Press Release

TRUMPF becomes one-stop supplier for industrial 3D printing of metal parts

New 3D printers to be presented at formnext in November – Focus on industrialization considering the whole process chain – Solutions for external powder and parts management – Breadth of technology with LMF and LMD solutions

Ditzingen, September 26, 2016 – Laser manufacturer TRUMPF continues to build its product and technology portfolio for the additive manufacturing of metal parts. The company will be showcasing new 3D printers and one-stop solutions for a comprehensive system of industrial manufacturing using additive technologies at the formnext trade fair in Frankfurt, November 15-18, 2016. Here, TRUMPF continues to pursue breadth: with expertise in both Laser Metal Fusion (LMF) and Laser Metal Deposition (LMD), the Ditzingen-based company is the only manufacturer worldwide to have mastered both relevant technologies for industrial 3D printing. As a result, it can select the best solution according to the application and the component for a variety of sectors. While LMF solutions manufacture complete parts layer by layer in a powder bed, in the case of LMD the laser forms a melt pool on the surface of a component and fuses the powder – applied simultaneously and coaxially – so as to create the desired shape.

“Since we launched our new LMF and LMD solutions at the end of 2015, we have been seeing a significant upwards trend as well as interest from all areas of industry,” says Peter Leibinger, Head of TRUMPF Laser- und Systemtechnik GmbH. “More and more customers are using additive technologies not just to manufacture prototypes, but in full-scale production as well,” says Leibinger. This extends all the way from the tool and mold-making industries, through automotive and aerospace applications, all the way to dental and supplier solutions.

New 3D printer with LMF technology

One of the key product highlights in Frankfurt will be the new TruPrint 3000. The new system comes with a 500 watt laser and can manufacture components of up to 400 millimeters in height and 300 millimeters in diameter. It works on the basis of an industrial exchangeable cylinder, which allows for parallel setup and post-

processing and guarantees a high level of machine availability. “With the TruPrint 3000, we are shifting the focus onto the industrialization of additive manufacturing based on the whole process chain. That means that we consider not only the manufacturing technology itself, but also – and this is quite in the spirit of Industry 4.0 – the work steps that precede and follow it,” says Leibinger. The process chain begins with the preparation of data for the manufacturing task, continuing on via the machine and the whole manufacturing process, including monitoring to finish with an industrial system periphery for smart parts and powder management. Thanks to consistently reproducible powder and part quality, the TruPrint 3000 is ideally equipped for series production.

Technological breadth with LMF and LMD solutions

One year after the successful market launch of the TruPrint 1000, TRUMPF will also be showcasing new industrial application scenarios for this solution at the formnext trade fair. The TruPrint 1000 is a compact and universally deployable LMF system that can cost effectively manufacture fist-sized components of up to 100 millimeters in height and 100 millimeters in diameter. The technology portfolio is rounded off with the LMD solution TruLaser Cell 3000. This machine is capable of generating just about any sandwich structure you care to imagine – at a rate of up to 500 cubic centimeters per hour. What about restrictions on the combination of materials? Next to none! By drawing on LMD technology, TRUMPF is addressing not only additive manufacturing, but joining technology, the manufacture of coating systems, and all sort of repair techniques as well.

TRUMPF has also prepared a little glimpse into the future. “We want to make further improvements in the productivity of our additive manufacturing solutions – and are currently working on new, innovative machine concepts,” says Leibinger of the next generation.

LMF – TruPrint 1000

The TruPrint 1000 can manufacture components of up to 100 millimeters in height and 100 millimeters in diameter.

LMF – Automotive sector

This impeller is a prototype component from the field of powerplant development. The component geometry optimizes flow conditions in the engine area.

LMD – TruLaser Cell 3000

The TruLaser Cell 3000 can reach a manufacturing speed of up to 500 cubic meters per hour.

Peter Leibinger

Vice-Chairman of the Managing Board of the TRUMPF GmbH + Co. KG, head of the Laser Technology and Electronics Division.

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About TRUMPF

The high-technology company TRUMPF provides manufacturing solutions in the fields of machine tools, lasers and electronics. These are used in the manufacture of the most diverse products, 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 2015/16 the company – which has approximately 11,000 employees – achieved sales of 2.8 billion euros (preliminary figures). With almost 70 subsidiaries, the TRUMPF Group is represented in nearly all the countries of Europe, North and South America, and Asia. It has production facilities in Germany, France, Great Britain, Italy, Austria, Switzerland, Poland, the Czech Republic, the USA, Mexico, China and Japan.

For more information about TRUMPF go to www.trumpf.com

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