

# PRESS RELEASE

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## Fraunhofer ILT and TRUMPF offer joint solutions for Laser Material Deposition

**The Fraunhofer Institute for Laser Technology ILT in Aachen and TRUMPF Laser- und Systemtechnik GmbH from Ditzingen have signed a cooperation agreement. They want to cooperate more closely in the field of Laser Material Deposition and accelerate the transfer of the technology to industry. Customers will benefit from the unique combination of world-leading laser system technology and many years of application-specific process know-how.**

How can I increase my productivity in Laser Material Deposition? What are the best materials for my process? And how fast can I coat with them? These are typical questions that Dr. Thomas Schopphoven and his team at Fraunhofer ILT are asked by interested customers from industry. "Our core business is developing application-adapted processes and system technology components. The basis for this is our 30 years of experience in Laser Material Deposition – in applications we have developed for a wide variety of industries", says Schopphoven.

During this period, the Aachen scientists have decisively influenced the development of the technology and set numerous trends. Innovations such as extreme high-speed Laser Material Deposition EHLA have won a number of prizes and been successfully implemented industrially many times over.

"When we transfer our technologies to industrial applications, our customers are increasingly focusing on the questions of systems engineering implementation, especially with regard to the availability, stability and suitability of the components.", Dr. Thomas Schopphoven is sure.

This is where ILT's partner TRUMPF comes in with more than 20 years of experience. As the world's leading manufacturer of laser systems and components for Laser Material Deposition, TRUMPF has the necessary know-how in manufacturing robust, reliable and highly productive machines for laser material processing in industrial series production.

For Marco Göbel, industry manager at TRUMPF in Ditzingen, the cooperation with Fraunhofer ILT is a win-win situation for customers: "Thanks to the close cooperation with Fraunhofer ILT, we can offer solutions for the entire production chain from a single source. By combining our system technology – optimized for industrial use – with

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processes adapted or specially developed for this purpose, we help customers all over the world benefit from these innovations.”

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**Research and development on the latest TRUMPF system technology**

For process and application development in Aachen, TRUMPF provides the team at Fraunhofer ILT with state-of-the-art laser systems that have various optical systems and powder feed nozzles. “In this way, we research our processes directly on industrially relevant systems. This enables us to transfer our research into customer applications particularly efficiently”, says Dr. Thomas Schopphoven, head of the Laser Material Deposition Competence Area at Fraunhofer ILT.

The plant will be installed at the beginning of this year and available for the first tests in the spring. Numerous promising applications are already in sight, such as the economical coating of passenger car brake discs or the wear and corrosion protection of hydraulic cylinders.

For the two partners, this is another important step in their long-standing collaboration. Plans are already underway to expand the cooperation between TRUMPF and Fraunhofer ILT in other areas of laser materials processing.



**Image 1:**  
**Extreme high-speed Laser**  
**Material Deposition EHLA**  
**with innovative TRUMPF**  
**system technology.**  
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(Holding), Ditzingen,  
Germany.

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**Image 2:**

**Aim of the cooperation:**  
Applications such as the  
economical  
brake discs or the wear and  
corrosion protection of  
hydraulic cylinders.  
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