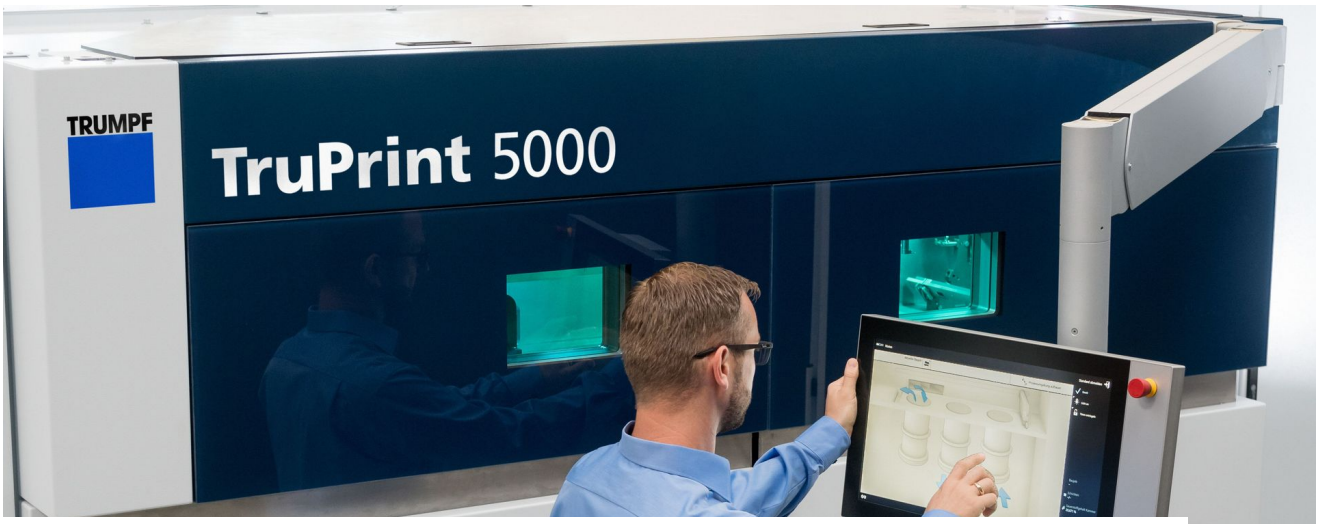


RAMONA HÖNL

"The corona crisis is the ideal time for 3D printing"

TRUMPF's Frank-Peter Wüst is a specialist in 3D printing, also known as additive manufacturing (AM). He sees the corona crisis as a great opportunity for 3D printing in industrial manufacturing. He reveals the reasons why in an interview.

Mr Wüst, we know that 3D printing has been able to provide quick support for medical technology during the corona crisis. What other potential do you still see?

3D printing has huge potential to re-establish supply chains. All sectors can in principle benefit from this, for example, the automotive and energy industries. It is not just about replacing another technology with 3D printing. Additive manufacturing processes is more about giving us an opportunity to rethink and sustainably improve supply chains. For example, a complex component can often be printed "in one piece" rather than assembled from several individual pieces. This can save time and costs as well as increase quality. A spring heat sink on our TRUMPF laser machines, for example, is made up of ten individual parts when traditional manufacturing methods are used. In the case of 3D printing, we need only one component. This has enabled us to save 30 percent in costs and to simplify assembly.

In which areas is AM most beneficial?

3D printing offers benefits in almost every industry. At TRUMPF, we envisage plenty of opportunities in medical technology, aerospace, dental technology and the energy industry. It's not just about companies improving their products with 3D printing, but more about the opportunities for in-house production. For example, 3D printing can optimize grippers in production lines by integrating functions and improving cooling and gas flow.

Supply chains will eventually be working again. 3D printers are quite expensive. When is it worthwhile for a company to invest in a system?

Whether a 3D printer is worthwhile is not just a question of investment costs but more about creating a business case for each additively manufactured part and taking all factors into account. Component costs such as for production, assembly and tools must be included in the calculation as well as system performance factors such as longer service lives and increased capacity utilization. 3D printing also offers added value along the entire value chain, for example, due to independence from suppliers and lower storage costs. When a company is able to take advantage of these benefits, it pays to invest in a 3D printing system

Right now, lots of employees are highly motivated and want to be innovative and to explore the opportunities of additively manufacturing their products.

Frank-Peter Wüst, Senior Application Expert for Additive Manufacturing at TRUMPF

Is the crisis a good time for companies to think about 3D printing?

Absolutely. Right now, lots of employees are highly motivated and want to be innovative and to explore the opportunities of additively manufacturing their products. This is exactly what is needed to be successful with 3D printing. At TRUMPF, we have developed a training program that helps companies to get started with 3D printing – from understanding the process to selecting components and integrating it into their own process chain.

The AM sector includes many new companies and start-ups. What impact has the corona crisis had on the industry?

One effect might be for start-ups and smaller companies to work more closely with larger firms because the former can often react faster and more flexibly than large companies in times of crisis. Large companies, on the other hand, have greater financial leeway. Cooperation is therefore beneficial to get innovative ideas implemented faster. This would provide major added value for the industry as a whole.

Does additive manufacturing now have an opportunity to move into new areas of traditional manufacturing? If so, why?

In times of crisis, companies are often under pressure to think differently and come up with new ideas. 3D printing opens up many opportunities to do this. However, fully replacing traditional technologies with 3D printing is feasible only in a few industries. The technology and entire value chain needs to be examined closely. Designers also need to free themselves from the limitations of traditional methods and learn to think "in 3D".



Frank-Peter Wüst is Senior Application Expert for Additive Manufacturing at TRUMPF.



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