTER GFR345/GFR445 – Special – Flame Retardant Halogen-Free EN:45545-2



## Chemical Resistant Gelcoats

**Manufacturer:** POLİYA, İLKESTER

- POLİJEL 213–Isophthalic, NPG, Acrylic – High Performance
- POLİJEL 271–Vinylester – High Chemical Resistant
- POLİJEL 291–BPA – High Thermal and Chemical Resistance
- İLKESTER GIN913–Isophthalic, NPG, Acrylic – High Performance
- İLKESTER GVE344 – Epoxy, Vinylester - Chemical Resistant Brush Type
- İLKESTER GVE5 – Epoxy, Vinylester - Chemical Resistant Spray Type

# Pigments |



## Opaque Pigment Pastes

**Manufacturer:** POLİYA, İLKESTER

- POLİPIGMENT Stock Light Colors - Poliya Colors and Universal RAL Colors
- POLİPIGMENT Stock Pro Colors - Poliya Colors and Universal RAL Colors
- İLKESTER Opaque Pigment Pastes - İlkester Colors and Universal RAL Colors



## Transparent Pigment Pastes

**Manufacturer:** POLİYA, İLKESTER

- POLİPIGMENT Transparent Colors - Poliya Colors
- POLİPIGMENT Fully Transparent Button Colors - Poliya Colors
- İLKESTER Fully Transparent Colors - İlkester Colors

# Machinery |

**FRP Production  
Systems**

**GRC Production  
Systems and  
Auxiliaries**



**Machinery**

Omnis Kompozit, for more than 12 years, has been connecting manufacturers with FRP and GRC production systems, accompanied by a strong technical knowledge base and an expert technical team. Our specialized team guides you through various intermediate and advanced solutions, directing you towards the right machinery investment. We provide comprehensive solutions encompassing machine installation, operation, maintenance training, and spare parts support. Continuously staying abreast of innovations in machinery and equipment, we consistently share our latest insights and advancements in modern production technologies with our industry. Elevate your production field with Omnis Kompozit.

# FRP Production Systems |



## Graco Chopper Spray Machine

**Manufacturer:** GRACO

- With over 30 years of experience in FRP systems, Graco's Chopper Spray Machine stands as the most preferred chopper spray system globally. Its ergonomics, unique spraying technology, and design enhance the FRP production speed. It stands out compared to its competitors due to its low acetone consumption and minimal spare parts requirement, offering cost-saving advantages.



## Graco Gelcoat Spray Machine

**Manufacturer:** GRACO

- With external and internal integrated spray gun gelcoat machines, achieve the most effective and rapid production, ensuring maximum gelcoat savings and optimal yield with the best surface quality. By integrating a heater into the system, it's recommended to maintain gelcoat viscosity at an optimum level regardless of ambient temperature, resulting in up to 40% savings in gelcoat consumption. All parts, sealing kits, and spare parts of the machine are designed to ensure maximum service life. Thanks to its ergonomic usage, gelcoat can be easily sprayed even in the most inaccessible areas of molds.



## Graco RS Fiber Chopper Gun

**Manufacturer:** GRACO

- Graco's RS Fiber Chopping Gun facilitates easy blade changes due to its magnetic chopping blade wedge. Offering high performance through its light weight design, ease of use, and ergonomics, the RS Fiber Chopping Gun supports your budget by guaranteeing maximum service life for sealing kits and spare parts.

# | FRP Production Systems



## Graco RS Gelcoat Spray Gun

**Manufacturer:** GRACO

- Developed with patented technology in the spray head, the Graco RS Gelcoat Spray Gun is designed to achieve homogeneous gelcoat application with minimum gelcoat for maximum surface area coverage. Enhancing your production performance and speed with ease of use and ergonomics, it elevates efficiency by reducing gelcoat consumption and spare part maintenance costs. Post-usage cleaning is highly practical, and spare part replacement can be easily performed with the included keys.



## Graco Helix Resin Mixer

**Manufacturer:** GRACO

- The Graco Helix Resin Mixer is a system required to prepare materials for production. It ensures that filled resins reach the appropriate viscosity for production, especially in cold weather conditions. In mixtures where correct flow parameters are not achieved without using a mixer, significant decreases in spray machine performance are observed. Graco's patented Twistork Helix Mixer blades are designed to prevent this issue. Attached to the mouth opening of the drum head, it performs light mixing movements unlike propeller-bladed mixers, reducing settling and splashing.



## Graco Spare Parts

**Manufacturer:** GRACO

- All original spare parts and spare chopping blades to maintain and repair your machines for consistent performance of Graco CTP Systems are available. Our expert technical team can provide remote or on-site support for part replacement or calibration.

# FRP Production Systems |



## Thermoplastic Prepreg Machines

**Manufacturer:** SCHMIDT & HEINZMANN

- S&H prepreg systems enable the impregnation of reinforcing materials like glass or carbon with thermoplastic resins such as PA. Heating devices like infrared and heating rollers facilitate the application of required temperatures.
- Using a specialized system with molten caprolactam, it is applied before the impregnation process by heating rollers. The machine operates in an environmentally controlled setting, ensuring optimal reactivity by controlling moisture and production temperature.
- Heating the technical textile reinforcement to be used before thermoplastic coating is achieved through heating rollers or infrared, maintaining control over a stable production process temperature. Additionally, film peeling, cutting, and packaging can be automated.



## Thermoset Prepreg Machines

**Manufacturer:** SCHMIDT & HEINZMANN

- Customers can choose from a wide range of products based on their complex needs. Heat control and cutting lengths are precisely adjusted through the PLC control panel on each system. Prepreg systems can be designed to work with film or silicone-based paper as per the requirement. Through specially designed doctor boxes, the desired amount of resin can be applied to felt, continuous filament, or chopped fiber.

# | FRP Production Systems



## Prepreg Tape Production Lines

**Manufacturer:** SCHMIDT & HEINZMANN

- The foundation of specialized tape line production lies in spreading carbon fiber at specific tension, pressure, and controlled heat. The tape production can be done with thermoset or thermoplastic resin systems.

Features in Tape Machine Systems:

- Yarn unwinding unit
- Fiber patch unit
- Heat treatment
- Paper unwinding unit
- Tension and pressure roller unit
- Cutting device
- Winding device



## Composite Sheet Production

**Manufacturer:** SCHMIDT & HEINZMANN

- Horizontal production systems ensure the manufacturing of sheets used in construction, commercial vehicles, and caravans. Polyester sheet usage provides high heat and chemical resistance. S&H systems offer quality sheet production systems.

- Polyester sheet production systems facilitate production for various functions and applications. Systems are available that can produce up to 3400mm.

- These systems deliver A-grade surface quality, preferred by leading manufacturers worldwide.

- In polyester sheet systems, the following equipment can be chosen:

- Gelcoat Unit
- Chopping System
- Various Doctor Box or roller systems
- Separate heating zones
- Brushing station
- Cutting unit
- Automatic Packaging

# FRP Production Systems |



## SMC Production Lines

**Manufacturer:** SCHMIDT & HEINZMANN

- Schmidt & Heinzmann is a globally recognized manufacturer of SMC press lines made with glass and carbon fibers. They can produce systems tailored to the manufacturer's needs.

- Features include:

- Doctor boxes with high precision
- Reliable choppers providing consistent distribution
- Pre-wetting units
- Systems ensuring the release of trapped air within the press



## Material Preparation for SMC

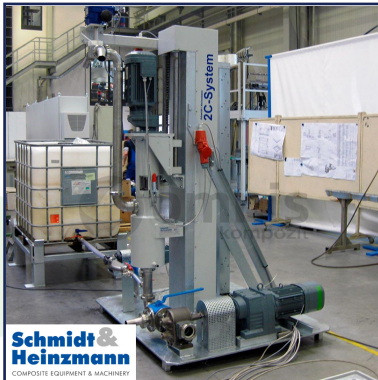
**Manufacturer:** SCHMIDT & HEINZMANN

- Automatic and precise transfer from raw material silos to mixing tanks is ensured to obtain a resin and filler mixture. Recordings of mixture quantities on the PLC system enable rapid filling with Gravimetric weighing. Systems that achieve the mixture of resin with fillers and additives allow batch preparation ranging from 100 to 4000 kg.

- Variable speed settings, high-performance mixing heads, wall coating, heat monitoring and control, along with vacuum options, are available.



# | FRP Production Systems



## **SMC Pumping, Metering and Mixing Systems (PDK)**

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**Manufacturer:** SCHMIDT & HEINZMANN

- Enables the creation of resin-filler mixtures at desired viscosities. Available static or dynamic mixing systems ensure homogeneous mixing.
- The pump system is easily cleaned. Additional components like pigments (3rd and 4th components) can be added to the PDK system when needed, controlled through the PLC panel. The amounts of resin to be sent to the doctor box on the SMC production system are monitored by height sensors on the PDK, ensuring a consistent resin mixture feed at the desired level.
- Transitioning between different resin systems, additives, and fillers within the recipes allows for a broad viscosity range. PDK systems are essential for continuous high-quality SMC press production.



## **Conbility ATP Machines**

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**Manufacturer:** CONBILITY

- The Automated Tape Placement (ATP) process is one of the most advanced methods in composite manufacturing. It operates entirely automatically. Unidirectional fiber prepreg tapes are layered in multiple passes onto a part mold at articulation angles that vary based on the complexity of the manufactured part. The PrePro 3D system, which combines laser-assisted thermoplastic tape placement and infrared-assisted thermoset prepreg placement, was developed for 25 years at the Fraunhofer Institute for Production Technology and introduced for industrial use by Conbility GmbH in 2018.

# GRC Production Systems and Auxiliaries |



## **Power Sprays PS 10000i**

**Manufacturer:** POWER SPRAYS

- With larger rotor stators compared to its sibling, the PS 9000i system, the PS 10000i has a higher capacity for spraying concrete mortar. It requires less maintenance relative to its performance. The volume of the mortar hopper is larger than standard systems, thus contributing to increased production speed by enabling the simultaneous discharge of mortar from the mixer to the machine.



## **Power Sprays PS 9000i**

**Manufacturer:** POWER SPRAYS

- The PS 9000i is a standard spray system and is considered the most ideal system for precasters who are new to pre-cast production. Its ease of control, easy rotor-stator replacement, and LCD screen displaying motor speed contribute to the practicality of the system. Power Sprays is the most widely used system worldwide.



