

High-Performance Reinforcements

OCV™ high-performance reinforcements are a product platform featuring ShieldStrand®, XStrand®, FliteStrand® and WindStrand® high-strength and modulus reinforcement products developed for defense and survivability, industrial, aerospace and wind energy markets.

High-Performance Reinforcements

PRODUCT NAME	SIZING	TEX RANGE	RESIN COMPATIBILITY						PROCESS				APPLICATION	PRODUCT CHARACTERISTICS & BENEFITS	
			UP	VE	EP	PN	FILAMENT WINDING	PULTRUSION	WEAVING	INFUSION	PREPREGS				
WindStrand® H roving	EPW 17	300 up to 2400			x						x				Compared to standard E-glass: - Up to 15% higher strength - Up to 15% increased stiffness - Up to 20% weight savings - Significant corrosion and fatigue resistance

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XStrand® H roving	EPX13	1100 up to 2000			X			X							Compared to standard E-glass: - Up to 15% higher strength - Up to 15% increased stiffness - Up to 20% weight savings - Significant corrosion and fatigue resistance
	EPX15	600 up to 2400			X	X		X			X				
	EPX17	300 up to 2400			X		X			X					
	MCX21	600 up to 4800	X	X	X		X			X			X		
	MCX23	4800 up to 9600	X	X	X				X						
	MCX24	1100 up to 4800	X	X	X				X						
	MCX26	300 up to 2400	X	X	X		X		X		X		X		

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XStrand® R roving	EPX10	300 up to 2400			x		x			x				Compared to standard E-glass: - Up to 35% higher strength - Up to 15% increased stiffness - Up to 70% increased toughness - Significantly better thermal and corrosion resistance properties
	MCX21	300 up to 2400		x			x				x			
XStrand® S roving	EPX-S 10	300 up to 2400			x		x			x			x	Compared to standard E-glass: - Up to 50% higher strength - Up to 20% increased stiffness - Up to 80% increased toughness - Outstanding fatigue and impact performance, superior mechanical properties, higher thermal performance and excellent corrosion resistance
	EPX-S 15	360 up to 2400			x		x			x			x	
	MCX-S 21	300 up to 2400		x			x				x		x	

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FliteStrand® S roving	EPF11	337 up to 675			x			x				x		Compared to standard E-glass: - Up to 35% weight saving Compared to metal and CFRP: - Excellent impact resistance
	MCF14	337 up to 675	x	x				x				x		
ShieldStrand® R roving	EPS10	600			x							x		- Up to 48% weight saving compared to steel - Up to 37% weight saving compared to aluminum - Higher structural performance than aramid, polyethylene and polypropylene fibers - Meets all fire, smoke and toxicity (FST) requirements for military vehicles
	EPS11	600				x						x		

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			UP	VE	EP	PN	FILAMENT WINDING	PULTRUSION	WEAVING	INFUSION	PREPREGS			
ShieldStrand® S roving	EPS-S11	360				x						x		<ul style="list-style-type: none"> - Up to 50% weight saving compared to steel - Up to 40% weight saving compared to aluminum - Higher structural performance than aramid, polyethylene and polypropylene fibers - Meets all fire, smoke and toxicity (FST) requirements for military vehicles

PRODUCT NAME	SIZING	RESIN COMPATIBILITY	WARP WEIGHT (OZ/SQ-YD)	WEFT WEIGHT (OZ/SQ-YD)	THICKNESS (IN)	APPLICATION	PRODUCT CHARACTERISTICS & BENEFITS
ShieldStrand® S fabric	WSS24/3000						