Magna has put a new twist on joining thermoplastic materials in order to help automakers cut weight and costs: torsional welding. The torsional welding process, developed by Magna for automotive applications at its exteriors plant in Liberec, Czech Republic, presents a new way to join plastics. It features a high-speed twisting motion that creates enough friction-based heat to join a plastic bracket to a thermoplastic fascia.

**Category:**
Enabling Technology

**Application:**
2017 Skoda Octavia

**Weight Savings:**
10%
Lighter than previous system

**Methodology:**
Design Optimization