



COMPOSITE BODY SOLUTIONS™
(CBS™)

Structural Reinforcement Technology.

L&L's Composite Body Solutions (CBS™) structural reinforcement technology improves vehicle body structure performance. Our technology enables weight reduction, while maintaining or improving vehicle durability, stiffness, and crash worthiness.

cbs.llproducts.com

COMPOSITE BODY SOLUTIONS™ (CBS™)

Performance, Mass, Process, and Cost Optimization.

Our CBS™ technologies combine highly engineered heat-activated structural adhesive material with a customized thermoplastic carrier for lightweight but strong structural applications. L&L CBS™ reinforcements can eliminate localized durability problems, such as metal fatigue, by increasing overall stiffness and distributing loads more effectively across the structure. During a crash event, L&L CBS™ technology provides both section integrity and load path management.

The L&L Products team uses its proven expertise with advanced CAD/ CAE simulation to design a three-dimensional engineered part. The result is a structural insert that is dry to the touch and ready to assemble into the body structure prior to cavity closure and E-coating.



Uncured state (before activation and foaming)



Cured state (after activation and foaming)

KEY PRODUCT ATTRIBUTES



STRONGER

- Load path management
- Section integrity
- High strength/stiffness-to-weight ratio
- Increased durability



QUIETER

- Improved NVH performance when our structural reinforcement technology is integrated into the body structure



PROCESS IMPROVEMENT

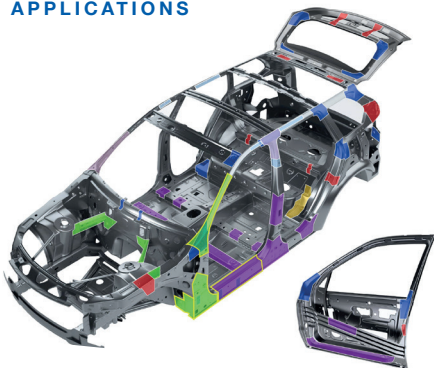
- Reduced implementation timing
- No impact to the body shop



DESIGN FLEXIBILITY

- Increased stability of joints and sections within the body structure
- Lightweighting potential, enabling thickness reduction and part replacement

APPLICATIONS



- Stiffness and NVH
- Durability
- Front Crash
- Side Impact
- Rear Crash
- Roof Crush
- Roof Load Security
- Small Overlap Front