



**Femtosecond fiber lasers
superior lifetime & performance**

fs fiber Lasers for Science and Industry

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**CZECH
OPTICAL
CLUSTER**

**Ostrava,
The Czech Republic,
22/03/2023**

ABOUT FLUENCE



2003

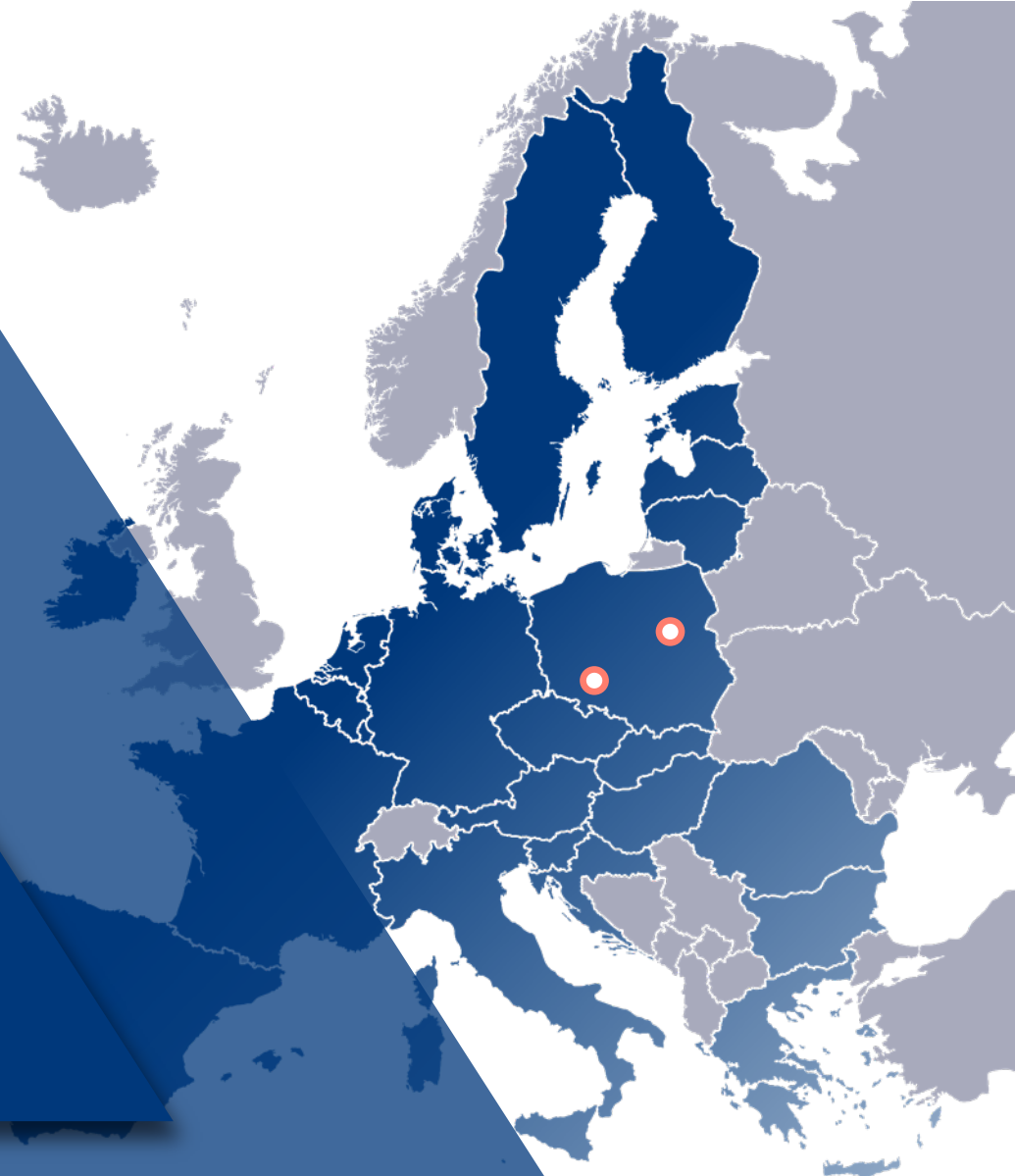
2016

2023

13 YEARS OF PRE-COMMERCIAL TECHNOLOGY DEVELOPMENT

7 YEARS OF CORPORATE EXPERIENCE

- Femtosecond laser manufacturer
- Unique all-fiber technology, perfected since 2003
- Founded in 2016*
* Leveraging 13 years of fs product and application development at Polish Academy of Sciences
- Headquarters in Warsaw, Poland
- Ultrafast Laser Application Laboratory (ULAL) in Wrocław, Poland
- High power, industrial-grade lasers for materials processing, science and medicine



FEMTOSECOND FIBER LASERS: SUPERIOR LIFETIME AND PERFORMANCE

Halite

All-Fiber Amplified Femtosecond Oscillator



2 W
100 nJ
100 fs



- ✓ 2 photon polymerization
- ✓ 2-photon imaging
- ✓ Ophthalmology

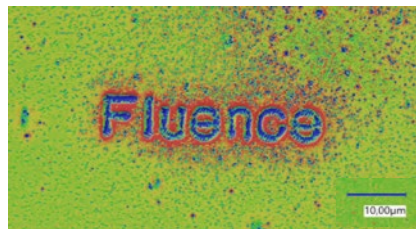
NEW

Jasper Micro

Compact Femtosecond Fiber Laser



7 W
5 μ J



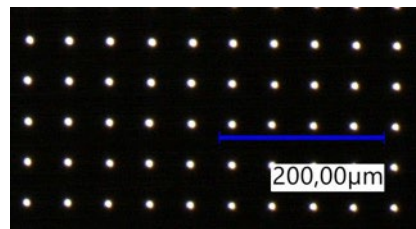
- ✓ Marking
- ✓ Micromachining
- ✓ OEM integration

Jasper Flex

Compact High Power Femtosecond Fiber Laser



30 W
30 μ J



- ✓ Micromachining
- ✓ Surface structuring
- ✓ Waveguide writing

Jasper XO

High Power Femtosecond Fiber Laser



HGM

Harmonic Generation Module



Average power: **up to 60 W**
 Max. Energy: **100 μ J (200 μ J)**
 Max. Peak Power: **0.5 GW**
 Pulse duration: **<270 fs – 20 ps***
 HGM wavelengths: **515, 343, 258 nm**

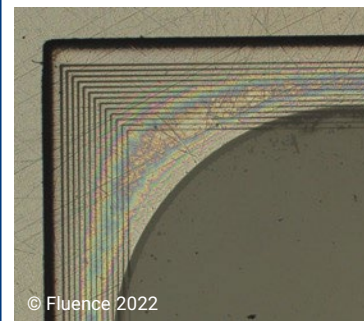
Most powerful and versatile



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