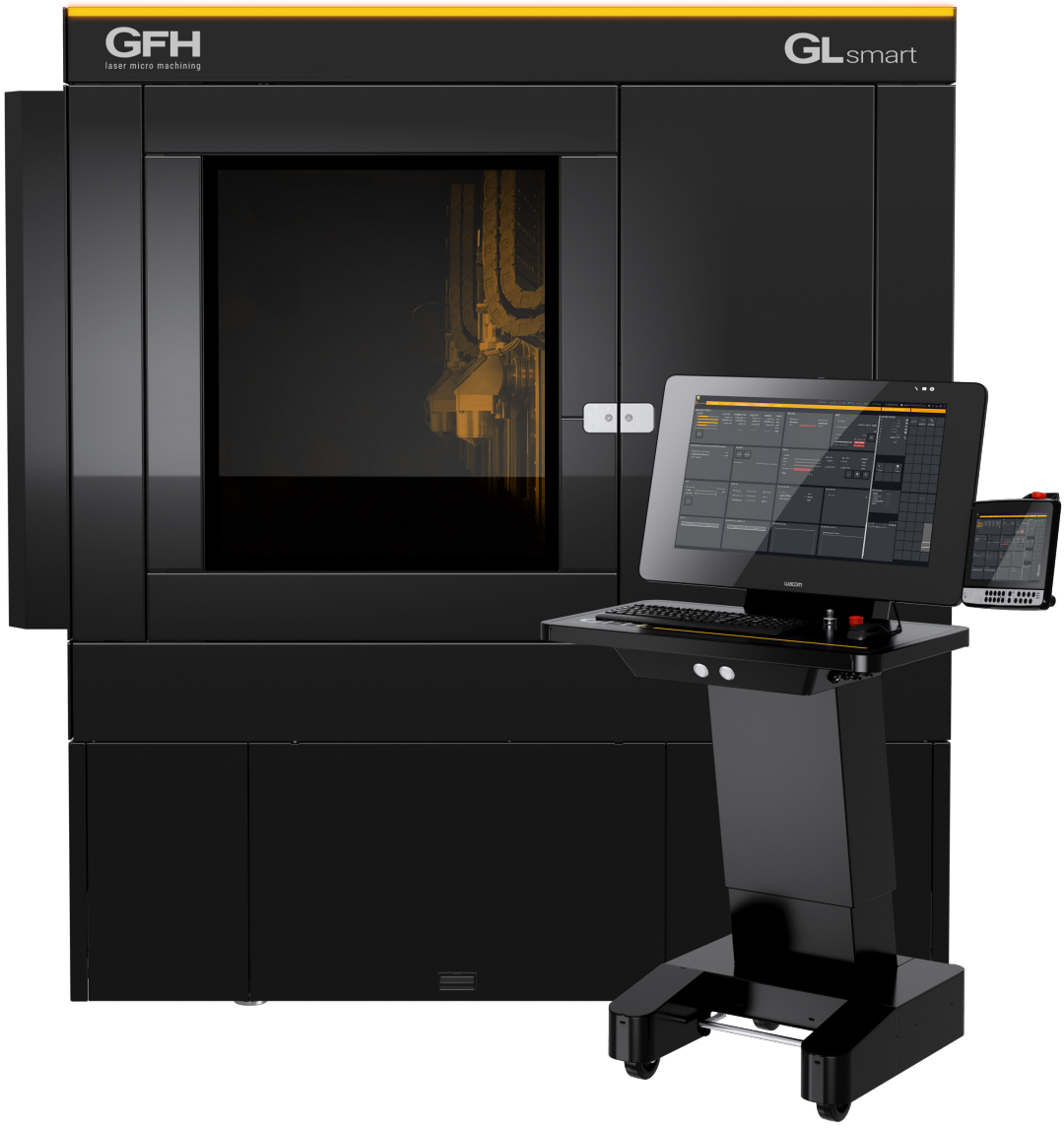
GLsmart



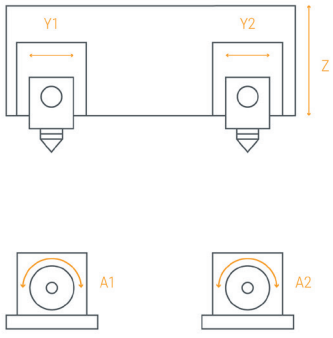
The compactly constructed machine offers besides the possibility of combined machining of laser drilling, turning, and cutting, an increase in output for the customer by parallel machining on two stations. All heat sources in the laser drilling machine, including the direct drives of all axis will be actively cooled with water. The machine concept of GL. smart is aimed at machining rotationally symmetrical components and also offers the option of 3+2 axis machining with the optional counter spindle.

The deep integration of our components into the control system enables online monitoring of production processes as well as efficient service and therefore fulfils all requirements of a production machine.

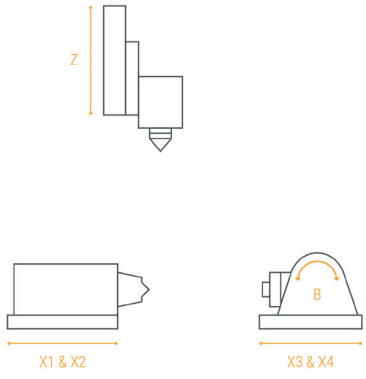
HIGHLIGHTS

- precision, flexibility and productivity combined in one machine
- combination machining: drilling, cutting and turning
- parallel processing on two stations
- double output
- direct drive in all axes
- water-cooled drives
- position-controlled rotary spindle with 3500 rmp
- working area variable depending on the equipment
- small installation area 2,3 sqm
- integrated automation
- optional six-axis robot for autonomous discharge function

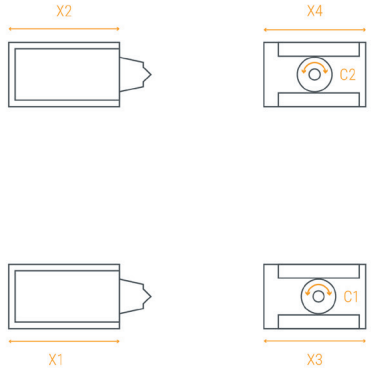
front view



side view



top view



TECNICAL DATA

Axis	X	Y	Z	A	B	C [GL.rotil SE]	C [GL.rotil SE air]
Axis type	linear			rotatory			
Drive type	direct drive			torque drive			
Bearing	profiled rail guide	M&V-guidance	profiled rail guidance	air bearings	cross roller bearings		air bearings
Travels [mm]	500	40	220	endless	+/- 90°	endless	
Speed	30 m/min			3500 U/min	700 U/min	700 U/min	3500 U/min
Acceleration	5 m/s²			150 1/s²	160 1/s²	220 1/s²	-
Repeatability	1 µm			2 arcsec	10 arcsec		2,5 arcsec
Accuracy	2 µm			3 arcsec	20 arcsec		5 arcsec
Perm. comp. weight	Customized component testing				0,5 kg		
Clamping set-up	drilling pattern			clamping system for collets	clamping system		
Sound pressure level	≤ 70 dB						
Dimensions [mm]	D=1026; W=2212; Height depends on laser – H=2333 or H=2483 – without supply unit						
Rod bearings	On request						
Parts magazine	In accordance with customer component						
Total weight	3700 kg without suplly units						