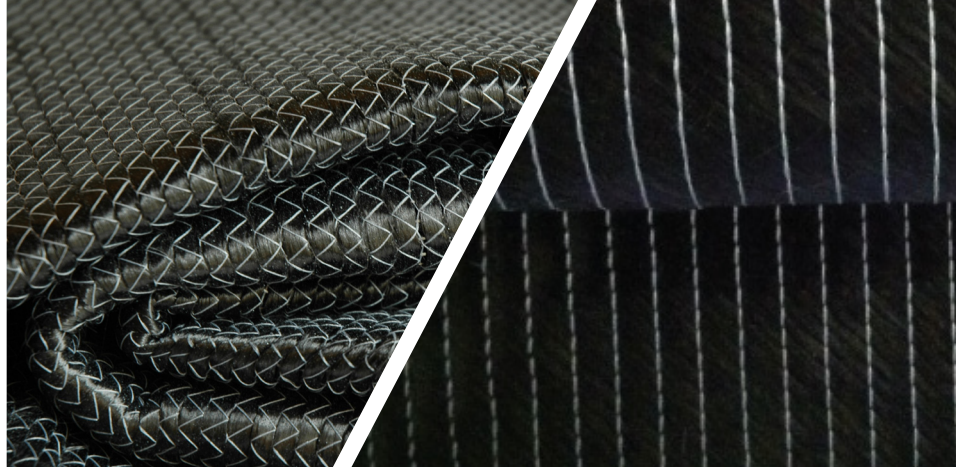


# HP-RTM PROCESS

## DESCRIPTION

ZOLTEK™ offers Carbon Fiber Non-Crimp Fabrics with Fiber Sizings Specifically designed for the HP-RTM Process which provide excellent out of mold surface quality.

Our portfolio of Non-Crimp Fabrics and available sizings for Epoxy, Polyurethane, and Polyamide resins, provide Engineers with an extensive range of design option for HP-RTM Applications.



**Polymers:** Epoxy, Polyurethanes, Polyamides

**Achievable Cure Times:** Epoxy, Polyurethanes: 5 minutes  
Polyamides: 5-10 minutes

## ZOLTEK PX35 FABRICS

ZOLTEK PX35 Unidirectional Fabrics (150-300 gsm) are sized specifically for Epoxy, Polyurethane, and PA applications

	STRENGTH (MPa)	MODULUS (GPa)	TEST METHOD
0° Tensile	1713	129	ASTM D3039
90° Tensile	51	10.1	ASTM D3039
0° Compression	981	110	Boeing ASTM D695
90° Compression	227	18	Boeing ASTM D695
0° Flex	1315	64	ASTM D6272
In Plane Shear	85	4.2	ASTM D3518

*Mechanical properties generated with UD 150gsm ZOLTEK PX35 fabric  
Average values shown. Typical Fiber Volume Fraction (FVF) is 55%.*

## ABOUT ZOLTEK

ZOLTEK helps companies use our commercial-grade carbon fiber in high-volume automotive applications. Our growing range of intermediate products are well-suited for advanced automotive processing technologies. With manufacturing capabilities in Europe, the United States and Mexico, as well as, a quickly expandable capacity, ZOLTEK has become the supplier of choice for high volume auto applications.