## **Power Sprays PS 38i**

**Manufacturer:** POWER SPRAYS

- The PS 38i is a traditional peristaltic system used for spraying premixed material. Its 38mm peristaltic pump is connected to a 3-phase electric motor. This system allows for spraying premixed GRC mortar as well as conventional 'hand spraying' methods. However, due to lower production speed compared to rotor-stator systems, it is not suitable for factories requiring high-capacity production.

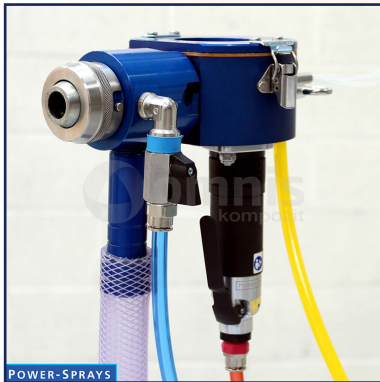
# | GRC Production Systems and Auxiliaries



## Power Sprays PS 38B

**Manufacturer:** POWER SPRAYS

- The PS 38B enables the spraying of traditional premixed mortar using a peristaltic pump. It sprays by compressing the mortar through the peristaltic pump, resulting in a lower spraying speed compared to rotor and stator systems. The difference between this model and the PS 38i model is the absence of the 'bum' system, which allows the continuous flow of chopped fiber to the gun without tangling.



## Concentric Spray Guns

**Manufacturer:** POWER SPRAYS

- This gun is the most preferred worldwide for the traditional hand spray method. It delivers concrete mortar with the most accurate curtain. Renowned in the GRC sector due to its durable and powerful air motor, designed for intensive use.



## Power Sprays MK5A

**Manufacturer:** POWER SPRAYS

- Typically used with the PS 38i Premix Spraying Machine, the MK5A Gun allows for easy application of alkali-resistant glass fiber GRC mortar. It is practical in both usage and cleaning.

# GRC Production Systems and Auxiliaries |



## Power Sprays MK3

**Manufacturer:** POWER SPRAYS

- The MK3 Gun has a 4.5-liter capacity for GRC mortar. It is typically used for smaller, specialized tasks. When surface sensitivity and high surface performance are required in production, the MK3 Gun is primarily used to apply the initial mist coat. It easily reaches areas where corners of molds or the base of the spraying system might not penetrate. The MK3 boasts a unique design that ensures a smooth and flawless surface finish by effectively spraying the mortar onto the surface at low pressure, preventing excessive mortar distribution.



## Power Sprays Lightweight Mist Gun

**Manufacturer:** POWER SPRAYS

- This gun is used for mist coating surfaces, ensuring a smooth and even finish on the first layer applied to the mold. It is an essential component accompanying PS9000i, PS10000i, and PS38i machines in GRC applications. It's used to avoid edge cracks and pinholes on surfaces in applications where misting guns are not utilized.



## WAAPS 3000 Liquid Material Dosing Systems

**Manufacturer:** POWER SPRAYS

- The WAAPS 3000 Dosing System operates directly connected to the mixer. It adjusts the mixing ratios of the polymer and water going into the mortar. By using the WAAPS 3000, you can send two different components to the mixer in desired proportions with the press of a button, avoiding the need for manual measurement and dosing tools/methods for each mixing process.

# | GRC Production Systems and Auxiliaries



## Power Sprays 3 Liquid Material Dosing Systems

**Manufacturer:** POWER SPRAYS

- This system allows sending the polymer, water, and concrete plasticizer in desired proportions to the mixer for mixing. Its distinction from WAAPS 3000 lies in its ability to dose three materials. It should be used in GRC productions to prevent mixing ratio errors and ensure consistency, eliminating manual mixing and measurement processes, thereby increasing production speed.



## Power Sprays GRC 125 BT

**Manufacturer:** POWER SPRAYS

- GRC 125 BT is the most efficient mixing system that meets the mixer needs of precast producers, equipped with a transport cart and two spare buckets. It quickly mixes the concrete mortar at the required speed, preparing it for casting or spraying in a short time, approximately 2-3 minutes. The helical mixer nozzle ensures the concrete mortar is mixed most rapidly and effectively without burning.

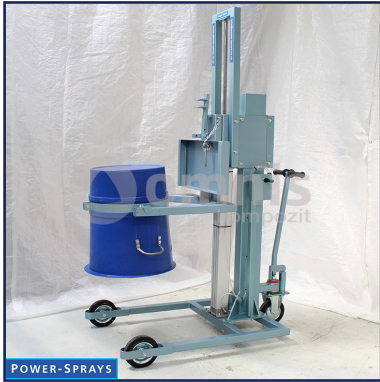


## Power Sprays GRC 125

**Manufacturer:** POWER SPRAYS

- GRC 125 is the version of the GRC 125 BT model without a transport cart. It provides quick response to the user with an LCD control panel for easy adjustments. It efficiently mixes the concrete mortar at the desired speed, preparing it for casting or spraying in a short time, about 2-3 minutes. It operates compatibly with other production systems from Power Sprays.

# GRC Production Systems and Auxiliaries |



## Power Sprays Wheel-Mounted Pneumatic Bucket Carrier

**Manufacturer:** POWER SPRAYS

- Used for transporting GRC (Glass Reinforced Concrete) mixes and transferring the mixture to premix molds or spraying machines. The recommended maximum carrying capacity is around 125 kg.



## Portable Fiberglass Chopping Machine

**Manufacturer:** ES

- Capable of cutting fibers of any type and thickness into desired lengths. It allows for the quick production of chopped products in the desired quantity and length without the need for additional stock. If desired, the chopped product can be directly applied to a mold and impregnated with resin. This portable, lightweight chopper operates by connecting to an air compressor.



## Rotor Stator Sets

**Manufacturer:** POWER SPRAYS

- These are rotor stator sets that operate in PS 9000i and PS 10000i systems.

# | GRC Production Systems and Auxiliaries



## GRC Flexural Testing Instruments

**Manufacturer:** TESTOMETRIC

- Developed for conducting mechanical strength tests on GRC (Glass Reinforced Concrete) materials. It enhances quality control processes by identifying production errors.



## Fiber Ratio Testing Basket

**Manufacturer:** POWER SPRAYS

- A practical measurement tool used to determine the fiber ratio in GRC mixes. A sample is taken from the mix and weighed. Then, it's washed in water within the basket, removing the mortar and leaving only the fibers to be weighed. It is used to assess homogeneous mixing.



## Flow Test Kit

**Manufacturer:** POWER SPRAYS

- Used to calculate the viscosity of GRC mortar. The test mortar is poured into the cylinder placed at the center and, upon lifting the cylinder, the mortar starts to flow and spread over the table. The flowability of the concrete mix can be measured based on the distance the mortar spreads in a given time.

# GRC Production Systems and Auxiliaries |



## Thickness Measurement Pen

**Manufacturer:** POWER SPRAYS

- Used to determine the thickness of sprayed concrete.



## GRC Rollers

**Brand:** OMNIS KOMPOZIT

- Spring-loaded rollers designed for GRC applications, these pressure rollers ensure that GRC mortar, after being sprayed, is laid onto molds without leaving any voids.



## GRC Spare Parts

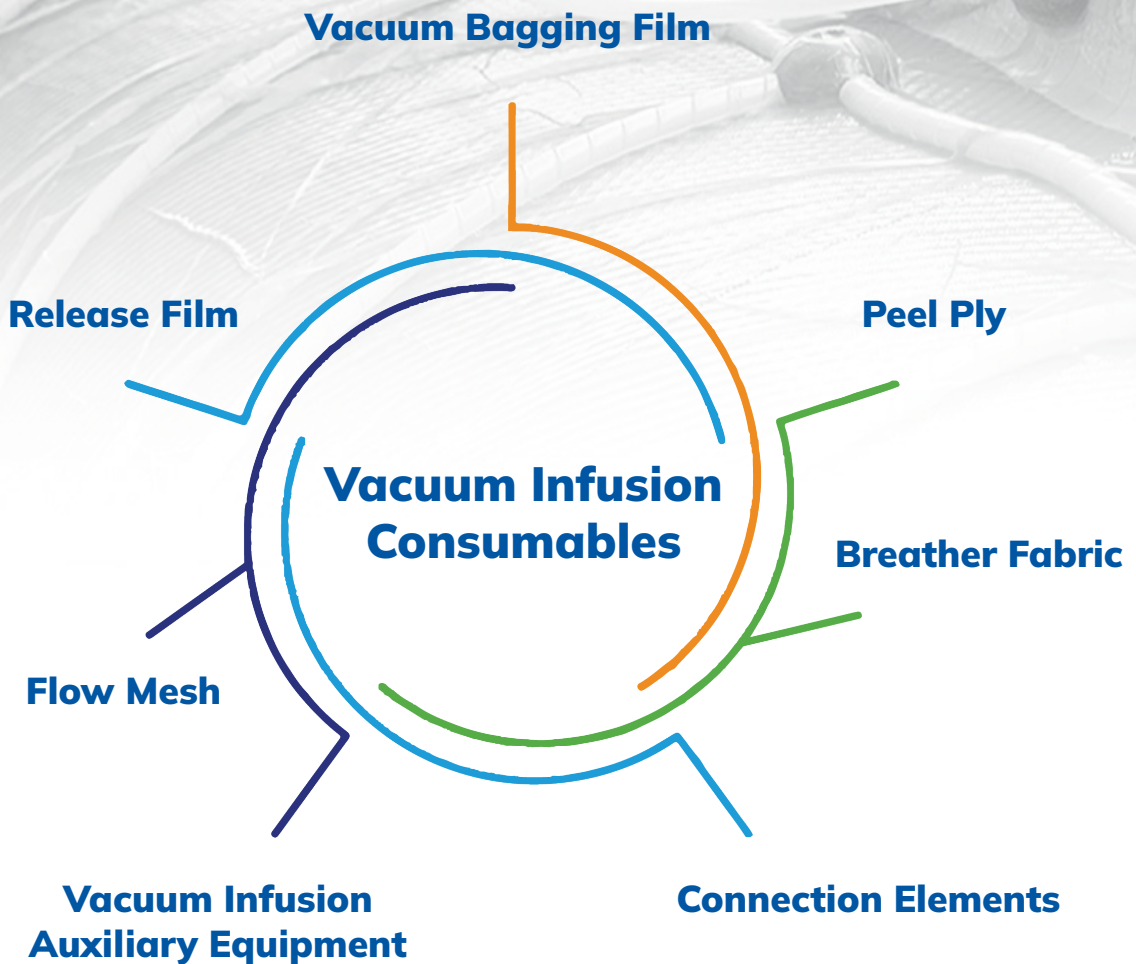
**Manufacturer:** POWER SPRAYS

GRC Spare Parts are offered as a set.

