

# Automotive Sector

## Structural Applications and Cosmetic Finish

### Objectives

Structural and cosmetic pre-preg system for mainstream automotive interior and exterior applications, with high volume processing, low programme tooling investment, excellent UV performance and high dimensional stability.

### Material Qualification

ACG LTM<sup>®</sup>26 pre-preg resin system is used extensively across the global automotive industry for the production of components requiring high aesthetic appearance, resin clarity and excellent mechanical performance. The system has undergone thorough UV and weathering qualification testing, providing exceptional results when compared with other structural epoxy resin systems.

### Applications

#### Exterior Trim

LTM<sup>®</sup>26 is used for the carbon fibre bumper extensions as part of the advanced aerodynamics pack on the BMW 3 Series. Functionally they improve the vehicle stability but also underline the technical individuality of the BMW brand. The bumper extensions are manufactured by Die Wethje GmbH Kunststofftechnik (Hengersberg, Germany), who were very careful both in their selection of the composite materials and in the moulding process used for the components.



At only 140g per car, these bumper extensions are lighter than other similar components, and with the materials, tooling and processing route optimised to give the most cost effective solution at these volumes, Die Wethje selected ACGs LTM<sup>®</sup>26 resin system because it was shown to offer the best balance of structural, cosmetic and commercial performance.

#### Spoilers

LTM<sup>®</sup>26 is also used for the BMW Mini spoiler. In this application the key technical requirements are aerodynamic structural performance and low part weight. This is also supplemented by excellent carbon aesthetics.



These materials are also extensively used on interior trim applications on vehicles from Ford's Premier Automotive Group. The production volumes on all of these applications continues to highlight that carbon composite pre-preg meets the industry's mass production technical and commercial requirements.

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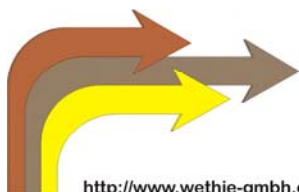
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