



Materials

Non-weakened Skin for Seamless Airbag System

OEM/Vehicle

Ford Motor Company
2018 Ford EcoSport

System Supplier

Faurecia Interior Systems

Material Processor

Faurecia Interior Systems

Material Supplier

Haartz

Resin

Deploy Bilaminate TPO

Tooling/Equipment Supplier

GS Engineering



This scoreless skin technology eliminates the visible line of the airbag door. A special bi-laminate foil with TPO chemistry for unique tensile, shear and processing characteristics enables an improved surface appearance over previous scored IP skin constructions. Parts are injection molded with in-mold lamination. No high capital expenses (\$750,000 cost avoidance) for laser score equipment make this doable globally in low cost, low tech countries. The previous process included injection molding the substrate, cutting and sewing and hand wrapping the top skin cover and laser scoring the composite panel. Streamlining the production results in a \$1.5/part cost saving. Since the skin is not weakened by scoring, the underlying substrate can be made weaker to enhance the airbag deployment door opening time.