



P196 HIGH- PERFORMANCE PROCESS PRODUCTIVITY

P196 single-end Type 30™ roving is specifically designed to match the unique needs of a high performance to process a productivity ratio in a wide variety of applications and industries.

- Produced with patented Advantex® corrosion resistant E-CR glass by Owens Corning.
- Meets ISO 2078, ISO 2797, and ASTM D 578 requirements.
- Excellent properties for use in both epoxy/amine and anhydride, unsaturated resin curing systems.

**FOR FILAMENT WINDING, WEAVING,
REBAR, AND PULTRUSION**

Product Benefits

Outstanding Mechanical Properties

- Excellent properties in both epoxy/amine and anhydride curing systems, unsaturated polyester and vinyl ester resins.
- Improves axial tensile strength, inter-laminate shear strength, and burst stress for high-performance filament wound epoxy applications.
- Designed for applications requiring high strand stiffness while increasing production efficiency.

Excellent Processing

- Designed for fast wet-out with capacity for very high glass content.
- Smooth run-out and less fuzz, resulting in improved machine efficiencies.
- Flexibility for use in filament winding, weaving, rebar, and pultrusion.

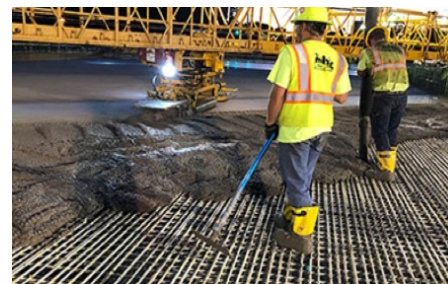
Reduce Cost

- Provides flexibility and cost-saving through a single glass input and higher glass loading with multicompatible resin systems.

Enhanced Service Life

- Compared to standard E-glass, Advantex® glass provides longer service life in applications facing corrosion (including alkali aging) and possesses high-fatigue properties.

Applications

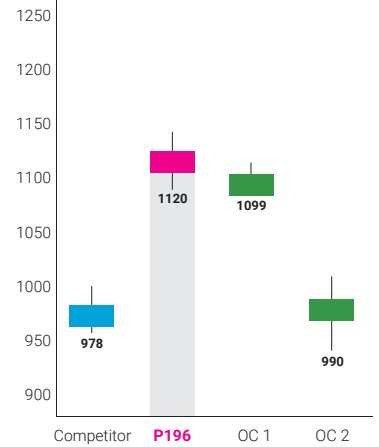


Designed to achieve high performance in a variety of applications, including filament winding (pipes), weaving, rebar, and pultrusion for telecommunication, construction, and other industries.

Technical Characteristics

CHARACTERISTICS	PRODUCTS (TEX)	INDIVIDUAL VALUES			MEASUREMENT METHOD
		MINIMAL	NOMINAL	MAXIMUM	
Linear Density (tex) (Glass + Size)	300	276	300	324	ISO 1889
	600	555	600	645	
	1200	1109	1200	1291	
	2400	2200	2400	2580	
	4800	4438	4800	5162	
	9600	8876	9600	10324	
Moisture, %, loss on drying	All	-	-	0.15	ISO 3344
Solids ¹ (% loss on ignition after drying)	300	0.40	0.55	0.70	ISO 1887
	600	0.35	0.55	0.75	
	1200	0.35	0.55	0.75	
	2400	0.45	0.55	0.65	
	4800	0.50	0.62	0.75	
Linear Density (tex) (Glass + Size)	9600	0.50	0.62	0.75	
Bobbin Height ² (mm)	"C" Bobbin Type	250	270	290	
	"H" Bobbin Type	180	190	200	
Bobbin Diameter ² (mm)	All Full	310	315	300	
	All Partial	-	-	300 <	

Laminate Tensile Strength Comparison



Data based on internal Owens Corning results obtained from unidirectional (UD) samples, testing at the following conditions:

- Resin system: Epoxy LY556 + HY917CV (anhydride hardener)
- Curing cycle: 2h at 100°C + 4h at 140°C
- Glass fiber is ~70% weight fraction – tested following ISO527-5

¹ For solids on direct roving, the sample must be taken after having discarded 1000 g from the outside and/or the inside of the package.

² For reference only.

Availability & Packaging

P196 is available in Russia/CIS. Additional weights and widths may be available upon request by your Owens Corning contact.

PRODUCT DESCRIPTION	AVERAGE FILAMENT DIAMETER, (µm)	LINEAR DENSITY*, (TEX)	AVAILABLE PACKAGE	APPROXIMATE PACKAGE WEIGHT (KG)
P196 16M 300TEX	16	300	H	17 - 19
P196 17M 600TEX	17	600	C	23 - 25
P196 17M 1200TEX	17	1200	C	23 - 25
P196 24M 2400TEX	24	2400	C	23 - 25
P196 24M 4800TEX	24	4800	C	23 - 25
P196 34M 9600TEX	34	9600	C	23 - 25

Rovings are available in a single-end internal-pull package. Pallets are stretch wrapped for load stability. All doffs are wrapped with Tack-Pak™ or shrinkable film for protection during transport. More information is available in the Customer Acceptance Standards.

Labeling

Each individual package is labeled with information, including product name, Tex/yield, producing plant, and production date.

Storage

It is recommended to store glass fiber products in a cool, dry area. The glass fiber products must remain in their original packaging material until the point of usage. The product should be stored in the workshop in its original packaging for 48 hours prior to its utilization, to allow it to reach the workshop temperature condition and prevent condensation, especially during the cold season. The packaging is not waterproof. Be sure to protect the product from the weather and other sources of water.



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