

BBW Lasertechnik introduces new laser turning service

Prutting, March 12, 2025 – Manufacturing specialist BBW Lasertechnik is expanding its service portfolio to include the innovative laser turning process. This advanced technology allows for the machining of rotationally symmetrical components with unparalleled precision using a USP laser. The non-contact nature of laser turning makes it especially well-suited for delicate workpieces in medical technology, microelectronics, precision mechanics, and the watchmaking industry.

Turning without exerting force on the component

Laser turning combines the properties of conventional turning with the outstanding advantages of lasers. Since the laser beam does not make direct contact with the workpiece, the component is machined without mechanical stress, a crucial feature for sensitive or very small components. The use of ultrashort pulse lasers (USP) ensures minimal thermal stress on the material.

The absence of force during laser turning enables the manufacturing of components with diameters of up to 0.15 mm. The laser's precision allows for drilling of cross holes that would be difficult or impossible to realize using traditional turning processes.

The result is smooth, flawless surfaces with a roughness of $Ra < 0.05 \mu m$ that require no additional post-processing.

Versatility in material selection

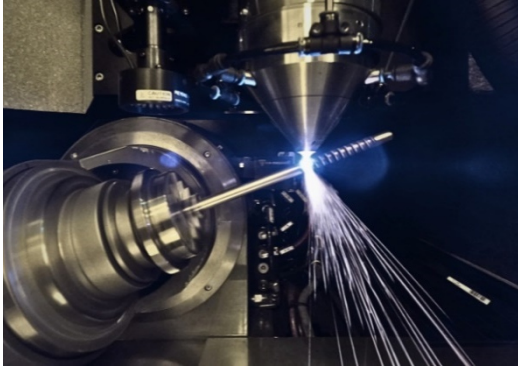
A key benefit of laser turning is the wide range of materials it can process. The process allows for precise machining of a wide range of materials. This versatility extends to materials that are challenging to machine using traditional turning processes, including those with high hardness and brittleness.

For precision mechanics, medical technology, and more

Our expertise encompasses precision mechanics, microelectronics, medical technology, and the watchmaking industry. Laser turning is a highly effective process for micro-tweezers, ultra-fine electronic contacts, and delicate watch indicators. In one of the first customer projects, laser turning was used to produce micro screws for a progressing cavity pump that exceeded the customer's expectations. BBW Lasertechnik is planning to commence series production in the near future.

BBW Lasertechnik is a trusted partner for high-precision manufacturing solutions

The management of BBW Lasertechnik is pleased to share the following update: "Our customers benefit not only from our ongoing investment in the latest laser technology, such as laser turning, but also from our flexible service approach. We work closely with our customers to develop customized solutions for their specific requirements," says Andreas Bürger.



Laser turned sample

The attached photo may only be used with the reference "Photo: BBW Lasertechnik" and for editorial purposes. Graphical changes are not permitted.

About BBW Lasertechnik:

BBW Lasertechnik GmbH is one of the leading specialists in the field of laser material processing in Germany. The company's service portfolio includes laser welding, fine cutting, drilling and surface processing with lasers as well as mechanical production and assembly. If necessary, customized devices and machines are also developed in the in-house design department. Thanks to these capabilities, customers from all sectors of industry can be supplied. Founded in 1997, BBW Lasertechnik now has over 50 laser systems, employs around 200 people and is committed to continuous growth.

Further information about BBW Lasertechnik can be found at: <https://www.bbw-lasertechnik.de/en/>

Press contact:

BBW Lasertechnik
Alica Hofmeister
Corporate Communications
+49 8036 9 08 20 20
a.hofmeister@bbw-lasertechnik.de