Chrysler, SABIC and Intertec Systems

Chrysler Jeep Cherokee - Optimized Instrument Panel for Mass Reduction

This part is an instrument panel retainer molded at 2.0 mm material thickness in long glass fiber polypropylene (LGFPP) composite resin.

- The weight savings equate to 1.7 pounds per part, a 27% reduction. The most significant factor is reducing the wallstock to 2.0 mm from the typical thickness of 2.5 to 4 mm. The 30% long glass fiber polypropylene composite material, STAMAX™ resin from SABIC, combined with the technical know-how is an enabler for reducing mass.

- The design accommodated a reduction in material thickness from 3.0 to 2.0 mm, while also meeting instrument panel performance and dimensional requirements. The material provides modulus and stiffness for high performance despite the thin walls.

- This significant weight-saving solution may be applied to other structural applications and application programs to realize similar benefits. The approach is innovative, but also practical, proven and ready to apply, contributing to weight out and fuel efficiency gains at a lower cost.