- Spare Spray Gun Parts
- Fiber Chopping Blade
- Cutting Wedge
- Air Motor
- Fiber Spray Nozzle

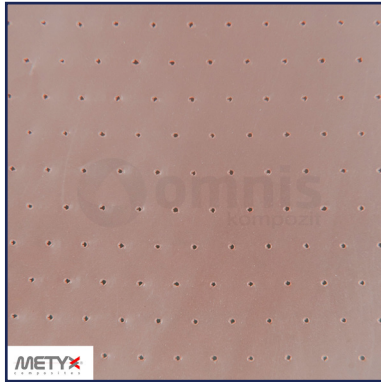


# Vacuum Infusion Consumables



VARTM (Vacuum Assisted Resin Transfer Moulding) Method, briefly known as vacuum infusion, refers to the process where dry fibers placed in a mold are wetted with resin under vacuum pressure. Successful infusion applications rely significantly on appropriate resin and fiber selection, as well as the use of the correct consumables. Achieve successful applications with our proven quality products.

# Vacuum Infusion Consumables |



## Perforated Release Film

**Manufacturer:** METYX

- Perforated release film is specifically designed to prevent adhesion with resin and is commonly used as the primary barrier between composite laminate and other vacuum bagging materials.

- Roll Width: 145 cm
- Thickness: 25 microns
- P3 Perforated
- Suitable for use up to 120°C.



## Peel Ply

**Manufacturer:** METYX

- It is an 80g/m<sup>2</sup> red-stripped peel ply made of PA6 (Nylon).
- An economical polyamide peel ply layer used for vacuum bagging of hand lay-up laminates and resin infusion applications.

- Roll Width: 152 cm



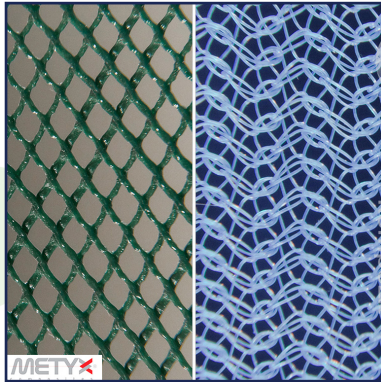
## Breather Fabric

**Manufacturer:** METYX

- Breather fabric (blanket) is utilized to ensure air permeability on laminates during vacuum bagging and infusion applications or to retain excess resin.

- 150 – 300 g/m<sup>2</sup>
- Roll Width: 150 cm

# Vacuum Infusion Consumables

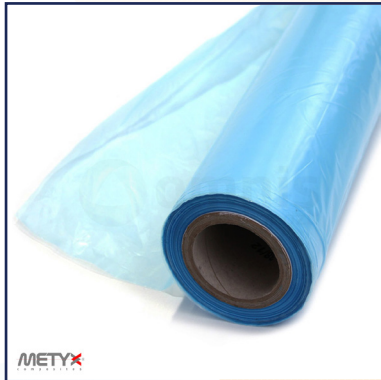


## Flow Mesh

**Manufacturer:** METYX

- A polypropylene-based mesh used as a “flow medium” to assist resin flow along the lamination during the resin infusion process.

- ART23 Flow Mesh / Roll Width: 145 cm
- V12 Flow Mesh / Roll Width: 120 cm

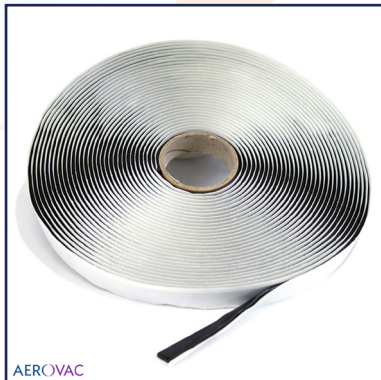


## Vacuum Bagging Film

**Manufacturer:** METYX

- The vacuum bag is a high-quality, multi-layered vacuum bagging film suitable for traditional vacuum bagging, resin infusion, and prepreg applications. It is resistant up to 170°C.

- 75 Micron Thickness
- Roll Width: 2.3 m (unfolded, 4.6 m)
- 65 Micron Thickness
- Roll Width: 3 m (unfolded, 6 m)



## Vacuum Sealant Tapes

**Manufacturer:** AEROVAC

- Vacuum sealant tapes is a high-performance product used to create strong and reliable air-tightness between the mold and vacuum bagging film during vacuum infusion applications.

- Available in 3 types capable of working at temperatures of 170 – 204 and 232°C.

# Vacuum Fittings and Hoses Elements |



## T-Connector

**Manufacturer:** HITEX

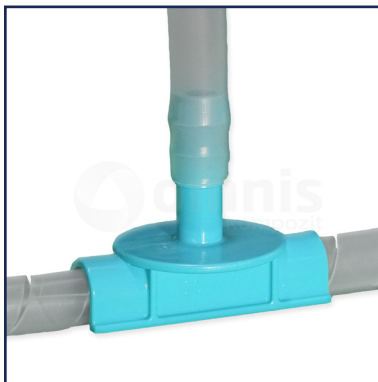
- These are connection elements used in vacuum infusion applications to connect resin and air channels.
- T10 – Suitable for 10 mm internal diameter pipes.



## Valved Valve

**Manufacturer:** HITEX

- Used in vacuum infusion applications to connect resin and air channels, this valve allows control of resin or air flow to desired lines due to its integrated valve.
- T10 – Suitable for 10 mm internal diameter pipes.



## Infusion Resin T-Connector

**Manufacturer:** DARGEWITZ

- This resin infusion T-entry connector, due to its special design, serves as the resin entry point into the vacuum environment along with the spiral resin hose.
- T10 – Suitable for 10 mm internal diameter pipes.

## | Connection Elements



### Spiral Infusion Hose No:4

**Manufacturer:** METYX

- Used in vacuum infusion applications, it serves as a flow channel for resin entering the inside of the vacuum bag through the vacuum line.



### Infusion Hose 10x12 mm

**Manufacturer:** HITEX

- Channels that facilitate the flow of resin and air in vacuum infusion applications.



### Infusion Block Connector

**Manufacturer:** HITEX

- This block connector, due to its special design, serves as the resin entry point into the vacuum environment along with the spiral resin hose.

# Vacuum Infusion Auxiliary Equipment |



## Resin Infusion Catch-Pot

**Brand:** OMNIS KOMPOZIT

- Used to capture excess resin that is drawn into it between the vacuum environment and the vacuum pump, preventing it from reaching the pump. It can also be used to remove air from within resins, apart from its usage in the infusion method.
- 3 different models with different volumes as 3L-10L-20L.



## Vacuum Pump

**Manufacturer:** WIPCOOL

- Double-stage Oil Rotary Vane Vacuum Pump with a capacity of 18,7 m<sup>3</sup>/h, providing sub-atmospheric pressure for industrial and scientific applications. It is a laboratory-type portable product used for applications like vacuum infusion, vacuum bagging, and removing air from resin.



## Vacuum Leak Detector

**Manufacturer:** ACCUTRAK

- Utilized to detect areas where gas and air leaks are present by emitting ultrasonic sound waves, the vacuum leak detector helps identify regions with leaks in vacuum applications such as vacuum infusion or vacuum bagging.

## | Vacuum Infusion Auxiliary Equipment



### Prepreg Lamination Spatula

**Manufacturer:** DARGEWITZ

- Prepreg Lamination Spatulas are used to press and guide fiber layers to take the exact shape of the mold. Made from a polymer with low friction resistance, they can easily move over the fibers, allowing for fast lamination without causing damage to the fibers.



### Sheet Wax

**Manufacturer:** FREEMAN

- Sheet Wax is a high-temperature resistant, self-adhesive waxy layer used to create material thickness differences between the model and mold in mold-making projects.

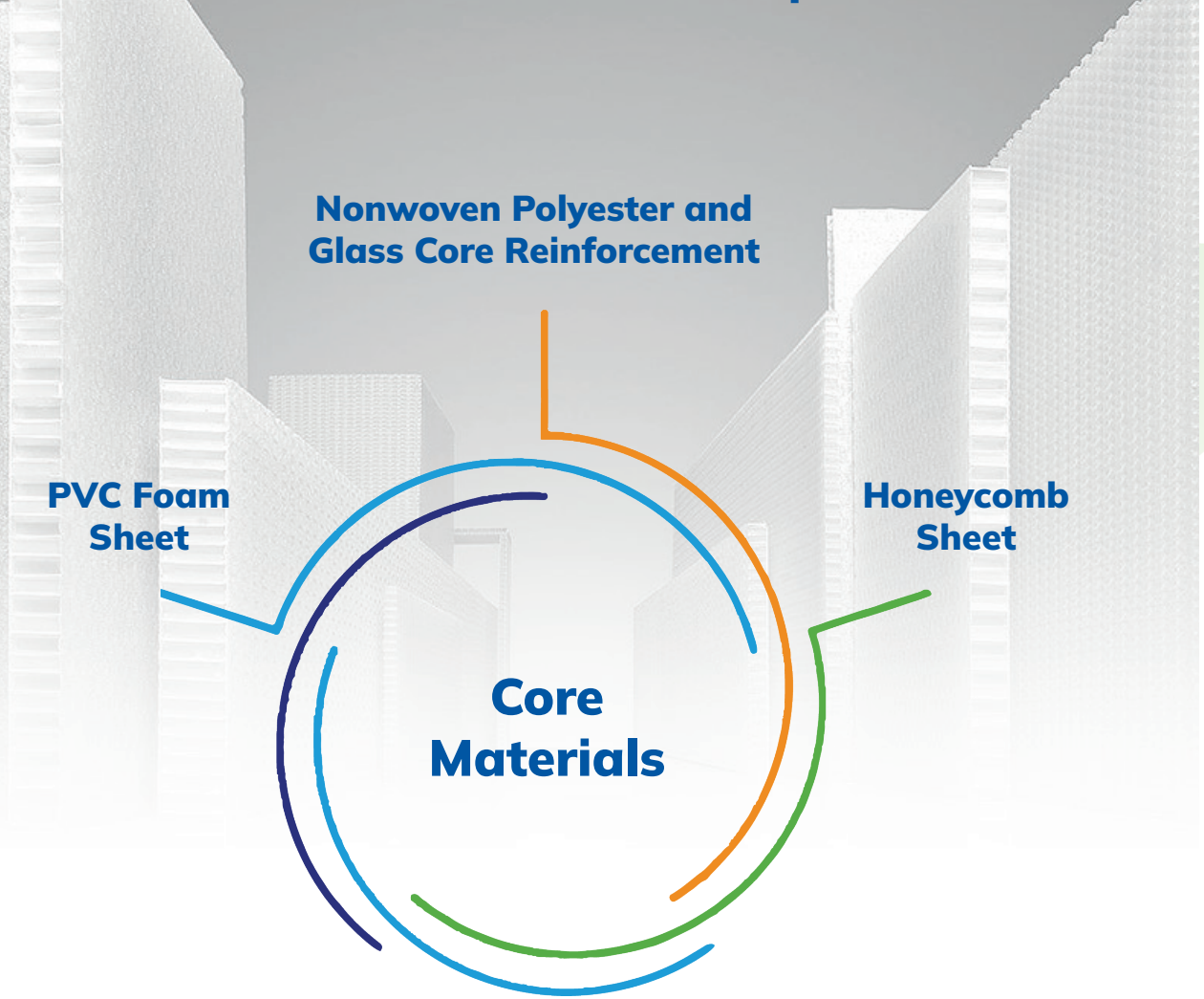


### OmniGrip G50 Spray Adhesive

**Manufacturer:** METYX

- Specifically designed for composite applications, Metyfix Spray Adhesive is a high-performance temporary spray adhesive used to prevent slippage of dry fiber reinforcements, core materials, and vacuum infusion consumables during infusion and RTM applications.

