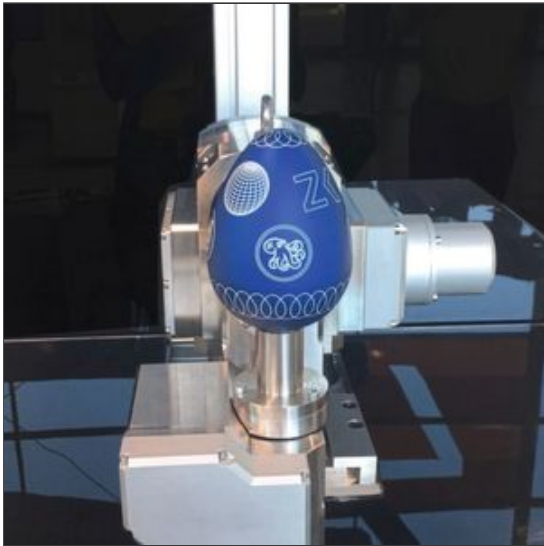




Zimmer & Kreim / Formnext

Automated laser technology and customised solutions

11/06/2018 | Editor: [Brigette Jaya](#)



Diverse precise engravings on an egg is one of the many solutions ZK offers. (Source: Zimmer&Kreim)

The Genius 900 Nova eroding machine is Zimmer & Kreim's latest innovation, which uses a laser application to remove the supporting geometry of generatively manufactured components in the SLM technique.

[Zimmer & Kreim](#) (ZK) says that the focus in the Genius 900 Nova is laser technology. The eroding machine is stable and precise, thanks to its modular design and thermo-symmetrically-mineral cast construction. To be presented at [Formnext](#), the Genius 900 Nova will be new prototype construction with the technological support of Indel AG and Arges for the control engineering and the laser technology respectively. It will have a laser application, which removes the supporting geometry of generatively manufactured components in the **SLM technique**. ZK notes that as such, the eroding machine is offered and built specifically on customer requirements or suited to the component to be produced.

Well-experienced in automation across different technologies, ZK has integrated laser technology, in regard to the software, for a long while now in its systems. And now with this new approach, it can also offer the hardware, the company adds.



VDW

Global interest in German connectivity initiative

10/10/2018 – Germany – VDW has just launched Umati (universal machine tool interface), a standard interface for machines. [read...](#)

In the machining of components with time losses of up to 50% still occurring during the simultaneous processing of G-codes, ZK has managed to overcome this with laser machining that takes place in real time. Here, the laser is the tool, which increases the **machine-running time to a 100%**. Accordingly, the ROI for plant operators significantly decreases.

The machining (3D-ablation) of ceramic coated Inconel components – a complex component to machine – is an application that has already achieved series production, ZK notes. Here, in addition to positioning the X,Y,Z-axes of the machine responsible for the laser scan head, an additional A-B axis is used to simultaneously track the laser beam in real time.

Also on show will be **digital workflows** in the post-processing of generatively manufactured components using an SLM-component, which currently requires about 70% of the production time of the whole component.



TCT Conference / Formnext

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11/05/2018 – The TCT Conference is one of the most awaited sessions at the Formnext trade fair. It is here that industry players get a 360-degree view of the revolutionary additive manufacturing technology. [read...](#)

As post-processing is divided into several steps and technologies, conditions must be first met to create all work steps digitally. These work steps are then

saved and processed on a database with standardised software tools, also offered by ZK, known as the **Alphamoduli software solution**. This job-management software for different technologies controls all work steps for each component individually – either manually or fully automatically. First, the CAD/CAM system suited to customer needs is deployed. Then, combined with the customer's ERP system, the automated control and processing of components in tool and mould making can begin with the 1 lot size.

The presentation at the trade fair will show how customers can separate supporting geometry with a laser close to the contour or by simply revising building panels, which can be re-used in an SLM-system, is part of an innovative overall concept. Apart from the fully automated post-processing of generatively manufactured components, wire-eroding machines or band saws for separating components from building panels can also be automated with the ZK's **Chameleon automation system**.

ZK notes that it provides solutions that can eliminate bottlenecks originating from the post-processing of generatively manufactured components. Also with moving technologies like SML, a step towards synchronised and reproducible mass production (beginning with 1 lot size) can take place.

At Formnext, Zimmer & Kreim will be in **Hall 3, Booth C70**.



Formnext 2018

Additive solutions for everyone

10/23/2018 - Formnext 2018 is approaching rapidly. The event will show the entire process chain of additive manufacturing and modern industrial manufacturing methods. The growth of the trade show is a clear sign of the importance of additive manufacturing. [read...](#)

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