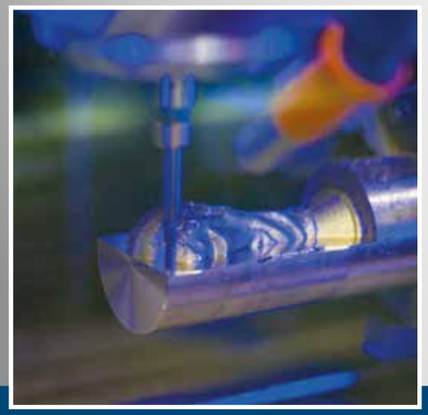
PREMIUM 5030µ

Granite, steel and linear motors
for top processing quality!

Up to 5 axes



Highlights

- Solid and stable machine construction on polished granite components
- Small installation space due to compact design
- High frequency spindle with up to 2 kW output and 50,000 rpm
- HSK-E 25 changer system
- HSC control technology with a set processing time of < 1 ms in real-time
- High rail precision due to digital length measuring system
- High-load linear guides
- Low-maintenance linear motors in X, Y, Z
- Control software on Windows® for i-8000
- Zero point clamping system in the granite table for rapid change from 3 to 5 axes

Options

- 3D measuring switch for capturing the workpiece zero points or remeasuring workpieces
- Laser for contactless tool control
- High frequency spindles up to 100,000 rpm
- 4th/5th Axis as rotating/swivelling axis
- Minimum quantity cooling lubrication system
- Various controllers from Heidenhain®
- Hand-held operating unit
- Professional CAD/CAM solutions

The **PREMIUM 5030µ** is a 3 to 5-axis HSC milling machine, that is specially designed for the requirements of high-precision processing of fine mechanical small parts, microprocessing and milling graphite/copper electrodes. In order to meet with this demand for accuracy, all essential points are integrated in the machine concept for reliable production. The solid machine base, consisting of a natural hard rock granite portal with de-coupled Y-axis, guarantees high stiffness and long-term stability. The individual granite elements are produced with an accuracy per DIN 876 / quality 00. The pioneering linear motor technology and the incremental measurement process guarantee maximum positioning accuracy with highly dynamic feed rates. Fastest control technologies (high-speed cutting) guarantee harmonic rail movements with maximum precision and simple user guidance on: Windows® for i-8000 controller.

Application examples

- Microprocessing
- Fine mechanical processing
- Medical engineering
- Electronic industry
- Watch industry/jewellery industry
- Automotive supplier industry
- Tool/mould construction
- Electrode manufacture

Typical materials

- Stainless steel
- Graphite
- Copper
- Steel
- Titanium
- Aluminium
- Brass
- Plastics
- Hardened steel
- Ceramic
- Special materials

Technical data	**PREMIUM 5030**
Dimensions (W x D x H) in mm	1560 x 1200 x 2050
Design	Steel-granite construction
Weight in kg	approx. 1000
Travel ranges (X / Y / Z) in mm	500 / 350 / 180
Speed range (X / Y / Z) in m/min	20
Clamping table area (W / T) in mm	450 x 350
Clamping weight in kg	200
Repetition accuracy in µm	± 3
Positioning accuracy in µm	± 5
Resolution in µm	0.5
Drive motors	Linear motors
Main spindle drive	High frequency spindle: Up to 2 kW / 50,000 rpm (optionally up to 100,000 rpm)
Control	Heidenhain®
Operation	Operating terminal with 19“ TFT monitor, stainless steel keyboard and trackball mouse
Software	Heidenhain® / isyCAM 2.8 (optional isyCAM 3.6)

Machine dimensions without operating panel or additional accessories.
Travel ranges without processing unit and other attachments (tool changer, length measuring switch, etc.).