

3D printing meets high-tech industries: toolcraft uses TRUMPF's overall solutions for additive manufacturing



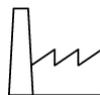
MBFZ toolcraft GmbH

www.toolcraft.de

toolcraft is a trailblazer in pioneering technologies such as 3D printing in metal and the construction of individual turnkey robot solutions. Here, the company provides the entire process chain in-house – from the idea and production, right up to the qualified part in the areas of CNC machining, 3D printing in metal, as well as injection moulding, electrical discharge machining and mould making. Customers include market leaders from the fields of semiconductor technology, aviation and aerospace, medical technology, the optics industry, specialist mechanical engineering, as well as motorsport and automotive technology. The medium-sized family company based in Georgensgmünd und Spalt, Germany, was founded in 1989 by Bernd Krebs.



NUMBER OF EMPLOYEES
403



INDUSTRY
Manufacture of precision components along with automation solutions



TURNOVER
EUR 39.5 million

APPLICATIONS

- 3D printing in metal (Laser Metal Fusion, Laser Metal Deposition) laser marking

TRUMPF PRODUCTS

- TruPrint 3000 TruLaser Cell
3000 TruMark Station 7000

toolcraft is a pioneer in new manufacturing technologies, such as 3D printing in metal, and the construction of customised turnkey robot solutions. Their customers come from the aviation and aerospace industry, the semiconductor industry, medical technology, as well as

the automotive and energy sectors. A close, partner-like cooperation with the development departments of customers, research institutes and universities is an integral part of the company philosophy. Here toolcraft always aims to be directly involved in the development of new trend technologies, and to be able to offer the best complete solution on the market together with their partners. From the idea, to production, right up to the qualified part – the company covers the entire process chain in-house.

Challenges

Around seven years ago, the management board of toolcraft made a landmark decision: 3D printing using metal was to be the next innovative production technology that the company was going to invest all of its efforts in. The high-tech company looked for a partner on the same wavelength to introduce a complete solution – a partner that you could deliver top performance with. To this end, the company tested systems from different manufacturers of additive manufacturing systems on the market.

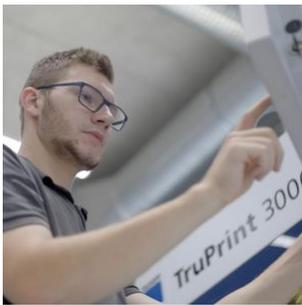


"TRUMPF has a clear advantage in that they develop the laser themselves, and know how to handle the medium. In conjunction with the highest standards for their own machines, for us, the company is the perfect partner in the field of 3D printing with metal."

Christoph Hauck
Managing Director of toolcraft

Solution As a customer in the field of laser marking systems, toolcraft was already familiar with and had held TRUMPF in high regard for many years as an expert and pioneer in the field of laser processing. As they were a satisfied customer, the company also included TRUMPF as a manufacturer of 3D printers for industrial manufacturing in the selection process. Above all, toolcraft was impressed with TRUMPF's overall concept, comprising of sophisticated machines,

external industrial part and powder management, intelligent monitoring solutions, as well as comprehensive services and digitalisation solutions – and they made the decision to invest in several TRUMPF machines. toolcraft was also delighted by the high machine utilisation rate. This is because build and supply cylinders can be changed quickly and safely for work parallel to production, meaning that downtimes are reduced to a minimum. **Implementation** toolcraft invested in the construction of a new additive manufacturing hall. When fitting it out with machines, toolcraft decided on several TruPrint 3000 systems, as these are "fully integrated solutions" and have optimal peripheral solutions before and after the LMF process. The specialists were particularly impressed by the fact that, compared to other systems, the industrial part and powder management process is much better and can be integrated more easily. Furthermore, the intelligent monitoring solutions ensure optimal transparency over the LMF process. Another advantage was that the system and the laser come from the same company, and are perfectly coordinated with each other. **Outlook** toolcraft has since invested in their fifth TruPrint 3000 system. Together with TRUMPF, the company would like to continue shaping the additive manufacturing process in an even more cost-effective manner, and to further improve performance and component quality, for example, in regards to the parameters. Both toolcraft and TRUMPF are convinced that both companies can continue to benefit from the cooperative exchange in the future, and that they can advance additive manufacturing technology with combined efforts.



Find out more about TRUMPF products



TruPrint 3000

The TruPrint 3000 is a universal medium-format machine with industrial part and powder management, designed for flexible series production of complex, metal components using 3D printing. The machine is ideal for use in job shops when combined with the industrial part and powder management.

To the product



Industrial part and powder management

Optimise the way you handle powder and components with TRUMPF products for industrial part and powder management such a silo, unpacking station and vacuum conveyor. This means you can achieve additive series production that is industry ready and cost effective, and make the most of noticeably shorter throughput times – just like our customer, MBFZ toolcraft GmbH.

To the product



TruLaser Cell 3000

With the compact, high-precision 5-axis TruLaser Cell 3000 laser machine, you can process small to medium-sized components using laser metal deposition (LMD). Whether for coating, generating or repairing – the TruLaser Cell 3000 can be used in a variety of applications in the LMD field.

[To the product](#)



TruMark Station 7000

With its generous inside dimensions, the TruMark Station 7000 laser marking system provides plenty of space for almost any application. It doesn't matter if you want to mark single large or heavy components with laser precision, or a large number of small parts in a series.

[To the product](#)

- / -

