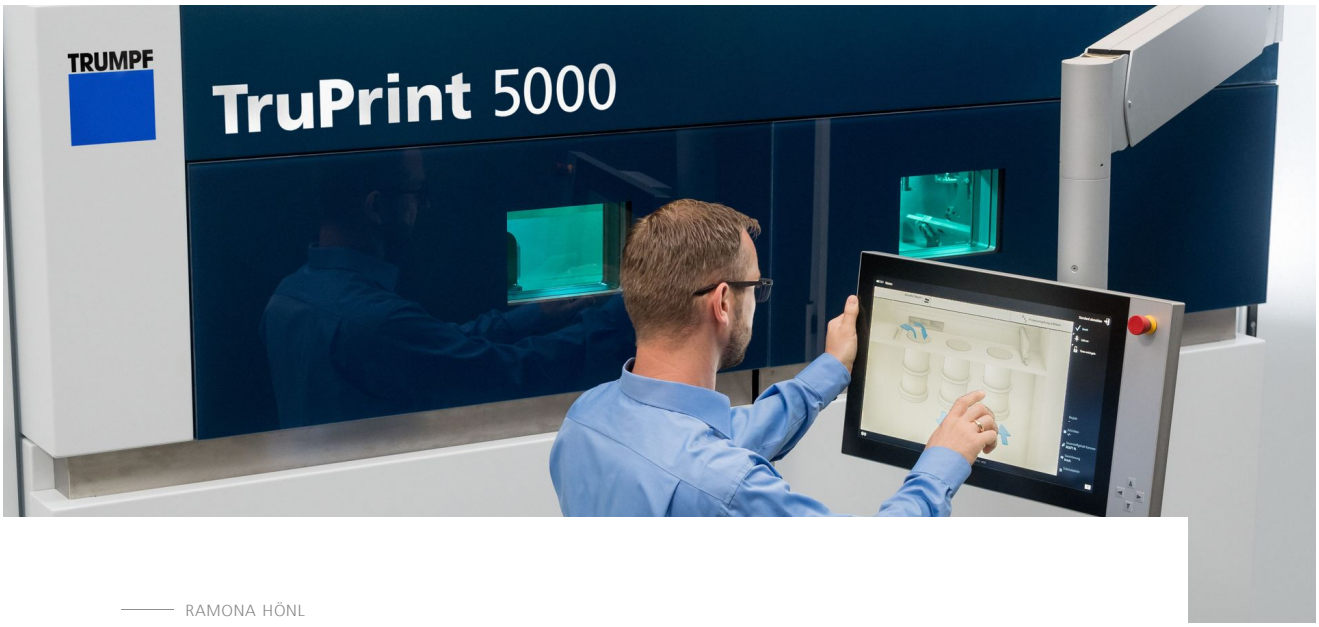
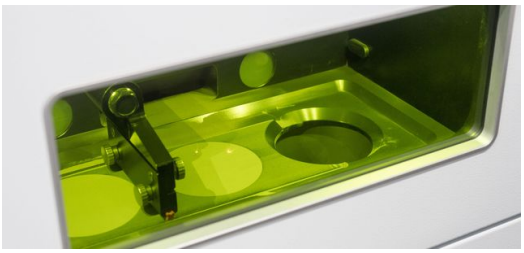


RAMONA HÖNL

Monitoring in 3D printing: What companies need to know

In industry, monitoring refers to the monitoring of processes. How can this be achieved in a process such as 3D printing, which may take several hours and runs independently within a system? Here are the answers to the main questions:



Process data such as the laser melt pool and powder application are monitored independently by the TRUMPF systems. (Source: TRUMPF)

– TRUMPF



Automated monitoring solutions are indispensable especially in strictly regulated sectors such as medical technology. (Source: TRUMPF)

– TRUMPF

How do operators find out that an error has occurred?

TRUMPF's 3D printers automatically generate process reports at the end of printing. This gives operators a quick overview of key parameters such as productive and non-productive times. The system also documents, for example, consumption figures for gas and powder. If anomalies occur, operators can intervene immediately. To correct errors, operators are not required to be actually present. With the TruTops Monitor software, the 3D printer can be accessed and changed from anywhere.

Powder Bed Monitoring enables even more convenient operation. The equipment automatically notifies when the system detects an error. Operators define limit values for notification to take place. The system also classifies errors into categories and provides remedial assistance.

On which TRUMPF 3D printers can the monitoring systems run?

Monitoring can run on all TRUMPF 3D printers: TruPrint 1000, TruPrint 3000 and TruPrint 5000. TRUMPF will also be world premiering a new 3D printer featuring the monitoring solutions at Formnext. Equipment from other manufacturers lack the necessary sensors and are therefore incapable of running the monitoring systems.

At the Formnext trade fair in Frankfurt, TRUMPF will be exhibiting its monitoring systems in Hall 12, Stand E 61.



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