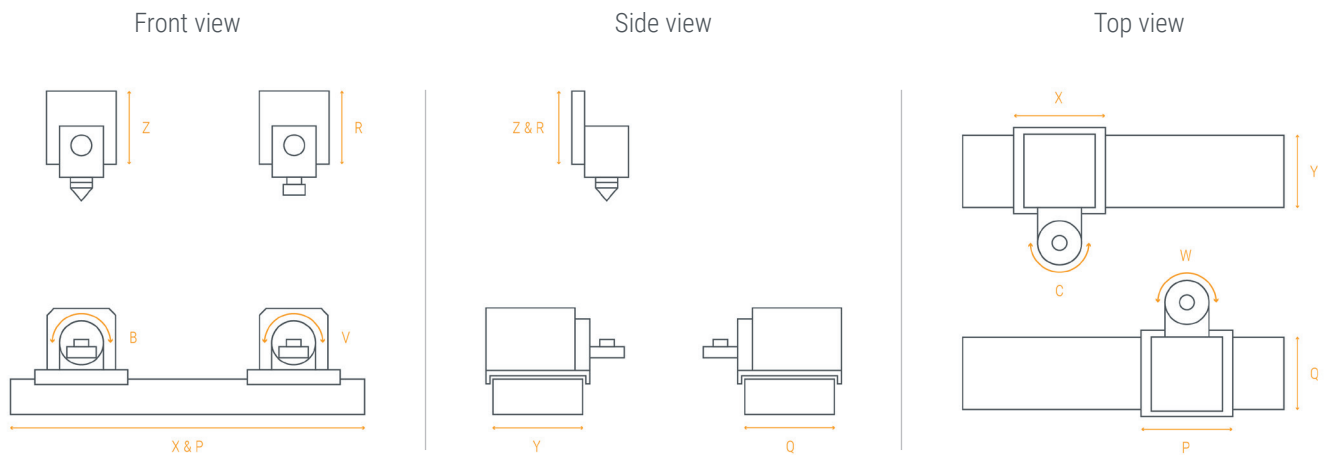




The GL.ultra as the largest machine of the GL. series offers a wide range of laser processing options with automated solutions, maximum laser on-time and therefore highest output with short cycle time. The integration of two 5-axis machining stations in one machine, as well as the possibility of integrating several laser systems in parallel, guarantee customers maximum investment security. A large number of interchangeable modules round off the new machine concept. On this occasion, the established advantages of "Hirth gearing" are consistently relied on in order to keep the changeover times as short as possible. In the course of the optional module selection, for example fixed or scanner optics can be installed that are compatible with all commercially available UKP laser sources. The patented axle kinematics in combination with two specially developed rotary and swivel units (X/Y-movable) offer maximum machining flexibility. The active water cooling of the drive and guide components and the granite slide guarantees the highest possible temperature stability. The innovative technology of GL.ultra is rounded off by the optical highlight of a sealed, black glass enclosure.

HIGHLIGHTS

- two 5-axis machining stations in one machine
- synchronous or sequential processing for highest accuracies optionally with fixed optics and/or scanner
- patented kinematics
- optics module change via Hirth-tooth system (repeatability $\leq 1 \mu\text{m}$)
- wear-free and highly dynamic linear drive technology in all axes
- economic advantage due to reduced investment and operating costs (lower energy and space consumption)
- separation of machine kinematics and electrical engineering can be configured
- user-friendly due to ergonomic operating units
- innovative machine housing in glass



TECNICAL DATA

Axis	X/P	Y/Q	Z/R	B/V	C/W
Axis type	linear			rotatory	
Drive type	direct drive			torque drive	
Bearing	profiled rail guide		M&V-guidance	radial thrust bearings	cross roller bearings
Travels [mm]	1280	180	450	+/- 110°	endless
Speed	30 m/min			280 1/min	500 1/min
Acceleration	5 m/s ²			160 1/s ²	220 1/s ²
Repeatability	1 μm			2 arcsec	
Accuracy	1,5 μm		2 μm	5 arcsec	
Perm. comp. weight	< 20 kg			2 kg	
Clamping set-up	clamping system				
Sound pressure level	≤ 70 dB				
Dimensions [mm]	T=2275; B=2275; H=2625 – without supply unit				
Rod bearings	X/P: 350 Y/Q: 250 Z/R: 300				
Parts magazine	Cylinder with diameter 120 mm and height 185 mm on all sides, down to the floor surface, minus clamping system				
Total weight	14 t without supply unit				