

Hannover Messe 2017: Efficient forging and additive manufacturing



Auf einen Blick

- Hannover Messe from 24 to 28 April 2017
- Hall 2, stand A08 (Pavilion of the State of Lower Saxony)
- IPH: Forging with undercuts
- LZH: Additive manufacturing and laser cutting underwater

23. 2017

IPH/LZH | Forging undercuts, additive manufacturing, underwater laser cutting and integrating sensors: This can be done with the tools presented by the IPH and LZH at the Hannover Messe 2017. From 24 to 28 April 2017, they will be presenting their research findings in hall 2.

How steel pistons can be manufactured faster and cheaper is shown by the Institut für Integrierte Produktion Hannover gGmbH (IPH). The Laser Zentrum Hannover e.V. (LZH) presents laser-based solutions for individual manufacturing, three-dimensional lightweight construction, efficient processes and smart components.

Engineers at the IPH have developed a forging tool that creates undercuts. Via horizontally movable stamps, the tool pre-drills the hole for the piston pin already during the forging process. Up to now, pin drillings have been created by cutting after forging, since conventional forging tools do not allow for undercuts. The new approach facilitates subsequent machining considerably, speeding up the manufacturing process and reducing the overall costs.

Using laser additive processes from the LZH, e.g. lightweight construction parts and implants made of plastics and metals can be produced in different sizes. Also, the institute shows new processes for the faster and cheaper repair of defects in CFRP components. Automated, laser-based systems of the LZH make works underwater more efficient – from cutting sheet pilings to detecting natural resources. Ultrashort pulse lasers integrate sensors directly on the component, an application with high potential for Industry 4.0.

From 24 to 28 April 2017, the IPH and LZH will be exhibiting at the Pavilion of the State of Lower Saxony at the Hannover Messe (hall 2, stand A08). Free visitor tickets are available at:

<http://www.hannovermesse.de/ticketregistrierung?Rbd4unv2opc25b>

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