

Laser treatment for tailored fiber reinforced structures

...automatable...

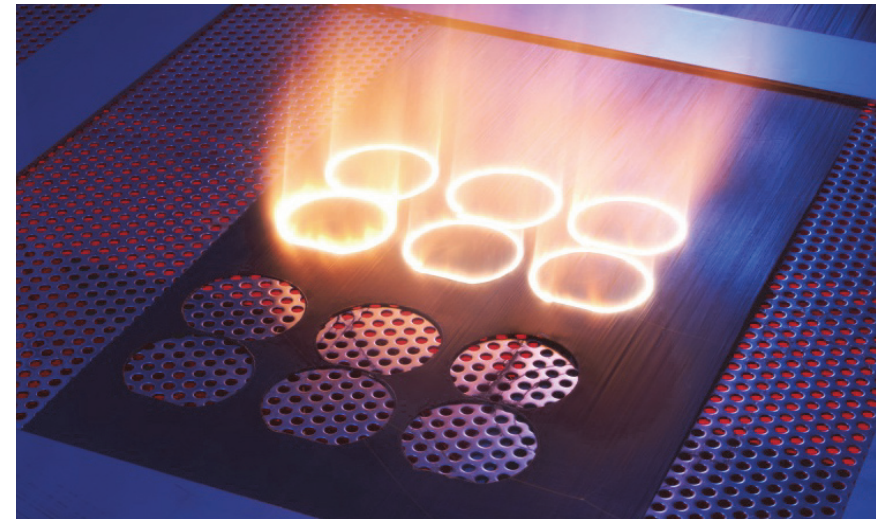
...wear-free...

...productive...

...force-free...

...flexible...

...selective...



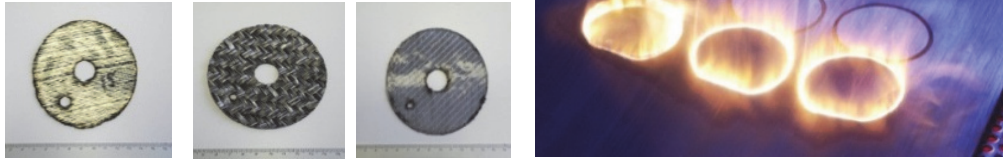
Annett Klotzbach, Andreas Fürst, Frank Kretzschmar, Karsten Zenger

Fraunhofer Institute Material and Beam Technology Dresden

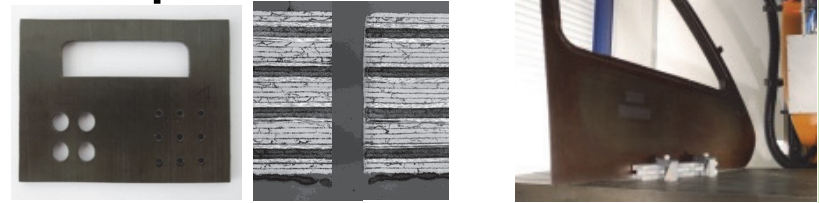
Applications of remocut®FRP



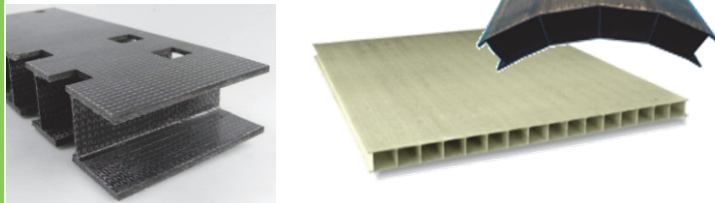
Laser cutting „on the fly“
of pliable fabric



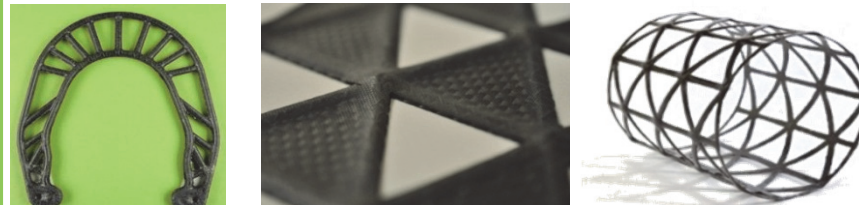
Laser drilling of
consolidated
composites



