



new

NEXT-GEN GLASS MICROPROCESSING WORKSTATION

Simple to operate

Budget friendly

Launching this June in LWOP Munich

FEATURES

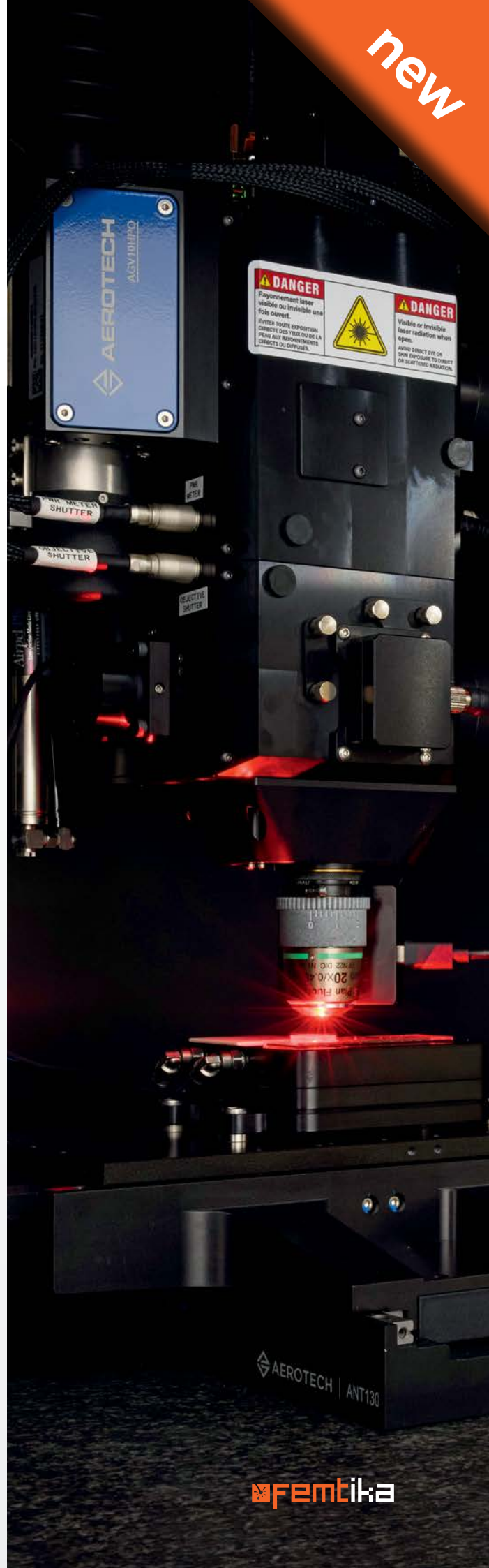
- Multi-scale glass processing: achieve precision from μm to cm scales, ideal for advanced glass applications
- Autofocus
- Self-aligning optical system for reduced maintenance requirements
- High-sensitivity camera for real-time process monitoring
- Dual-objective head for effortless fabrication mode transition

INDUSTRIES

- | | |
|-------------------|------------------------------------|
| • Microrobotics | • Biotechnologies and Life science |
| • Watch & Jewelry | • Medical |
| • Photonics | • Quantum computing |
| • Industrial R&D | |

APPLICATIONS

- Micromechanical parts and assemblies from glass
- Microoptics, microlens arrays
- Micro-fluidics, LAB-ON-CHIP



TECHNICAL SPECIFICATIONS

Femtosecond laser source	Central wavelength	1030 \pm 10 nm
	Average power	10 W
	Max. pulse energy	> 100 μ J
	Repetition rate	100 kHz – 1 MHz
	Pulse duration	400 fs – 4 ps
Positioning stages (XYZ)	Travel (XYZ)	120 mm \times 120 mm \times 60 mm
	Accuracy	\pm 0.5 μ m
	Bi-Directional Repeatability	\pm 0.15 μ m
	Maximum speed (XY no load)	350 mm/s
Galvano scanners	Scan angle	\pm 0.35 rad
	Repeatability	0.4 μ rad RMS
Process specifications	Technology	Selective laser etching, ablation, welding, refractive index modification
	Materials	Fused silica, borosilicate glass and other transparent materials
	Smallest feature size	> 1 μ m
	Minimum surface roughness	< 200 nm
	Maximum object height	20 mm
	Aspect ratio	> 1 : 200
	Minimum micro hole diameter	5 μ m

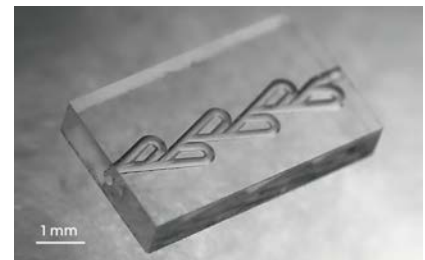
PROCESSING CAPABILITTIES



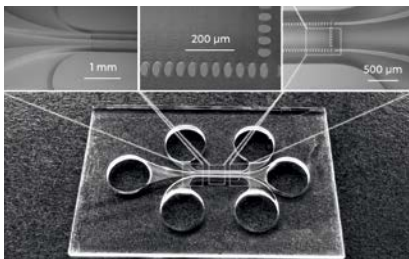
Gears system



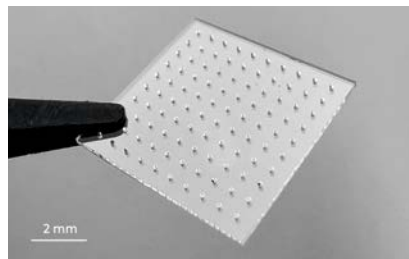
3D nozzle



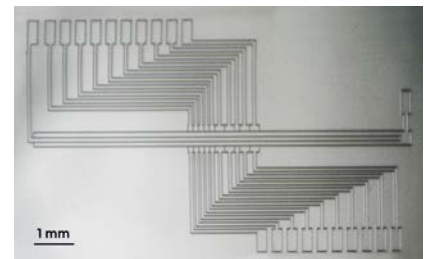
Tesla valve



Microfluidics



Quantum computing / TGV



Ion traps