

Creating the future

of fiber-reinforced plastics



DIEFFENBACHER

 **Fraunhofer**
ICT

Collaboration from idea to completion



Collaboration towards the future – Development Center at Fraunhofer ICT

The long-standing cooperation partners Dieffenbacher and Fraunhofer ICT intensified successful their collaboration in the development of innovative fiber-composite solutions, creating an R&D alliance that takes into account innovative and advancing technologies. A Development Center is located at a neutral site offering the opportunity to further developments of fiber-composite components in the compression molding technology. The pooling of the activities of both institutions – from material and process research to product engineering and production-scale prototyping – harbours synergy effects that will lead to faster innovation and efficient transformation of research and development solutions into industrial products.

When developing the High-Pressure Resin Transfer Molding process, the cooperation partners work closely with system supplier KraussMaffei.

Dieffenbacher

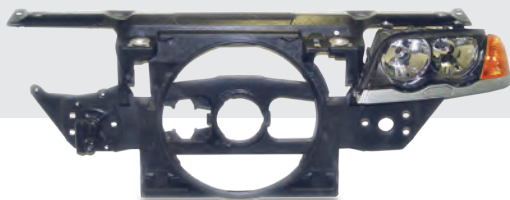
Dieffenbacher is one of the leading manufacturers of complete system solutions in the field of forming. Our product portfolio includes production lines for manufacturing of components out of HP-RTM, SMC and LFT/GMT. Other than the hydraulic press, which is the core component, all lines will be offered with automation systems for part handling and part-remachining. The company also focuses on developing automation of HP-RTM and direct processes for fiber reinforced thermoplastic and thermosetting composites (e.g. LFT-D and D-SMC).

Fraunhofer ICT

Activities at the Fraunhofer ICT focus on applied research and product development to the pilot plant level. In the field of fiber composites, Fraunhofer ICT carries out intensive material- and process-related research for thermoplastic and thermoset composites. In this area of research, emphasis is placed on High Pressure Resin Transfer Molding as well as direct processes: LFT-D and D-SMC.

Customer benefits provided by the Development Center

- One-stop shop for component, material, mold and process innovations
- Pooled expertise along the entire development chain, from product engineering to prototype
- Independent Development Center with production capability for customized development work
- Customer involvement during early stages – on-site training
- Benchmark and holistic assessment of the press technology compared to alternative technologies



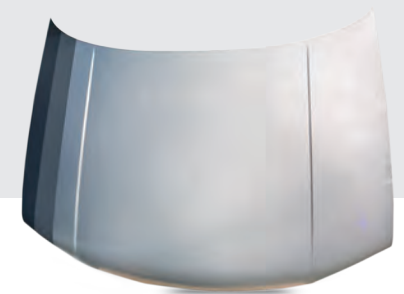
Front-end assembly carrier tailored LFT-D



Dashboard carrier LFT-D



Bumper Actros SMC



Engine hood D-SMC

Fraunhofer Institute for Chemical Technology ICT

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