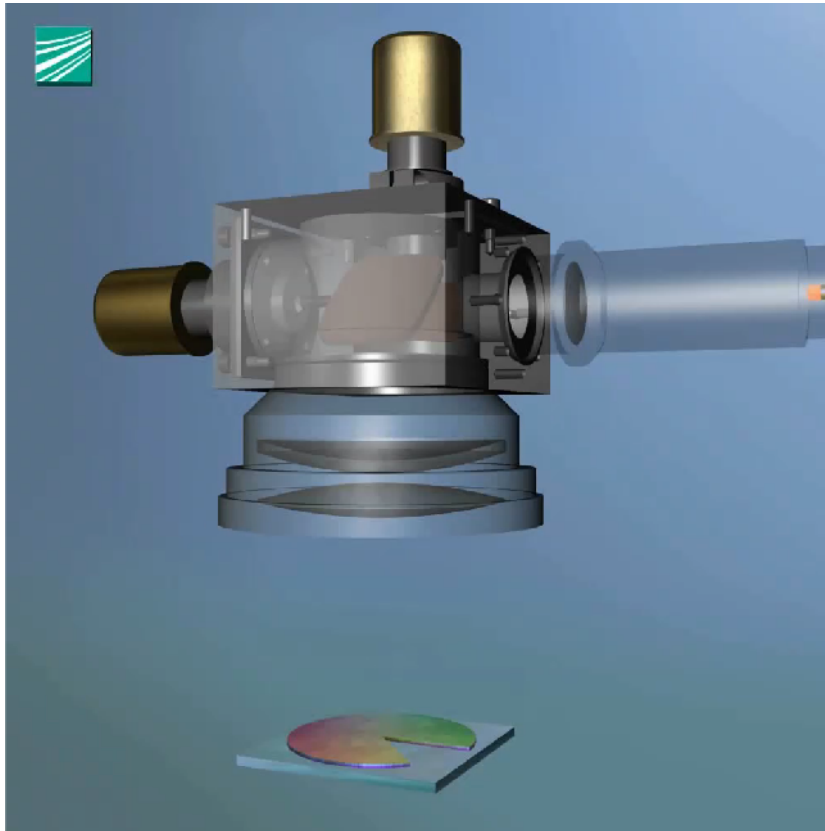
Laser cutting of
spacer fabrics



Laser trimming of tailored
fiber placement parts



Principle of remocut®FRP



Best quality lasers and
high-speed beam deflection
enable
thermal cutting and ablating

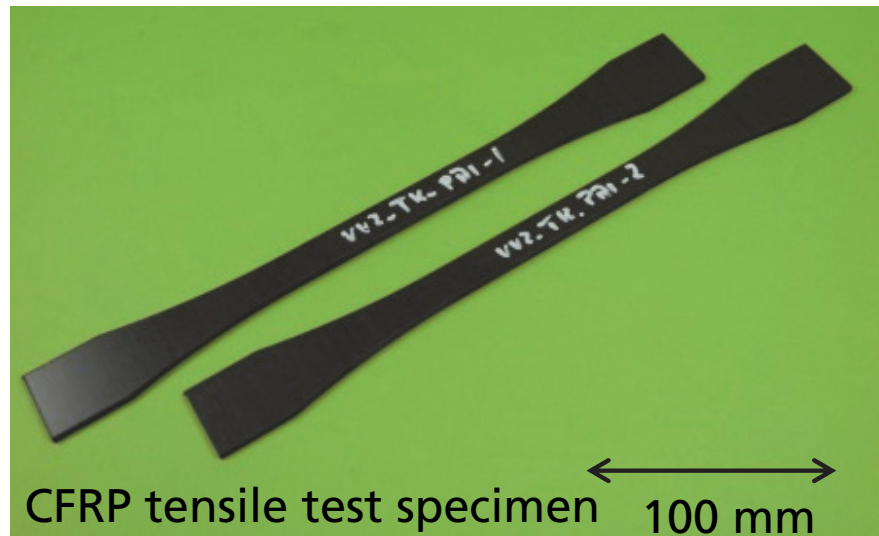
Remote cutting

Principle of remocut®FRP



Best quality lasers and
high-speed beam deflection
enable
thermal cutting and ablating

