



Press Release

TRUMPF boosts 3D cutting speed

New BrightLine Speed technology makes 3D laser cutting even more efficient // Cuts parts up to 60 percent faster // Half the gas consumption of conventional laser cutting

Ditzingen, January 13, 2022 – High-tech company TRUMPF has developed a new technology that increases the speed and efficiency of sheet-metal cutting. Known as BrightLine Speed, this innovative solution offers particularly striking benefits for the 3D cutting of hot-formed parts – for example, those used to produce B-pillars and door frames in auto manufacturing. “BrightLine Speed allows us to increase cutting speed by up to 60 percent for sheets up to four millimeters thick,” says TRUMPF product manager Ralf Kohllöffel. But that’s not all: BrightLine Speed also consumes around 50 percent less cutting gas per part than conventional laser cutting. What’s more, it makes the cutting process up to 15 percent more productive with the same laser power, so each part requires correspondingly less energy to fabricate. “Our new cutting technology is faster and uses less gas – and that translates into tangible cost savings and a real boost in productivity for our customers,” says Kohllöffel.

Two fibers in a single cable

At the heart of BrightLine Speed is a new, TRUMPF patented laser light cable (LLK), a special “2-in-1” innovation with an inner and an outer fiber core. A TruDisk disk laser couples the laser light into the LLK and distributes the laser power to the inner and outer cores using a device known as a wedge switch. This allows users to adapt the laser power and beam profile more precisely and flexibly to the thickness of the sheet currently being processed.

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3D laser cutting

BrightLine Speed offers real benefits, particularly for the 3D laser-cutting of hot-formed parts such as those used to produce B-pillars and door frames in auto manufacturing.



How it works

At the heart of BrightLine Speed is a TRUMPF-patented, 2-in-1 laser light cable (LLK) with an inner and an outer fiber core.



About TRUMPF

TRUMPF is a high-tech company offering manufacturing solutions in the fields of machine tools and laser technology. The Company drives digital connectivity in the manufacturing through consulting, platform products and software. TRUMPF is a technology and market leader in highly versatile machine tools for sheet metal processing and in the field of industrial lasers.

In 2020/21, the company employed some 14,800 people and generated sales of about 3.5 billion euros. With over 80 subsidiaries, the TRUMPF Group is represented in nearly every European country as well as in North America, South America and Asia. The company has production facilities in Germany, France, the United Kingdom, Italy, Austria, Switzerland, Poland, the Czech Republic, the United States, Mexico and China.

Find out more about TRUMPF at www.trumpf.com

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