



The GL.evo is a universal and high-precision tool machine for industrial laser microprocessing. The machine concept harmonizes the requirements of high-precision and dynamic kinematics with the requirements of ultra-short pulse laser technology and enables production of the most challenging components up to the possibility of 5-axis simultaneous machining.

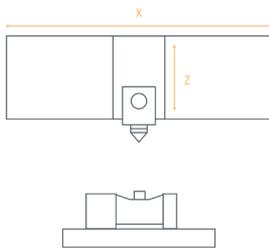
This means that the machine is therefore used in all laser micro machining processes and can be optimally customized to customers requirements via different modules.

The control of the machine, the beam source and the different modules are controlled from a consistent user interface. This procedure leads to intuitive operation of the system and enables the control and steering of all process parameters in real time. This significantly reduces the development time for the machining process and guarantees to identify the optimal parameter set of the machining in a short time.

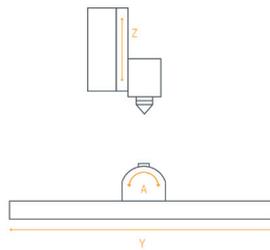
HIGHLIGHTS

- working area 640 x 445 [mm]
- machine base made of granite
- excellent damping and long-term stability
- position accuracy: +/- 1 µm
- max. acceleration: 2 g
- max. axle speed: 2 m/s
- air-bearing axlw guides in X and Y
- 5-axis simultaneous machining (universal)
- active water cooling
- high temperature stability
- vibration-optimised structure
- no wear in the guides
- control cabinet integrated into the machine

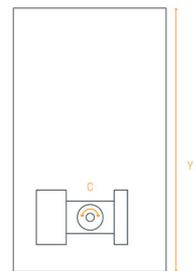
Front view



Side view



Top view



TECNICAL DATA

Axis	X	Y	Z	A	C
Axis type	linear			rotary	
Drive type	direct drive		spindle drive	torque drive	
Bearing	air bearings		M&V-guidance	roller bearing	air bearings
Travels [mm]	640	445	360	+/- 110°	endless
Speed	120 m/min		60 m/min	500 U/min	700 U/min
Acceleration	20 m/s ²			170 1/s ²	120 1/s ²
Repeatability	1 µm		3 µm	4 arcsec	2 arcsec
Accuracy	1,5 µm		4 µm	5 arcsec	4 arcsec
Perm. comp. weight	100 kg			10 kg	
Clamping set-up	T-notches plate			clamping system	
Sound pressure level	≤ 70 dB				
Dimensions [mm]	B = 2344 / T = 3455 / H = 3087				
Total weight	13 t				