The heat affected zone can
be minimized by
short interaction times



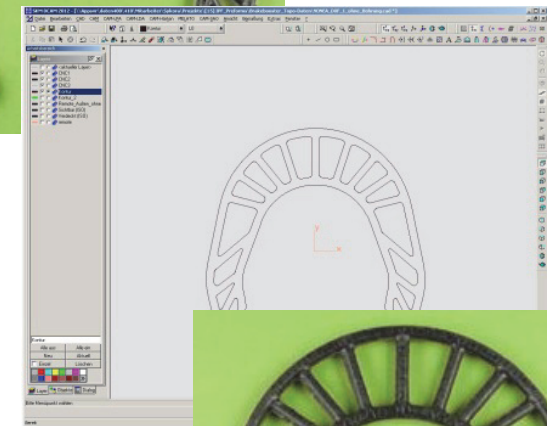
We are offering:

Technology developments for the industrial use of **remocut®FRP**

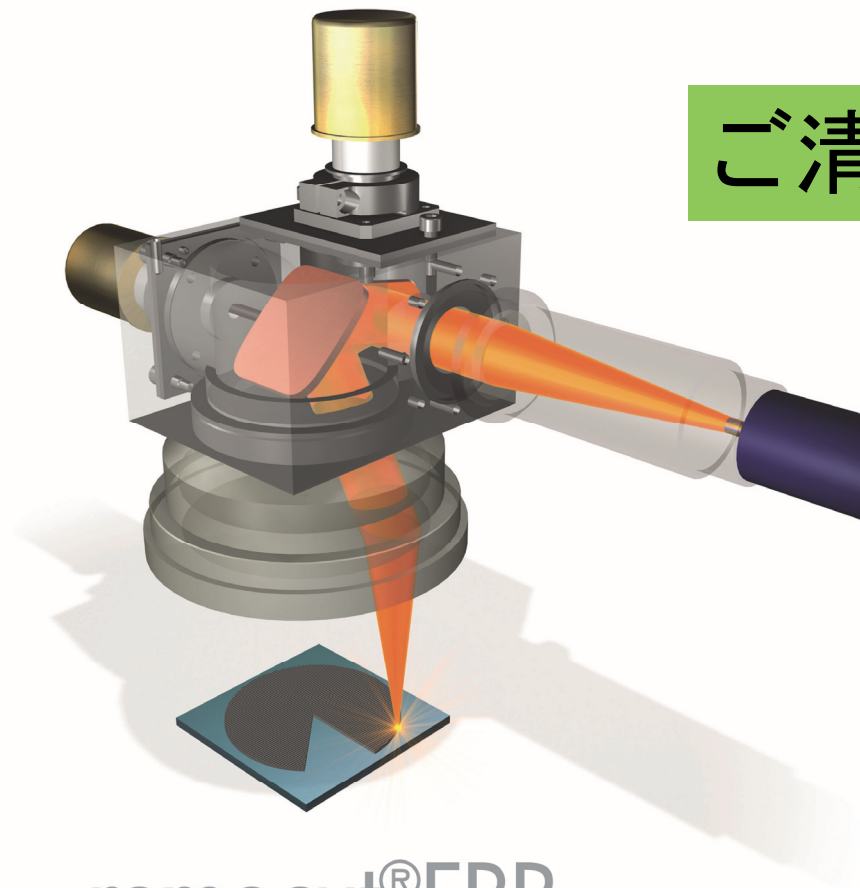
Feasibility studies
on real composite parts

Process design and
development

Application adapted
soft- and hardware
components



ご清聴ありがとうございました。



remocut®FRP –
high-power on the fly



アネット・クロツツバッハ

フラウンホーファーIWS（材料・ビーム技術研究所）
レーザアブレーション・切削部門
複合材料技術コーディネーター

Winterbergstraße 28 | 01277 Dresden | Germany
Phone +49 351 83391-3235 | Fax +49 351 83391-3300
annett.klotzbach@iws.fraunhofer.de | www.iws.fraunhofer.de