Laser welding of plastics and composite structures

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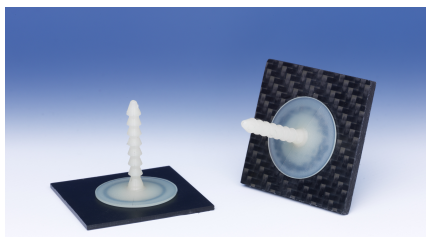

Laser transmission welding can be used reliably to join thermoplastics and fiber-reinforced composites.

Contact

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Social Networks

With laser transmission welding, a large variety of plastics and composite materials can be welded. Also non-similar materials can be joined. The group “Composites” offers welding processes for the following materials and material combinations:

- Constructional and high-performance plastics
- Glass-fiber reinforced components with CFRP components
- CFRP-CFRP joints
- Thermoset/thermoplastic joints (hot melt gluing, SIPN structures)

Furthermore, the group offers new, innovative laser-based processes for fiber placement.

Welding processes can be analyzed using pyrometry, thermography and NIR and VIS cameras.

This service is, among others, used in the following areas:

Manufacturing processes:

- Welding

Material groups:

- Composites
- Plastics

Imaging processes:

- Micro-CT images
- SEM images

Consulting, development and contract research:

- Feasibility studies
- Process and system development
- Technology consulting and transfer
- Technology transfer from research to industry

Fields of application and industrial sectors:

- Aerospace
- Automotive
- Material processing
- Medical technology and biotechnology
- Sensor technology

We will be happy to discuss your individual requirements. Please feel free to contact us.

Contact

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