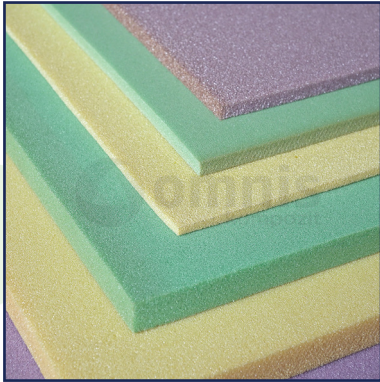
# Core Materials for Composites |



The material referred to as the core, is used between laminates to add thickness and volume to the piece while increasing its rigidity. Among the most preferred core materials are PVC foam sheet, honeycomb structure PP sheet, and non-woven polyester and glass fiber reinforcements. These lightweight materials with low density lighten the part compared to the rigidity they provide, thanks to the “Sandwich Structure” created among the fibers. Using an appropriate core material within a composite lamination increases modulus values, thus resulting in a more durable and lightweight final product.



## | Core Materials for Composites



### PVC Foam Sheet

**Manufacturer:** METYX

- Flat sheets with nominal densities of M048 – M060 – M080 kg/m<sup>3</sup> are used as core materials in a wide range of composite applications to provide thickness to the part. The resin absorption of closed-cell PVC foam materials is minimal in relation to the volume they provide.



### PP Honeycomb Sheet

**Manufacturer:** THERMHEX

- ThermHex Plates with nominal densities of THPP120-80-60 kg/m<sup>3</sup> are advanced technology products used in lightweight sandwich panel production. Manufactured from Polypropylene material, they offer 85% weight reduction compared to alternative core materials like chipboard.



### SphereCel PE Non-Woven Polyester Core Mat

**Manufacturer:** CARBONCORE SPHERECEL

- SphereCel PE is produced by volumizing polyester surface veil with thermoplastic microspheres. Its flexible structure allows easy conforming to molds. The product can be saturated outside the mold without experiencing tearing or breaking before placement into the mold. It should be positioned between fiber reinforcement layers during the lamination stage and should not be directly applied to a gel-coated surface.

- Available in thicknesses of 1 – 2 – 3 – 4 – 5 mm. Roll width is 100 cm.

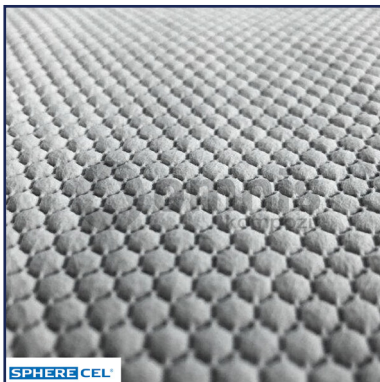
# Core Materials for Composites |



## SphereCel GF Nonwoven Glass Fiber Core Mat

**Manufacturer:** CARBONCORE SPHERECEL

- This special core material is produced by volumizing glass fiber fibers with thermoplastic microspheres, replacing some fiber layers and reducing resin consumption. For example, 3mm SphereCel replaces the place of 3 layers of 450 g/m<sup>2</sup> glass fiber mat.
- It provides higher bending resistance and tensile strength compared to polyester-based core materials.
- Thanks to its low resin absorption and lightness, it is suitable for very thin laminations.
- In composite parts produced with SphereCel GF, a solid glass fiber structure is formed. It ensures the fixation of screws and other connecting elements. Being a glass fiber, it does not compromise aesthetics at joints and can be easily folded over itself when wet.
- Available in thicknesses of 1.2 - 2 - 3 - 4 - 5 mm. Roll width is 100 cm.

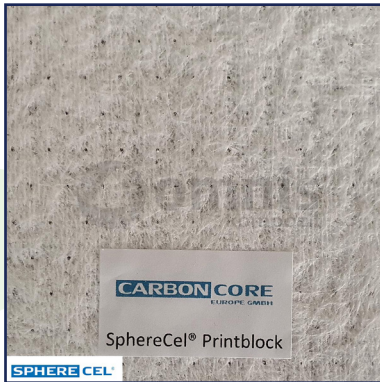


## SphereCel HX-OM-CM Nonwoven Honeycomb Structure Polyester Core Mat

**Manufacturer:** CARBONCORE SPHERECEL

- Suitable for OM Open Molding, CM Closed Molding (Infusion, LRTM). It tends to maintain its thickness during molding due to the microspheres resistant to pressure inside.
- Honeycomb structured core areas have a diameter of 6 mm and act as flow channels for resin. It is compatible with Polyester, Vinylester, and Epoxy resins.
- Upon request, SphereCel HX OM and CM can be supplied with self-adhesive layers, eliminating the need for adhesive sprays and providing ease of application.
- Available in thicknesses of 1.5 - 2 - 3 mm. Roll width is 100 cm.

# Core Materials for Composites



## SphereCel PrintBlock Nonwoven Glass Fiber Core Mat

**Manufacturer:** CARBONCORE SPHERECEL

- SphereCel PrintBlock is a product made of glass fiber and microspheres suitable for closed molding productions.
- It provides low resin absorption and ensures homogeneous lamination, resulting in an excellent surface.
- The material can be applied dry behind gelcoat or barrier coat. It can also be applied behind an impregnated layer of fiber, suitable for closed molding techniques. The performance is not affected by layering or tearing of the material.

Recommended Lamination Steps:

- 1) Gelcoat or Barrier coat
- 2) Gelcoat
- 3) Surface Veil
- 4) SphereCel PrintBlock
- 5) Glass Fiber Reinforcement or SphereCel SBF-CM

- Available in thicknesses of 1.3 - 2 mm. Roll width: 130 cm.

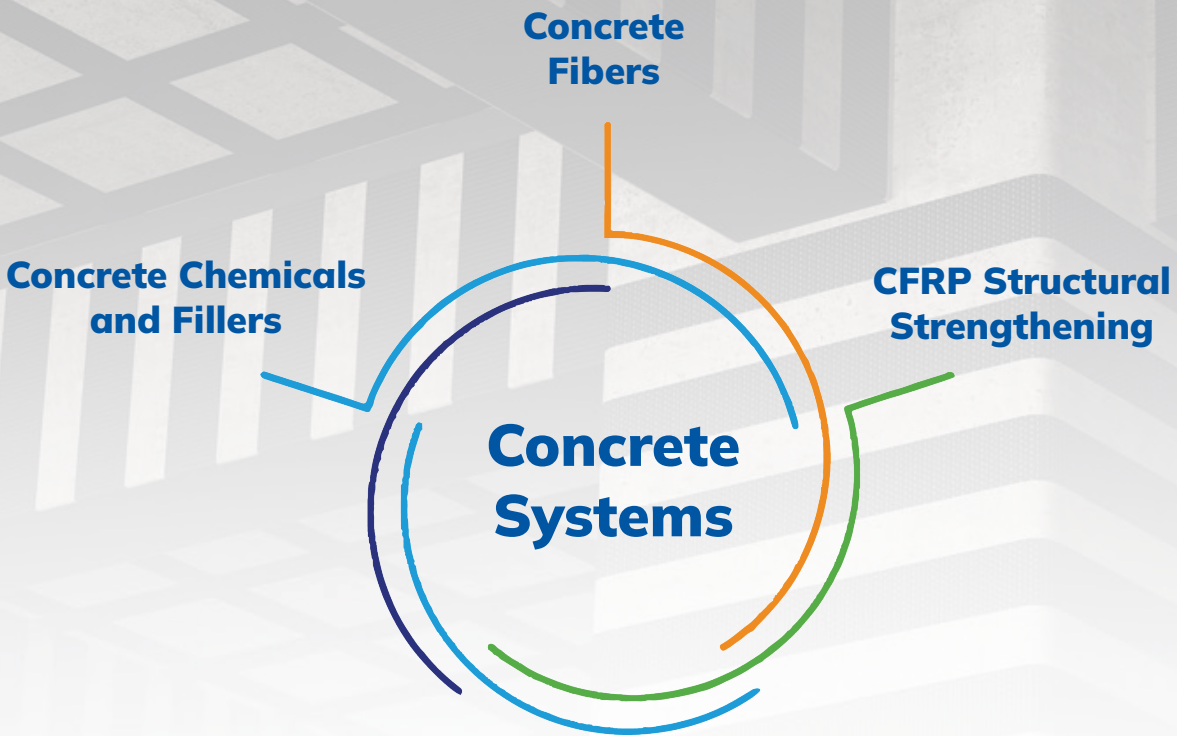


## SphereCel SBF-OM-CM Stitched Glass Fiber Core Mat

**Manufacturer:** CARBONCORE SPHERECEL

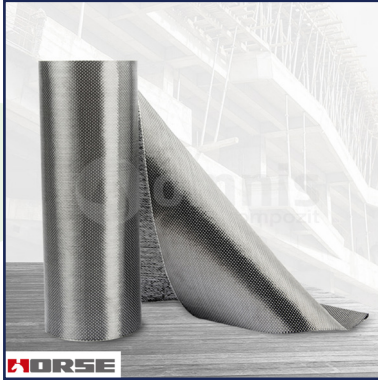
- SphereCel SBF is produced by volumizing stitched glass fiber layers with microspheres and additional glass fiber. It is suitable for OM Open Molding and CM Closed Molding (Infusion, LRTM).
- Using SphereCel SBF provides up to 40% resin saving compared to a part made entirely from glass fiber layers of the same thickness. It can replace other core materials like Balsa or PVC. It can be easily fitted into the three-dimensional structure of the mold. This product can be created with a hole during wetting. No need to cut the edges or shape it before application. For thicker laminations, multiple layers can be easily applied over each other.
- Available in thicknesses of 6 – 8 – 10 and 12 mm. Roll width: 127 cm.

