



Trade show update Photonics West 2016: New industrial 16 watts femtosecond laser from Jenoptik

Jenoptik shows a new femtosecond disk laser with power upgrade to 16 watts at SPIE Photonics West from February 16th to 18th in San Francisco, South hall of Moscone Center, booth 1823.

Since several decades, Jenoptik manufactures lasers for industrial and medical applications and presented one of the first femtosecond lasers for industrial use in the market ten years ago.

At Photonics West Jenoptik introduces a 16 W version as the new top model of its established JenLas[®] *femto* series for industrial micro-machining for the first time. The JenLas[®] *femto 16* features a pulse energy up to 80 microjoules, a free and quickly adjustable pulse repetition rate from 100 to 510 kilohertz, single shot ability, an internal SHG option (THG on request) and reliable operation at up to 35°C ambient temperature.

The performance of this femtosecond laser is ideal for drilling injection nozzles and also provides a high productivity in cutting and structuring processes, at higher material removal rates compared to picosecond pulses.

In addition, the outstanding quality of machining achievable with this disk laser yields cost reduction at subsequent cleaning steps.

The Yb-doped laser's typical pulse width of 550 femtoseconds facilitates processes like

- non-thermal ablation of nearly all materials (damage- and burr-free processing of Polymers, NiTi, etc.)
- nonlinear absorption in transparent materials (efficient machining of Sapphire or Glass)
- material-selective ablation in multi-layer systems
- inner marking of transparent materials
- scribing of invisible pre-determined break lines.



Page: 2 of 3
Date: February 15, 2016

Reliable 24/7 operation in industrial environments is based on a robust monolithic cavity and long-life, maintenance-free components like powerful pump diodes and a further enhanced oscillator.

Besides laser sources, Jenoptik delivers optical accessories like circular polarizers, beam expanders or F-Theta lenses. The company also offers the development of customized optical solutions from the laser to the focus for healthcare and industrial laser applications, as well as application and service support on a worldwide level with subsidiaries in Europe, in the U.S, and APAC regions.

Learn more at Jenoptik's new website <http://www.jenoptik.com/>.
You can download product pictures from [Jenoptik's image database](#).

Jena, February 15th, 2016

About Jenoptik and the Healthcare & Industry division

As an integrated photonics Group, Jenoptik divides its activities into five divisions: Optical Systems, Healthcare & Industry, Automotive, Traffic Solutions and Defense & Civil Systems. Its customers around the world mainly include companies in the semiconductor equipment manufacturing industry, automotive and automotive supplier industry, medical technology, security and defense technology as well as the aviation industry.

In the Healthcare & Industry division Jenoptik develops specific system and application solutions for customers worldwide in the healthcare sector and industry. The focus is on medical technology and life science as well as laser, automotive and lighting applications. The product portfolio includes semiconductor chips, optoelectronics, laser technology, polymer optics, electronics and software. Jenoptik combines them to OEM system solutions and products for the life science industry, such as analysis and treatment systems for research, clinical applications, and patient self-diagnosis. For industrial applications, Jenoptik offers high-performance optoelectronic components and modules as well as integrated solutions. They include complex components for head-up displays, innovative lenses for driver assistance systems and polymer optics for machine vision or augmented reality applications, the division also produces powerful, energy-efficient industrial LED lighting. In the area of industrial lasers for laser material processing, Jenoptik is active in the entire laser value creation chain.



Page: 3 of 3
Date: February 15, 2016

Contact

Denise Thim
Manager Communications & Marketing
Healthcare & Industry Division

Telephone: +49 3641 65-4366 | Fax: -4011
laser@jenoptik.com
www.jenoptik.com