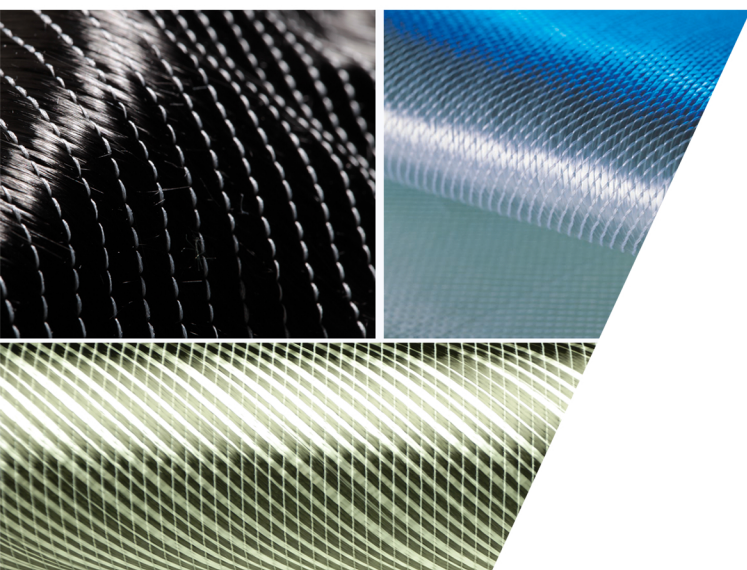


OPTIMIZE YOUR COMPOSITE PERFORMANCE

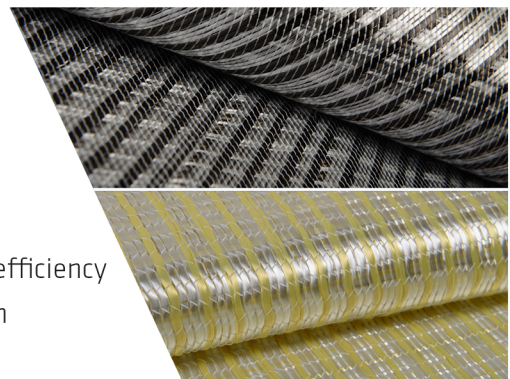
METYX, a global leader in high-performance technical textiles and composite solutions, supports advanced manufacturing processes with innovative multiaxial reinforcement technologies.

Designed for high-performance composite applications, METYX multiaxial fabrics are engineered to deliver optimized fiber orientation, superior mechanical properties, and efficient processing—helping manufacturers achieve consistent, reliable, and cost-effective results.



Engineered for High Performance Composites

Multiaxial fabrics are non-crimp reinforcements built from straight fiber layers (0° , $\pm 45^\circ$, 90°), precisely stitched for maximum load efficiency. Their optimized fiber architecture enables faster resin infusion, improved laminate quality, and reduced production time—delivering high performance in demanding structural applications.



Key Benefits at a Glance

- ✓ **Optimized Fiber Orientation** – Load paths aligned for maximum structural efficiency
- ✓ **Reduced Material Usage** – Fewer layers required, optimized laminate design
- ✓ **High Permeability** – Faster resin flow and improved infusion performance
- ✓ **Excellent Drapeability** – Conforms easily to complex geometries
- ✓ **Improved Mechanical Performance** – Enhanced strength and stiffness
- ✓ **Consistent Quality** – Repeatable fiber architecture and uniform results
- ✓ **Suitable for High-Volume Production** – Reliable and scalable manufacturing

Applications

- Wind turbine blades and structural components
- Marine hulls and deck structures
- Automotive and transportation parts
- Construction and infrastructure systems
- Industrial composite applications
- Sports and leisure equipment

Parameter	Description
Reinforcement Materials	Glass, carbon, aramid and hybrid fiber combinations
Fiber Architectures	Freely selectable fiber orientations (0°, ±45°, 90°) with tailored layer configurations
Construction	Stitched non-crimp fabric (NCF) for maximum fiber efficiency
Suitable Methods	Vacuum infusion, RTM, compression molding, pultrusion, prepreg, hand lay-up
Resin Compatibility	Polyester, vinyl ester and epoxy resin systems
Additional Options	CSM, surface veil, binder systems and hybrid configurations

Technical Specifications

	CARBON MULTIAXIAL	GLASS MULTIAXIAL	ARAMID MULTIAXIAL	HYBRID MULTIAXIAL
Fabric Type	Stitched non-crimp (UD, Biaxial, Triaxial, Quadraxial)	Stitched non-crimp (UD, Biaxial, Triaxial, Quadraxial)	Stitched non-crimp (Biaxial)	Stitched hybrid non-crimp (Biaxial, Quadraxial)
Fiber Type	Carbon Fiber	E-glass / H-glass	Aramid	Carbon + Glass / Aramid + Glass / Aramid + Carbon
Fiber Orientation	0°, ±45°, 90° and multi-angle configurations	0°, ±45°, 90° and multi-angle configurations	±45°, 0°/90°	0°, ±45°, 90° and multi-angle configurations
Unit Weight	200 – 2400 g/m ² (5.9 – 70.8 oz/yd ²)	200 – 3780 g/m ² (5.9 – 111.5 oz/yd ²)	200 – 1200 g/m ² (5.9 – 35.4 oz/yd ²)	200 – 2400 g/m ² (5.9 – 70.8 oz/yd ²)
Standard Width	127 – 254 cm (50 – 100 in)	127 – 254 cm (50 – 100 in)	127 cm (50 in)	127 – 254 cm (50 – 100 in)
Available Widths	On request	On request	On request	On request
Construction	Non-crimp stitched fabric	Non-crimp stitched fabric	Non-crimp stitched fabric	Hybrid stitched non-crimp fabric
Binder / Veil Option	Available	Available	Available	Available
Drapeability	High	High	High	High
Resin Compatibility	Polyester, Vinylester, Epoxy	Polyester, Vinylester, Epoxy	Polyester, Vinylester, Epoxy	Polyester, Vinylester, Epoxy
Processing Methods	Infusion, RTM, Prepreg, Pultrusion	Infusion, RTM, Hand lay-up	Infusion, RTM	Infusion, RTM
Certifications	DNV-GL	DNV-GL	DNV-GL	DNV-GL