# Concrete Systems |



Composite raw materials, which offer significant advantages compared to traditional construction materials, are increasingly used in construction and structural reinforcement worldwide. With the development of carbon fiber-reinforced polymer (CFRP) structural strengthening systems, faster, more effective, and cost-efficient results are achieved compared to reinforced concrete strengthening. Glass Reinforced Concrete (GRC), also known as “Glass Fiber Reinforced Concrete,” is a versatile construction material that provides architects and engineers with aesthetic and structural freedoms. GRC is a high-performance cement compound obtained by mixing silica sand, high-quality white cement, polymer additives that enhance concrete quality, and alkali-resistant glass fibers (AR-glass). Thanks to the zirconium ( $ZrO_2$ ) content in AR-glass, it serves as reinforcement without melting in the alkaline environment of cement. Basalt fiber reinforcement is recommended for concrete applications other than GRC. For plaster and ground concrete applications, polyamide-based synthetic fiber reinforcement can prevent shrinkage cracks. Expanded glass spheres, an ecological concrete aggregate derived from recycled glass, contribute to the lightweight, fire resistance, thermal and acoustic insulation properties in cement-based applications.

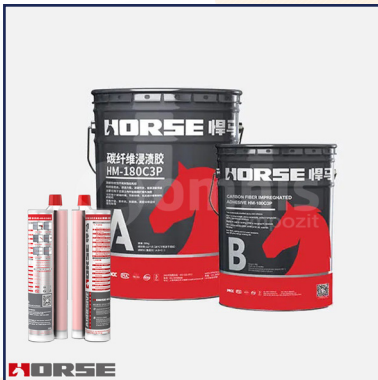
# | CFRP Structural Strengthening Systems



## **HM-30 Unidirectional (UD) Carbon Fiber Fabric 300 g/m<sup>2</sup>**

**Manufacturer:** HORSE

- HORSE HM-30 is a high-strength, unidirectional carbon fiber fabric for strengthening structural concrete elements. It is designed for CFRP reinforcement of columns, beams, slabs, and walls in buildings, bridges, highways, railways, tunnels, docks, and civil airports. It offers load increase in structures, improvement of structural conditions, seismic strengthening, and possibilities for structural alterations. HORSE HM-30 is recommended to be used with HORSE 180 series epoxy systems.



## **Epoxy Kits**

**Manufacturer:** HORSE

- These are high-performance epoxy binders used for effective adhesion of carbon fiber in the HORSE CFRP Strengthening System. Specially developed epoxy kits for preparation, priming, putty application, anchoring, and carbon lamination processes include:
  - HM-180C3P Carbon Fiber Lamination Epoxy Kit
  - HM-180 Epoxy Primer Kit
  - HM-180CE Epoxy Repair Putty Kit
  - HM-120CP Carbon Strip Adhesive Epoxy Kit
  - HM-500 Anchor Adhesive Epoxy Kit

# CFRP Structural Strengthening Systems |



## Carbon Reinforcement Strips

**Manufacturer:** HORSE

- HM-1.2 and HM-1.4 are high-modulus, unidirectional carbon fiber strips used for structural reinforcement. As external reinforcement, they are adhered to the structure using HM-120CP. Carbon fibers are continuously drawn in the unidirectional orientation (unidirectional) with epoxy resin during the pultrusion process. Typically applied to beams and walls, they offer load increase in structures, improvement of structural conditions, seismic strengthening, and opportunities for structural alterations.



## Equipment

**Manufacturer:** HORSE

- These are auxiliary equipment recommended for use in HORSE CFRP Strengthening Systems. They play an effective role in ensuring more practical and faster field applications.
- Anchor Adhesive Application Gun
- Electric Fiber Cutting Scissors
- Roller Handles
- Plastic Spatulas



## High ZrO<sub>2</sub> Content AR Glass Fiber Roving

**Manufacturer:** HUIERJIE, NIPPON ELECTRIC GLASS

- GRC (Glass Reinforced Concrete) is formed by reinforcing high-performance cement-based compositions with “alkali-resistant glass fiber.” Thanks to zirconium (ZrO<sub>2</sub>) on AR (alkali-resistant) glass fibers, they resist corrosion against alkalis and acids in cement, acting as reinforcement without dissolving in the cement. Alkali-resistant glass fibers prevent the spread of cracks in concrete. Moreover, they offer high tensile strength besides the compressive strength normal concrete possesses. The fiber’s strength is three times that of steel, while its flexibility is four times. Spraying GRC machines apply a mixture of fibers and GRC concrete on to molds simultaneously.



## High ZrO<sub>2</sub> Content Chopped AR Glass Fiber

**Manufacturer:** NIPPON ELECTRIC GLASS

- For glass to maintain its structure without chemical deformation in an alkali environment within concrete, it requires a minimum of 16% zirconium content. High-performance AR alkali-resistant glass fiber chopping can be used as reinforcement in concrete to act as reinforcement, preventing or minimizing shrinkage cracks.

- NEG ARG Fibre ACS13PH901X



## FibraTec V12 Chopped AR Glass Fiber

**Manufacturer:** FIBRA TEC GLASS

- V-12 Ground Fiber provides high flexibility, crack resistance, and tensile strength against fatigue due to dynamic loads and thermal shock on concrete. V-12 Ground Fiber ensures rapid and homogeneous distribution in all directions within the concrete, unlike steel mesh, which is limited to providing strength equal to its thickness in concrete. The specific gravity of AR glass fibers being similar to that of concrete prevents surface marks and settling into the base.

# Concrete Fibers |



## Basalt Direct Roving

**Manufacturer:** GEO BASALT

- 600, 1200, 2400 and 4800 tex basalt rovings are made of continuous fibers. Direct (single-end) rovings are used in concrete, polymer blends, composite applications, and areas where resistance against corrosive environments is needed.



## Chopped Basalt Fiber

**Manufacturer:** GEO BASALT

- Available in lengths of 3-4.5-6-12 and 25 mm. Longer cuts possible upon request.
- Fiber thicknesses of 13 or 17 microns.
- Suitable for BMC paste production for functional and structural applications.
- Suitable for concrete reinforcement.
- Used in epoxy resin reinforcement.
- Used in PP-PA-PBT/PET thermoplastic resin reinforcement.



## Micro Synthetic Polymer-Based Fiber Reinforcement

**Manufacturer:** KRATOS

- KraTos Micro Synthetic Fiber Reinforcement is produced in accordance with EN 14889-2 Class standards using KordSA's polymer-based special formulation. It provides superior results compared to polypropylene and basalt fibers in preventing shrinkage cracks. Unlike other synthetic fibers, KraTos Micro has moisture absorption properties of up to 5%. This moisture retained by the fibers is released back into the freshly poured concrete from the onset of setting, creating an internal curing effect. It minimizes shrinkage cracks and tension due to temperature, enhancing structural integrity.



# Concrete Chemicals and Fillers



## Concrete Plasticizer

**Manufacturer:** FIBRE TECHNOLOGIES

- Concrete plasticizers are added to concrete mixes to adjust the fluidity of the mixture according to the appropriate process.
- Flowaid FT is used in spraying and pre-mix applications.
- Flowaid SCC is recommended solely for pre-mix applications.



## Acrylic Polymer

**Manufacturer:** FIBRE TECHNOLOGIES

- Polycure FT: Used with Polycure FT and FT Extra to prevent the evaporation of the water needed for curing from the concrete mix, ensuring homogeneous curing of the concrete.



## Mold Release Agent for Concrete Applications

**Brand:** OMNİS KOMPOZİT

- Mineral-based mold release agents that facilitate the undamaged removal of GRC material from wood and steel molds. They prevent stains and surface irregularities on the product's surface. Effective in the easy release of large surface area and complex geometry panels from the mold without sticking.

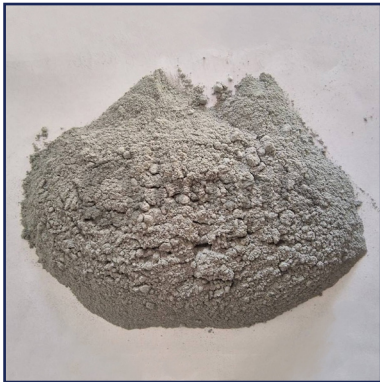
# Concrete Chemicals and Fillers |



## Poliurethane Mold Silicone

**Manufacturer:** POWER SPRAYS

- Polyurethane rubber-based GRC Fleximould is suitable for making flexible molds of all kinds. It allows obtaining high quantities of products without breaking, tearing, or stretching.



## Micro Silica - Silica Fume

**Brand:** OMNİS KOMPOZİT

- Micro silica, with its micron-sized fine structure, fills the voids in wet concrete mixtures that cement cannot fill, accelerating the reaction of concrete with water and increasing its strength by up to 20%.



## Dried Silica Sand AFS 30-35

**Brand:** OMNİS KOMPOZİT

- Dried silica sand is one of the most common mineral forms of silicon found in nature. It undergoes washing, screening, and drying processes. It has high hardness and comes in 10 different sieve sizes.

