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MoldJet® - Productive sinter-based additive manufacturing for a wide range of components and materials

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The limitations of existing additive manufacturing processes often include long printing times and time-consuming post-processing steps due to the removal of components from a powder bed or the removal of support structures.

The MoldJet® process developed by Tritone® Technologies Ltd. is a sinter-based additive manufacturing process that is equally suitable for the productive fabrication of metal and ceramic components. Compared to alternative AM technologies, this process is characterized by the fact that no support structures consisting of the processed component material are required. As part of the powder-free printing process, the MoldJet process also has the potential to avoid time-consuming depowdering following the printing process.

Regarding the printing process, the MoldJet technology also allows simultaneous component production on up to six building platforms in just one production system, so that large series can be economically realized in addition to prototype and small series production.

It will be shown how the MoldJet process compares to other technologies in the field of additive manufacturing. Furthermore, it will be explained how the layer-by-layer printing process is carried out without using loose powder. In addition, it is explained how the printing process, the subsequent process chain and the processable feedstock systems enable the production of metal as well as ceramic components with an almost unlimited variety of materials and designs.

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