

PRECISION HSC MILLING MACHINE G823-TL AND G813-TL

The NEW 5-axis and 4-axis CNC machines
with backlash-free linear and torque motors



built on stone

All supporting machine elements are made of granite.

INNOVATION WHICH HAS NO EQUALS

The NEW milling machine G823-TL (5-axis) and the G813-TL (4-axis) are built on a granit base.

To give you the best results, the system is equipped with backlash-free linear and torque motors and a high-precision measuring systems. Resolution of up to 0.05 microns.

To reach a perfect surface, we use iron cast components that are mounted on a granit base to reduce vibration to a minimum.

Combines real HSC and 5-axis milling strategies, supported by a 2.5 kW spindle with 50,000 rpm.

A patented 2 second tool changer, increases the system efficiency and productivity.

The system is ideally suited for wet processing hard precision parts and dry machining graphite electrodes.

APPLICATIONS

- electrode and graphite milling
- micromachining
- medical technology, implant production
- watchmaking industry, engravings
- tool and mold-making industries
- turn-mill machining

OPTIONS

- multifunction hand wheel for 5-axes
- 3D edge finder
- zero point clamping system EROWA / System 3R / Hirschmann
- extraction for graphite and zircon processing
- laser tool measuring system
- camera-based process monitoring
- CAM-software, open system and much more

TECHNICAL DATA

travet range X/Y/Z	300 / 180 / 350 mm
travel speed max.	20 m/min
repeatability	$\pm 0.5 \mu\text{m}$
dimensions l x w x h	1400 x 1700 x 1700 mm
electric axis drives (X/Y/Z/A/B)	backlash-free linear and torque motors with RG25-precision roller guide
toolholder	HSK-E 25
number of tools max.	20 max.
tool length max.	100 mm
spindle speed / power	50,000 rpm. / 2.5 kW
spindle concentricity	1 μm
measuring system resolution	0.05 μm
cooling and preheating system	peltier element with max. 0.2° temperature differential
system control	windows-based CNC controller with EtherCAT
HMI	12" touch panel, industry standard GU
weight	approx. 1000 kg
power requirements	3 x 400 V / 16 A

ORDER DATA

HSC MILLING MACHINE	item number
G813-TL (4 Achsen)	280800 0001
G823-TL (5 Achsen)	280800 0002

OPTIONS

multifunction hand wheel	680800 1004
3D edge finder	680800 1005
extraction for graphite and zircon processing	680800 1006

More accessories up on request.

EXAMPLES OF APPLICATION



graphit fuel cell



high precision parts (high-alloy steel)



graphite electrode