# | Concrete Chemicals and Fillers



## Expanded Glass Beads - Stikloporas

**Manufacturer:** STIKLOPORAS

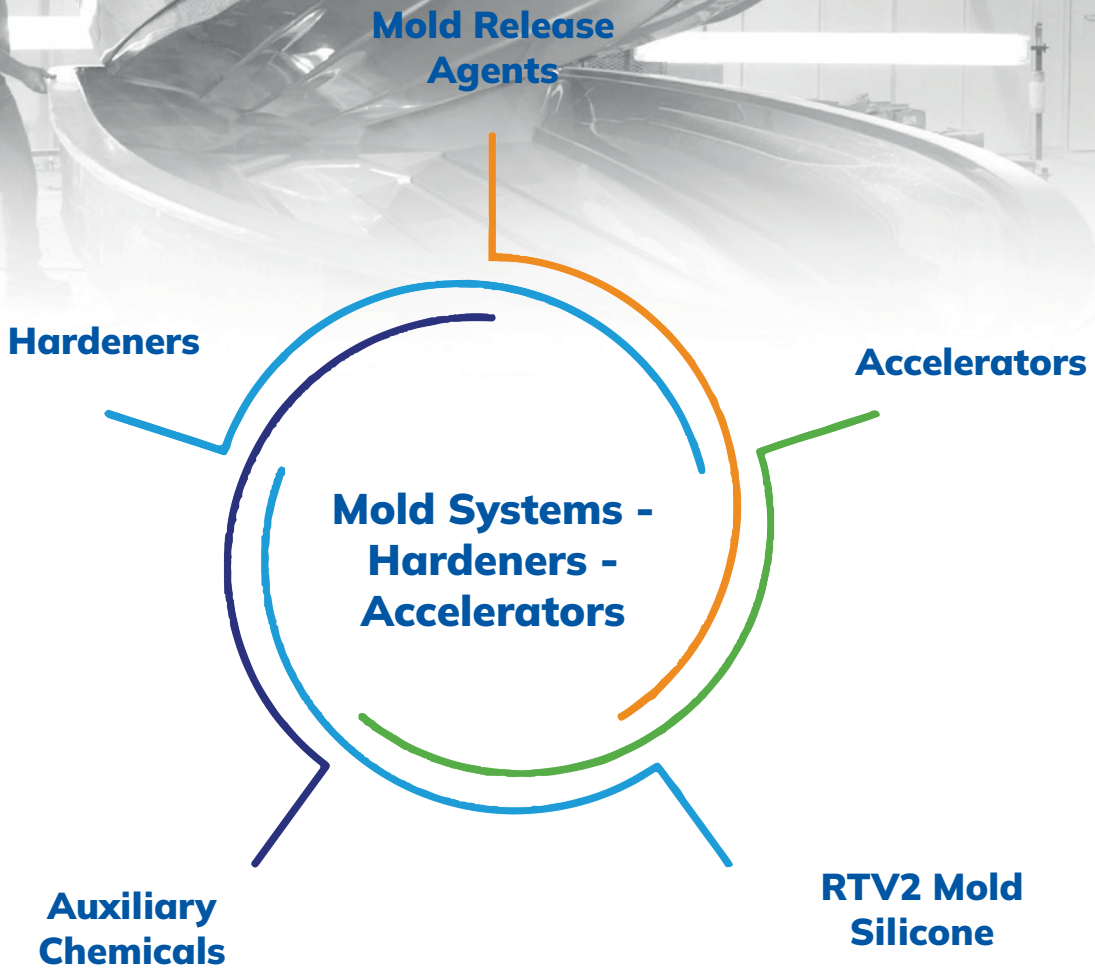
• Obtained through recycled scrap glass with a special patented technology converting it into small cellular structures, expanded glass beads serve as a special thermal insulation material. They offer a 50% reduction in weight and a 40% increase in thermal insulation value in their application areas:

- Insulation plasters
- Floor leveling, bonding, and repair mortars
- Cement-based adhesives
- Insulation panels
- Lightweight concrete blocks
- Lightweight concrete products
- Cast-in-place floor and drainage insulation

Furthermore, when applied, it provides resistance against sound, acoustic values, moisture resilience, resistance against bacterial and mold formation, exceptional design possibilities, and breathability features.

Stikloporas comes in various diameters: 0.1-0.3 mm / 0.25-0.5 mm / 0.5-1.0 mm / 1-2 mm / 2-4 mm / 4-8 mm / 8-16 mm.

## Mold Systems - Hardeners - Accelerators |



The successful release of a composite part from the mold depends not only on the mold itself and the materials composing the part but also on several chemicals working in parallel. These include mold release systems, hardeners, and accelerators responsible for the resin curing, as well as cleaners and primers ensuring the continuity of the mold. There isn't a single correct formula when using auxiliary chemicals. Mixing ratios vary depending on the production process, resin type, necessary gel time, part thickness, environmental conditions, and the type of additive. We offer the most suitable system for your process among proven products from expert manufacturers.

## | Mold Release Agents



### Mold Release Waxes

**Manufacturer:** POLİYA, İLKESTER

• Creamy waxes used in conventional composite material production to release products from molds.

- Polivaks SV6
- Polivaks N (PVA System)
- Polivaks Eco
- İlkester-Provaks First
- İlkester-Provaks Plus
- İlkester-Provaks Zero



### Spray Mold Release Agents

**Manufacturer:** POLİYA

• Performance mold release agents recommended for molds with complex shapes where applying standard waxes is challenging.

- Polivaks PV7
- Polivaks Aero-7



### Liquid PVA Mold Release Agents

**Manufacturer:** POLİYA

• Used in new or repaired high-risk molds in conjunction with the wax system. It creates a thin PVA film between the part and the mold, preventing adhesion between surfaces.

- Polivaks Liquid PVA
- Polivaks Eco PVA
- Polivaks Liquid Mat PVA

# Mold Release Agents |



## Semi-Permanent Mold Release Agents

**Manufacturer:** AXEL, EBALTA

• Semi-permanent mold release agents are suitable for continuous mold cycles. They are solvent-based liquid performance mold release agents.

- Axel-XTEND 1140-HS
- Axel-XTEND 19MDR
- Axel-XTEND 838
- Axel-XTEND 818
- EBALTA T1-1



## Mold Primer

**Manufacturer:** AXEL

• Mold primer protects the mold and enhances the performance of the mold release agent. It is developed especially for use in the initial batch molding from new, unconditioned molds.



## Mold Cleaner

**Manufacturer:** POLIYA, AXEL

• A solvent used for cleaning molds. It quickly disperses on the surface and evaporates. It provides fast and safe results in preparing molds before applying the primer or mold release system. It's also suitable for cleaning resin, paint, silicone, wax, and oil residues on various tools or surfaces used in the workshop.

- Axel-XTEND CX-500
- Poliya Mold Cleaner

## | Mold Release Agents



### D-32 Liquid Paraffin

**Manufacturer:** POLİYA

- Used to eliminate surface adhesion when added to polyester resins and gelcoats.

## | Hardeners



### Mek-P Hardeners

**Manufacturer:** AKPA, NOURYON

- Methyl Ethyl Ketone Peroxide (MEK-Peroxide) belongs to the family of organic peroxides. It regulates and controls the transition of liquid to solid state for resins like polyester, gelcoat, adhesive Tix, and vinylester. It is a necessary chemical that initiates cross-linking reactions between reactive monomers like resin and styrene.

- Butanox M-50
- Butanox M-60
- Akperox A1
- Akperox A50
- Akperox A60
- Akperox LPT
- Akperox MIK-P

## Accelerators |



### Accelerators

**Manufacturer:** EGE KİMYA, AKPA, POLİYA

• A dark blue liquid formed by diluting cobalt metal with a solvent at a 6% concentration. It is used as an accelerator in the curing process of polyester and vinyl ester resins and gelcoats at room temperature with the help of organic peroxides.

- EGECat KobaltOkt %6
- EGECat Kobalt XC1
- Akcobalt %6 Kobalt
- Akcobalt KXC6 Kobalt
- DMA Accelerator
- Poliya Accelerator 101

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## Mold Making Silicone |



### RTV2 Mold Silicone

**Brand:** OMNİS KOMPOZİT

• RTV mold silicone is pure silicone used for molding products like polyester or concrete. The silicone comes in two hardness degrees: 20 shore or 30 shore.



## | Auxiliary Chemicals



### Polyester Cleaner

**Brand:** OMNİS KOMPOZİT

- Widely used for cleaning workshop tools and equipment in the composite sector.



### Polyester Thinner

**Manufacturer:** POLİYA

- Styrene monomer is used to facilitate and thin the flow characteristics of polyester resins. It is mixed up to a maximum of 8% to make the resin that condenses in cold weather easier to use.



### Gelcoat Thinner

**Manufacturer:** POLİYA

- Gelcoat thinner is a specially prepared monomer mixture used to reduce the viscosity of gelcoats.

# Fillers - Putties - Adhesives |



Fillers enhance composite parts or resin systems with additional properties such as fire resistance, heat and electrical conductivity, and heat and sound insulation. The use of fillers has become a significant raw material input for productions requiring thixotropic structure, additional strength, lightweight properties, high surface performance, and different color effects. Omnis Komposit offers various filler options in different forms such as hollow and solid glass beads, ground carbon and glass microfiber, and expanded glass spheres.



### OMFIL E-Glass Microfiber Powder

**Manufacturer:** OMFIL

- Produced by grinding E and ECR glass fibers in different sizes. Used in repair applications by creating paste with epoxy, vinylester, and polyester resins. It offers excellent flow parameters, enhancing application ease. Improves vinylester's corrosion resistance. Increases the modulus values and surface mechanical performance of the part, providing protection against cracks. It is chemically resistant and can be reinforced with resin by weight by up to 10%.

- OMFIL Microfiber E-Glass 100 Micron
- OMFIL Microfiber E-Glass 200 Micron



### Carbon Microfiber Powder

**Manufacturer:** SGL CARBON

- This product, also known as Carbon Fiber Powder or Micro Carbon Fiber, is produced by grinding recycled carbon fiber until it becomes very short cuts of 80-150 microns in length. The use of Micro Carbon Fiber significantly strengthens the mechanical properties (tensile strength and modulus values) of the final composite part. It enhances dimensional stabilization and electrical/electrostatic conductivity.

- Carbon Microfiber M80-3 SGL Carbon- 80 Micron
- Carbon Microfiber M150-3 SGL Carbon- 150 Micron

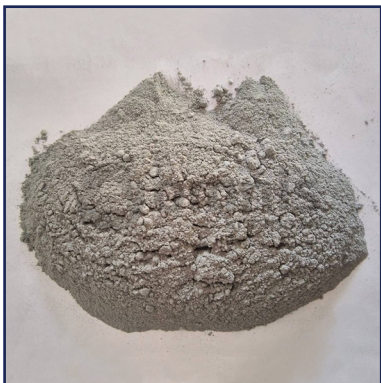
# Powder Fillers |



## Fumed Silica Thickening Agent

**Manufacturer:** WACKER

- Fumed Silica, also known as Aerosil powder, is a high-purity, white, synthetic, hydrophilic amorphous silica used as a filler to increase thixotropy in gelcoat production and polyester resins. It is volatile due to its very low specific gravity.



## Micro Silica - Silica Ash - Fume

**Brand:** OMNIS KOMPOZIT

- Micro silica fills the voids in a wet concrete mix with its micron-level fine structure, accelerating the reaction of concrete with water and enhancing the concrete's strength by up to 20%.

