

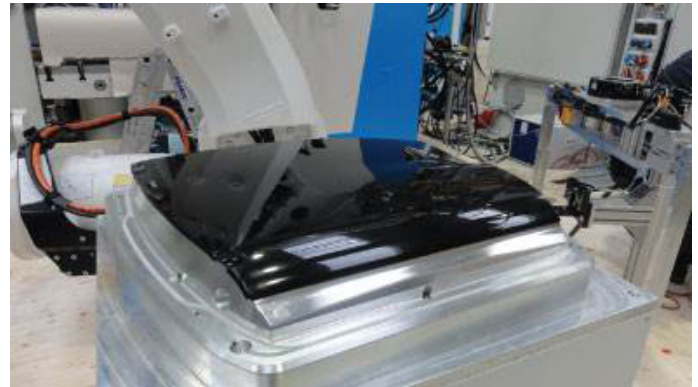
# Surface RTM

Out-of-Mold, Read to Paint Carbon Fiber Components for Structural & Semi-Structural Applications

## THE PROJECT

The Surface RTM process uses ZOLTEK™ PX35 carbon fiber and a polyurethane (PU) resin system. This is then overmolded with a polyurethane paint coating, resulting in a premium and paintable surface quality composite part, directly out of the mold.

This Surface RTM process is the result of a year-long, industry partnership using the latest Krauss Maffei RTM technology, Henkel PU chemistry, Chomarat C-Ply fabrics, Rühl PU coatings, and ZOLTEK'S™ specially sized ZOLTEK™ PX35 carbon fiber.



## THE PROJECT

The process begins with a carbon fiber fabric produced by Chomarat, which is injected with a PU resin (Henkel's Loctite Max 2). Once cured, the mold is opened slightly to allow the PU overmolding material to be injected (Rühl). The part is then cured again. The total time from tool closure to tool open is less than 6 minutes. The part is then removed from the tool, power washed and supplied to the painter – who applies a top and clear coat.

Surface RTM eliminates the primer and sand process to hide print-through, which has the potential to significantly reduce final part costs.

The development of Chomarat's C-Ply fabrics using ZOLTEK'S™ low-cost, large-tow carbon fiber is a significant step forward in cost reduction and will set a new standard for price points and quality carbon fiber panels.

## THE PARTNERS



*Krauss Maffei*

CHOMARAT



## 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.

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