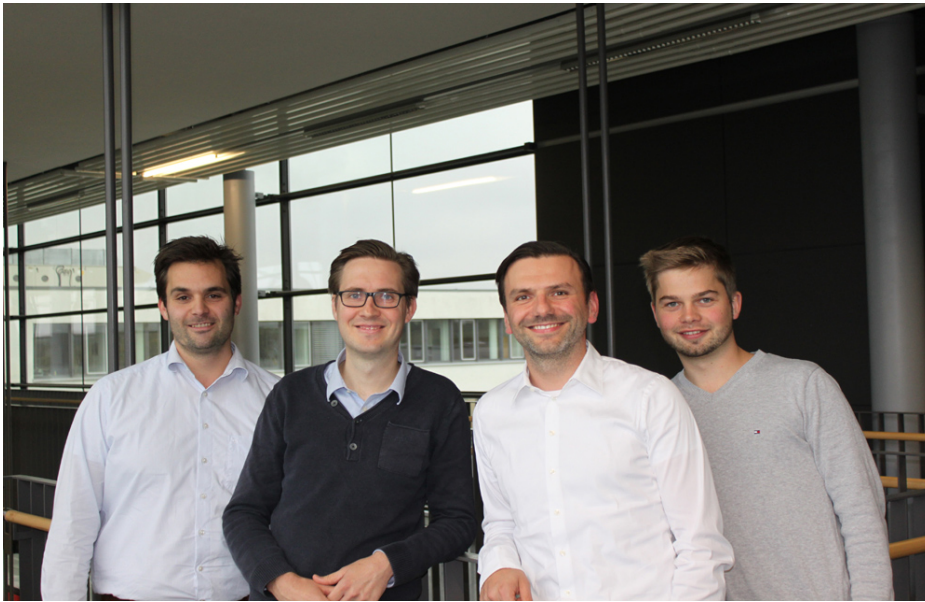


PZH start-up develops mobile machine tool



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IFW | A machine tool of manageable size, mobile and precise, capable of holding on to a component and advancing on it: This idea of engineers of the Hannover Centre of Production Technology (PZH) was honoured with the EXIST Business Start-up Grant. Completion of the prototype is scheduled for the beginning of 2017.

In 2015, the team already won the hannover-impuls Start-up Award, and in early 2016 the EXIST Business Start-up Grant. The innovation: a machine tool which is brought to the component. Presently, components – even large ones like components for ships or aircraft – are always brought to the machine tool. “In our opinion, it should be the other way round“, says Thomas Krawczyk, one of the design engineers of the Institute of Production Engineering and Machine Tools (IFW).

The mobile machine tool is of modular design. Hold-on devices can easily be changed, like taking off shoes. Outer housing and spindle housing are equipped with such devices, which for example adhere magnetically. In this way, the whole mobile machine tool can crawl along the component exactly to the intended position which is monitored by an external laser measuring system.

“For the time being, our focus is on milling“, explains Krawczyk, “but in the end, it doesn’t make any difference to us, whether we integrate a spindle, a print head or a riveting device into our mobile concept“.

by Julia Förster and Daniel Niederwestberg

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Auf einen Blick

- ☑ First mobile, precise and intelligent machine tool
- ☑ With this innovation, the team of IFW researchers wants to set up their own business
- ☑ Machine tool is capable of holding on to a component and precisely advancing on it towards a defined position.
- ☑ Presently designed as five-axis milling machine tool, but 3D printing or riveting is also possible
- ☑ Prototype for automotive sector to be completed in early 2017

Webseite: www.ifw-startup.de