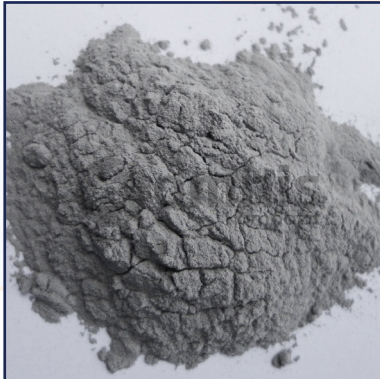


### Talc Powder

**Brand:** OMNİS KOMPOZİT

• Talc is found in nature as a hydrated magnesium silicate with the formula  $3\text{MgO}\cdot 4\text{SiO}_2\cdot \text{H}_2\text{O}$ . When used in thermoset resin systems, it provides electrical insulation and heat-moisture resistance. Talc-filled systems are mechanically easy to work with and can be sanded. Sheet and paste ready-mold formulations can also use talc as a filler material.

- Talc 5 Micron White
- Talc 5 Micron Extra White

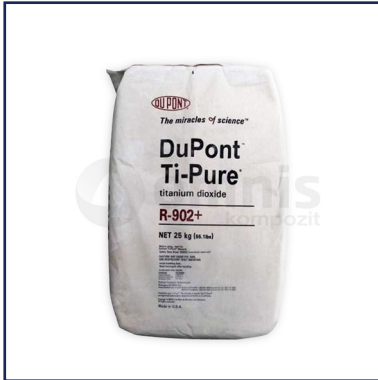


### AL 100 Aluminum Powder

**Manufacturer:** POLİYA

• It is possible to add micronized aluminum powder into resins to provide heat or electrical conductivity. It also enhances the impact resistance of the part.

# Powder Fillers |



## Titanium Dioxide R-902

**Manufacturer:** DUPONT

- Titanium dioxide is a white pigment powder filler used in polyester and gelcoat applications to create color and surface. T-Pure R-902 balances pigment performance with chalking resistance, high gloss, and vibrant color features.



## Calcite Powder

**Brand:** OMNIS KOMPOZIT

- Calcite is a semi-amorphous form of calcium carbonate. It has high resin absorption properties and is used as a filler material in polyester, gelcoat, and topcoat applications.



## ATH Flame Retardant Filler - Apyral 16

**Manufacturer:** NABALTEC

- ATH Flame Retardant Filler Apyral 16 (Aluminum Hydroxide- $\text{Al}(\text{OH})_3$ ) is a white filler material added to polyester resin, gelcoats, and topcoats due to its flame retardant and self-extinguishing properties.



### Hollow Glass Microspheres

**Manufacturer:** HALLOWLITE

- Used in composites (SMC-BMC-RTM), paint coatings, varnishes, artificial marble, and repair fillers, these Hollow Glass Microspheres have particle sizes ranging from 30 to 120 microns. These spheres, with a compressive strength ranging between 3.5 Mpa to 124Mpa, possess specific gravity ranging from 0.18 g/cm<sup>3</sup> to 0.58 g/m<sup>3</sup>. Providing significant volumetric advantages, this filling material ensures superior performance in the final product.



### Solid Glass Beads

**Manufacturer:** SOVITEC

- Solid glass beads are widely used in rubber, thermoplastic compounds, especially in PA, PP, and PBT compounds to enhance surface performance. They are also utilized in automotive and electrical home appliance parts for their excellent chemical resistance and heat resistance, in adhesives for surface durability against scratching, and in healthcare, paint, and construction sectors. One of the advantages of using glass beads is their smooth structure that creates a bearing effect during compound production, enhancing flow and increasing the production of units in a given time. Due to their high pressure resistance, they are suitable for many composite production methods.

- NP3 (Glass Bead for Varnish, Paint, and Special Coatings) 3 microns
- NP5 (Glass Bead for Varnish, Paint, and Special Coatings) 5 microns
- 050-20 (Glass Bead for Plastics) 20 microns
- 050-40 (Glass Bead for Plastics) 40 microns

## Fillers |



### Modeling Clay

**Manufacturer:** POLİYA

- Model filler is a plastic-based, smooth, non-drying compound that remains in a hard dough-like consistency at room temperature but is easily shaped.



### Polyester Filler Putties

**Manufacturer:** POLİKOR

- These are two-component, unsaturated polyester-based fillers. They adhere excellently to bare metal, aluminum, galvanized, steel, SMC, FRP, plastic, and painted surfaces. They are easily applicable due to their creamy texture. They can be shaped and sanded comfortably. Suitable for use in providing volumetric fill while supporting the structural integrity of the parts.

- Polikor Super Filler Putty
- Polikor Super Soft Filler Putty
- Polikor Plastic Filler Putty
- Polisilver Aluminum Filler Putty
- Polikor Polifibro Micro Fiber Filler Putty





### Adhesives

**Manufacturer:** POLİYA, İLKESTER

- Adhesive pastes are used in the repair and structural bonding of composite products.
- Politix Standard
- Flexotix Flexible
- Vetix Vinylester-Based
- Fibrotix Fiber-Enhanced
- Fibrotix Marine
- İlkester TIX-081 Fiber-Enhanced Liquid Mat Bonding Paste
- İlkester TIX-501 BP Flexible Fiber-Enhanced Bonding Paste

## | Expanded Glass Beads



### Expanded Glass (Stikloporas)

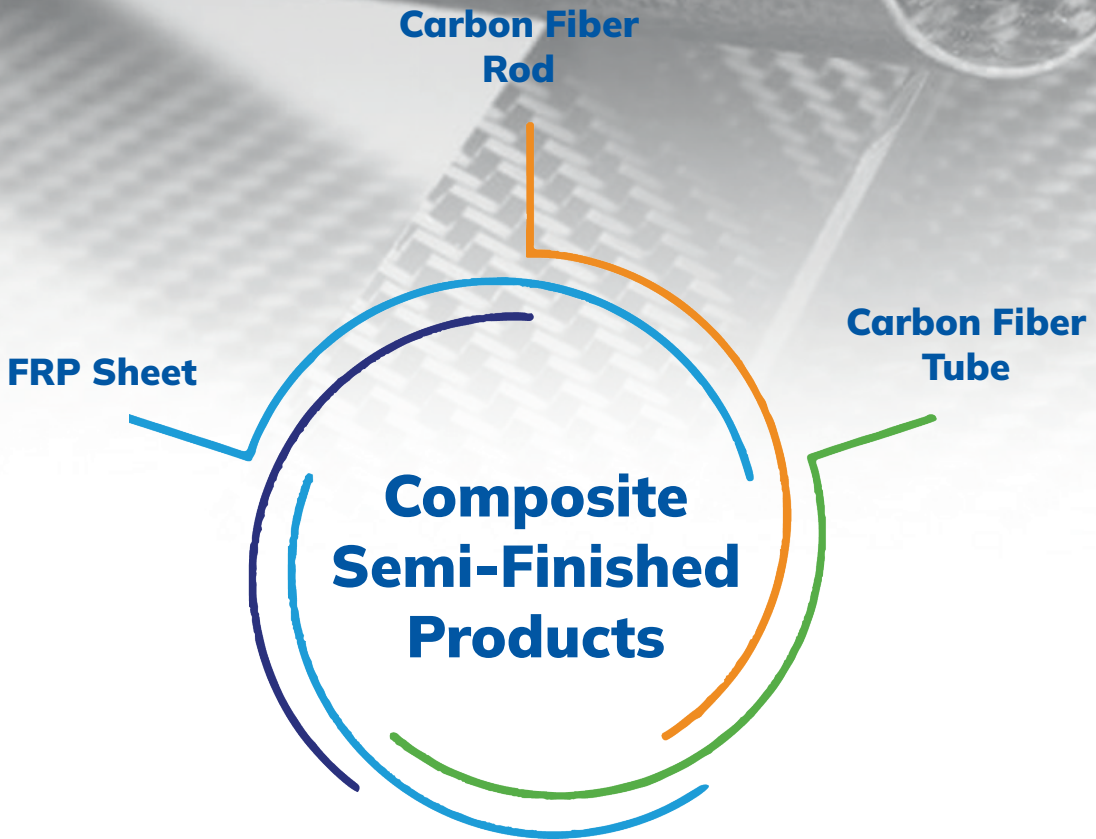
**Manufacturer:** STIKLOPORAS

- Resulting from the transformation of recycled scrap glass into a small cellular structure using patented technology, expanded glass beads are a special thermal insulation material.

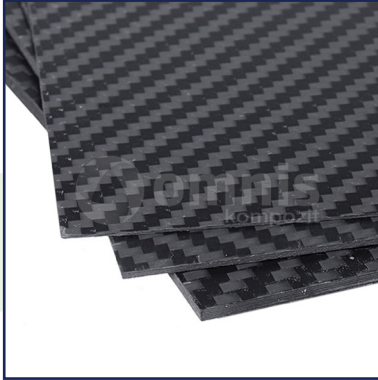
Expanded glass beads are used for:

- Insulation plasters
- Floor leveling, adhesive, and repair mortars
- Cement-based adhesives
- Insulation panels
- Lightweight concrete blocks
- Lightweight concrete products
- Applied as a cast for floor and drainage insulation, offering a 50% reduction in weight, a 40% increase in thermal insulation values, sound insulation for the structure, resistance against moisture, bacteria, mold, etc. It provides excellent design opportunities and breathable structures.
- Stikloporas: 0.1-0.3 mm / 0.25-0.5 mm / 0.5-1.0 mm / 1 - 2 mm / 2 - 4 mm / 4 - 8 mm / 8 - 16 mm

# Composite Semi-Finished Products |



Composite semi-finished products in the form of pipes, solid rods, strips, profiles, or plates, the usage of which continues to increase in various applications and products in many different sectors, provide alternative engineering solutions. They are present in diverse applications ranging from lightweight skeletal structures of aircraft, helicopters, boats, unmanned aerial and ground vehicles, and robotic systems to sports equipment, rocket components, structure reinforcement, and agricultural machinery.



## Carbon Fiber Sheet

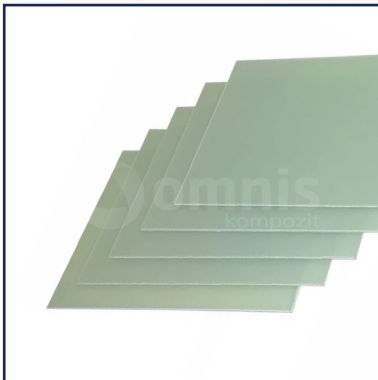
**Manufacturer:** KORD İPLİK

- These are glossy plates produced through vacuum infusion method with carbon fiber woven layers and epoxy resin.

