

PRESS RELEASE

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Factory of the Future on Research Campus

Basic research for Industry 4.0 – Joint project by TRUMPF and Fraunhofer IPA

Ditzingen/Stuttgart, July 29, 2015 – The TRUMPF company, world leader in machine tools for flexible sheet metal processing and industrial lasers, is embarking on a five-year strategic joint venture with the Stuttgart-based Fraunhofer Institute for Manufacturing Engineering and Automation IPA. The aim of this long-term cooperation is to integrate current research findings from Industry 4.0 into sheet metal processing. In the so-called "TRUMPF LAB," employees of TRUMPF and Fraunhofer IPA will be working together to develop innovative solutions for the manufacturing technology of the future.

The TRUMPF LAB is part of the Stuttgart Technology and Innovation Center, or S-TEC for short. This new concept of a collaborative research campus was the brainchild of the Fraunhofer IPA and Stuttgart University as well as its affiliated institutions. The other Stuttgart Fraunhofer Institutes and regional and national industrial enterprises also belong to S-TEC, which has produced not only the technology-oriented TRUMPF LAB but also initiatives such as "ARENA2036" for lightweight construction.

"With these initiatives, we're bundling public and private sector research activities in one location, and focusing on topics with strong socio-political relevance in a targeted manner," explains Professor Thomas Bauernhansl, Director of the Fraunhofer IPA. "This industry-on-campus concept represents a research, development and demonstration environment producing hands-on innovative solutions. I'm looking forward very much to working with TRUMPF, and I'm very optimistic that the results from this cooperation will not only be of market relevance for the company itself but also for other firms from other sectors."

IN COOPERATION WITH





In the new TRUMPF LAB at Fraunhofer IPA, employees of both project partners will be working together on the basic research into Industry 4.0. The cooperation will include many aspects of the factory of the future, with the initial projects focusing on "intralogistics", "the service-oriented machine" and "self-governing production." The aim is for content to evolve during the course of the joint venture – so new project topics will be regularly added.

The expectations of Dr. Heinz-Jürgen Prokop, Director of Development and Purchasing at TRUMPF, are correspondingly high: "We expect a great deal from this cooperation, since two different perspectives are being combined here under one roof: TRUMPF's deep knowledge of customer needs, technologies and markets in the sheet metal processing sector, and Fraunhofer IPA's scientific approach plus its extensive experience from many industrial projects relating to Industry 4.0. This combination has great potential for innovation. We plan to elaborate ideas for new solutions and business models, and develop them further using application-based functional models. The goal is to raise the productivity and profitability of companies in sheet metal production to a new level."

TRUMPF sees the developments surrounding Industry 4.0 as a great opportunity. For years now, the company has actively contributed toward the networked production of the future. For example, TRUMPF participates in various working groups and projects in order to contribute experience, expertise and ideas. Since 2011, the company has been a member of the Industry 4.0 working group initiated by the Federal Government, and has played a major role in defining the "smart factory of the future." TRUMPF is also a member of the working group SmartService Welt, and a partner in the Federal Ministry of Education and Research's CyProS project, the Smart Data Innovation Lab, and Allianz Industry 4.0 BW.

Since the 1990s, Fraunhofer IPA has run a globally unique learning factory for adaptable production; now, in the age of Industry 4.0, the most diverse cyber-physical systems are being integrated into it and networked together. With financial support from the State of Baden-Wuerttemberg and project partnerships from industry, machines, software and processes are being integrated into the so-called "Application Center Industry 4.0" and being made fit for the future. The cooperation with TRUMPF also fits in with this application model, and will benefit from already established expertise.

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Dr. Heinz-Jürgen Prokop, Head of Development and Purchasing at TRUMPF (left) and Professor Thomas Bauernhansl, Director of Fraunhofer IPA, exchange a symbolic handshake. (Source: Fraunhofer IPA/ Foto: Clemens Hess)



From left: TRUMPF Project Manager Klaus Bauer, Dr. Heinz-Jürgen Prokop, Professor Thomas Bauerhansl, and IPA Project Manager Ulrich Schneider in the "Application Center Industry 4.0." (Source: Fraunhofer IPA/ Foto: Clemens Hess)



About TRUMPF

The high-technology company TRUMPF produces machine tools, lasers and electronics for industrial applications. Products manufactured with the company's technology can be found in almost every sector of industry, from vehicles, building technology and mobile devices to state-of-the-art power and data storage. TRUMPF is the world technological and market leader for machine tools used in flexible sheet metal processing, and also for industrial lasers. In 2014/15 the company – which has approximately 11,000 employees – achieved sales of 2.72 billion euros (preliminary figures). With more than 60 subsidiaries, the TRUMPF Group is represented in almost all the countries of Europe, North and South America, and Asia. It has production facilities in Austria, China, the Czech Republic, France, Germany, Great Britain, Italy, Japan, Mexico, Poland, Switzerland, and the USA.

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With nearly 1 000 employees, the **Fraunhofer Institute for Manufacturing Engineering and Automation IPA**, Fraunhofer IPA, is one of the largest institutes in the Fraunhofer-Gesellschaft. It has an annual budget of approximately 60 million euros, of which more than one third derives from industrial projects. The institute's research focus is on organizational and technological aspects of production. We develop, test and implement not only components, devices and methods, but also entire machines and manufacturing plants. Our 13 departments are coordinated via six business units, which together conduct interdisciplinary work with the following industries: automotive, machinery and equipment industry, electronics and microsystems, power industry, medical engineering and biotechnology as well as process industry. The research activities of Fraunhofer IPA aim at the economic production of sustainable and personalized products. We regard cyber-physical production processes as topics of the future.