- t (thickness): 0.5 – 1 – 2 – 3 – 4 – 5 mm

Standard sizes: 50 x 45 cm (s) – 100 x 45 cm (m) – 200 x 95 cm (l)

- t (thickness) : 6 – 7 – 8 – 9 mm contact for information.



## G10 Sheet

**Manufacturer:** HITEX

- G10 plates are manufactured by curing layers of fiberglass cloth reinforcement with epoxy under high heat and pressure. They exhibit high modulus values and can be machined with CNC machines.

- t (thickness): 1-2-3-4-5-6 mm



## Carbon Fiber Reinforcement Strips

**Manufacturer:** KORD İPLİK

- Produced by continuously pulling carbon fibers placed longitudinally (unidirectional) along with epoxy resin in the pultrusion process. They are used for structural reinforcement purposes in construction (building strengthening), energy, and aerospace industries.

- Width: 50 mm – t (thickness): 1.2 mm
- Width: 50 mm – t (thickness): 1.4 mm
- Width: 100 mm – t (thickness): 1.2 mm
- Width: 100 mm – t (thickness): 1.4 mm

## Carbon Fiber Tube |



### Carbon Fiber Tubes

**Manufacturer:** KORD İPLİK

- Produced using the roll-wrapping method, carbon fiber tubes maintain a constant diameter along their length, manufactured with low tolerance and high precision. Suitable for telescopic use, these tubes are distinguished by their very high tensile strength and high flexural resistance relative to their weight.

- Inner Diameter - Outer Diameter mm: 5-6 / 6-7 / 6-8 / 8-10 / 10-12 / 14-16 / 18-20 / 22-24

- Contact for other dimensions.

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## Carbon Fiber Rod |



### Carbon Fiber Rods

**Manufacturer:** KORD İPLİK

- It is produced by placing carbon yarns longitudinally parallel and unidirectional and continuously drawing them together with epoxy resin in the pultrusion process. The diameters of the rods are constant along the length and are manufactured with low tolerance and high precision. It is used in RC airplanes, helicopters, boats, unmanned aerial vehicles and kites, as push-pull rods in mechanical control mechanisms and in light skeletal structures of robotic systems.

- Outer diameter mm : 4,5 / 5 / 6 / 7 / 8 / 9 / 10 / 12 / 14 / 16 / 18 / 20

- Contact for other dimensions.

# Workshop Materials |



Workshop materials accelerate composites production and provide cost-effective, practical solutions. Omnis Kompozit facilitates your work with essential hand tools, measurement and dosing equipment, composite air release rollers, brush, and laminate roller products, which are necessary for every business.

# Equipment |



## Fiber Shears

**Manufacturer:** KRETZER

- Finny Tech X shears specially developed by Germany's leading scissor manufacturer Kretzer using Solingen steel are designed for the composite industry. They allow easy cutting of glass, carbon, and aramid fibers. Due to hardened carbon steel, they provide years of trouble-free use. Micro-serrations on the scissor blades keep the fibers stable during cutting, preventing bunching and slipping.



## Battery Powered Fiber Shears

**Manufacturer:** HITEX

- These shears are suitable for cutting various composite materials like glass, carbon, aramid fiber weaves, vacuum bags, peel ply fabrics, flow meshes, as well as in cutting textile fabrics like satin, leather, carpet, cardboard, and other materials with thick stitches. They are designed for cordless, portable, and serial use.



## Cutting Knives

**Manufacturer:** MOZART

- Professional cutting knives used for precise cutting, trimming, finishing, and removing burrs on materials such as prepregs, woven fabrics, leather, and 3D parts. Produced from Solingen steel by the expert in blade technology, Mozart, these knives have a long cutting life and are replaceable. They are available in different handle designs offering various ergonomic versions.

- Mozart Cutting Knives P2A – P1A – P2T – P1T



### External-mix Portable Gelcoat Spray Gun

**Manufacturer:** ES

- The Portable Dual-Headed Gelcoat Spray Gun is a hand-held tool operated by air pressure. It's a cost-effective solution for companies that don't want to invest in large gelcoat systems and engage in small to medium-sized part production. It has separate chambers for gelcoat and catalyst (MEK-P). During use, the catalyst and gelcoat are mixed right before application to the mold surface. As the gelcoat cures externally, it prevents wastage of catalyzed gelcoat. The catalyst ratio can be adjusted between ½ to 4%.



### Portable Gelcoat Spray Gun

**Manufacturer:** ES

- This portable gelcoat spray gun is an air-pressure operated handheld tool. It's a cost-effective solution for companies engaged in small to medium-sized part production that do not want to invest in a large gelcoat system. The spray tip is interchangeable, available in diameters suitable for the fluidity of the sprayed gelcoat.



### Resin Infusion Catch-Pot

**Brand:** OMNIS KOMPOZIT

- Used to capture excess resin that is drawn into it between the vacuum environment and the vacuum pump, preventing it from reaching the pump. It can also be used to remove air from within resins, apart from its usage in the infusion method.
- 3 different models with different volumes as 3L-10L-20L.



## Roll Holder with Wheels - Mobile Type

**Manufacturer:** KOMPOZİT PAZARI

- Developed to ensure the most accurate storage conditions for all rolled raw materials and to enable quick and practical access to materials during usage, the Roll Holder with Wheels will enhance the organization and production speed in your workshop.

- 15 Roll Hangers
- Maximum Load Capacity: 250 kg (movable) • 450 kg (fixed usage)



## Roll Holder - Wall-Mounted Type

**Manufacturer:** KOMPOZİT PAZARI

- Designed for amateur and semi-professional producers, the wall-mounted roll holder comes with 6 pieces of 1.5 meters long galvanized pipes. The optimum width for shelf openings is 1.4 meters.





### Mold Release Wedges

**Manufacturer:** KOMPOZİT PAZARI

- Mold Release Wedges assist in removing the cured composite part from the mold. These wedges are made from High-Density Polyethylene (HDPE), offering both sturdiness and a certain level of flexibility. They are available in two different sizes: 100mm and 150mm in length.



### Prepreg Lamination Spatula

**Manufacturer:** DARGEWITZ

- Used to compress and guide reinforcements to conform to the complete shape of the mold, Prepreg Lamination Spatulas are made from a polymer with low friction resistance. This allows for easy movement over the fibers, enabling quick lamination without causing damage to the fibers.

# Measurement and Dosage |



## Mek-P Measurement Cups

**Manufacturer:** HITEX

- Made from HDPE material, it is resistant to abrasives like Mek-P. It is a practical measuring equipment used for adding the correct amount of hardener to the resin. By squeezing the main body, the desired amount of Mek-P is transferred from the lower reservoir to the upper reservoir.



## Measurement and Mixing Cups

**Manufacturer:** HITEX

- Produced from PP material, these Measurement and Mixing Cups are suitable for dosing and mixing solvents, silicones, paint, epoxy, vinylester, polyester resin, and gelcoat. Chemicals placed inside the cup do not stick to the surface. Its gradation showing different 2 and 3 component mixing ratios facilitates volume measurement.

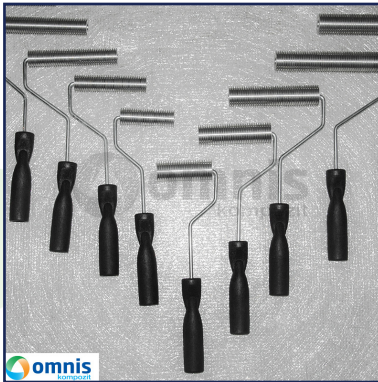


## Gelcoat Thickness Measurement Comb

**Manufacturer:** KOMPOZİT PAZARI

- The Gelcoat Thickness Measurement Comb is used to measure the thickness of the wet gelcoat layer applied to the mold surface with a brush or spray gun. Made from stainless steel, the comb, with its hexagonal structure, allows the measurement of wet film thicknesses ranging from 25-3000 microns.

## | Brushes and Rollers



### Aluminium Bubble Paddle Rollers

**Brand:** OMNIS KOMPOZIT

- These are metal and Teflon rollers used to ensure complete wetting of fiber layers with resin and their proper placement in the mold. Among different sizes and shapes, the most suitable roller can be selected for the application.



### Laminating Brushes

**Manufacturer:** AKRULO, FABA RULO

- The bristles of Wooden Handled Resin Brushes are dense and long. This enables them to pick up fluid resins and facilitates adherence to the brush, aiding in the transportation of the desired amount of resin onto the surface. The longer bristles also make it easier for resins to spread and distribute evenly onto the surface.



### Laminating Rollers

**Manufacturer:** AKRULO, FABA RULO

- Used in the hand lay-up method to impregnate fiber layers with resin. It allows fibers to absorb resin while effectively distributing the resin evenly throughout the mold.

# Our Brands |



**AKPA KİMYA**



**CARBONCORE  
SPHERECEL**



**CONBILITY**



**CPIC  
FIBERGLASS**



**DARGEWITZ**



**EGE KİMYA**



**ES**



**FIBRATEC**



**FREUDENBERG**



**GRACO**



**HITEX**



**HOLLOWLITE**



**HORSE**



**İLKESTER**



**KOMPOZİT  
PAZARI**



**KORD İPLİK**

# | Our Brands



**KRATOS**



**KRETZER**



**METYX**



**NIPPON  
ELECTRIC GLASS**



**OMFİL**



**PD FIBRE  
GLASS**



**POLIYA**



**POWER SPRAYS**



**SCHMIDT &  
HEINZMANN**



**SOVITEC**



**SPINTEKS**



**STIKLOPORAS**



**ŞİŞECAM**



**TAIWAN GLASS**



**TEKNO MARIN**



**THERMHEX**

# Why Us?

**Omnis Composite**, with a wide customer portfolio within the country, also regularly exports to 15 different countries, thanks to its unlimited vision and professional solutions.

As Omnis Kompozit, we are dedicated suppliers of high-quality polymer composite raw materials to integrate composite production into diverse facets of everyday life. We steadfastly procure superior raw materials to support the successful development and manufacturing of cutting-edge products. Our ongoing commitment includes continuously updating and enriching our product portfolio.



01

**SOLUTION-ORIENTED APPROACH**

02

**STRONG TECHNICAL KNOWLEDGE AND SUPPORT**

03

**BROAD SPAN OF SUPPLY CHAIN**

04

**RAPID ACCESS OF INFORMATION**

05

**INNOVATIVE AND WIDE PRODUCT RANGE**





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