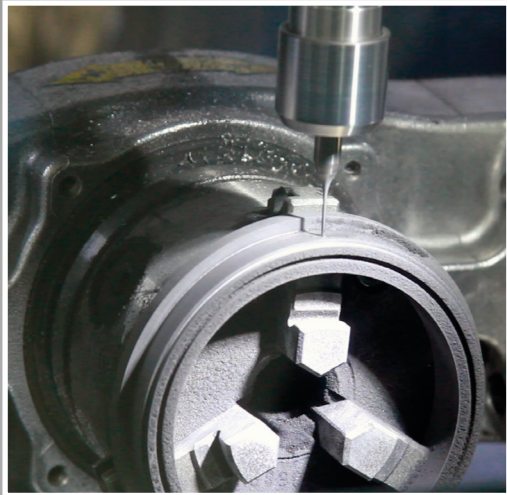


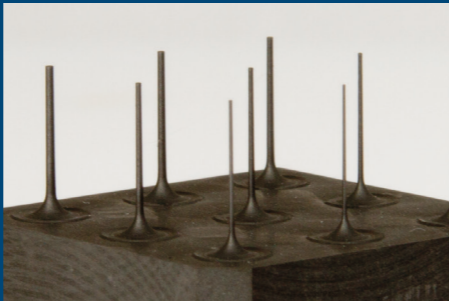
# PREMIUM 5030 Graphite

High speed cutting for graphite!

Up to  
5 axes



The **PREMIUM 5030 graphite** is the ideal machine concept for the milling of graphite and copper electrodes. All critical points of the high speed cutting (HSC milling technology) are combined in this CNC system, therefore performance of this machining process can be fully utilised. The high stability required with HSC milling is attained through the solid granite table with steel substructure. The primary rock graphite offers high damping, high thermal stability and high compressive strength. Linear guides and linear motors are installed outside the working area, additionally protecting components against chips and abrasive fine dusts. Extraction of the fine dust generated during processing takes place with Tornado power, due to the variable arrangement of the extraction cyclone. An additional highlight: The **PREMIUM 5030 graphite** is compatible with all zero point clamping systems. On request it is possible to integrate the electrode retainers and changer systems of all renowned manufacturers (Hirschmann, Erowa, 3R, etc). The rapid control technology required for the HSC processing is optionally realised with i-8000/Heidenhain®.



- ### Highlights
- Protective enclosure against aggressive fine dusts
  - Solid and stable machine construction
  - High stability
  - Minimal installation space
  - High frequency spindle with up to 50,000 rpm
  - Precise high frequency spindle
  - Very rapid control technology with a set processing time of < 1 ms
  - High rail accuracy
  - Linear guides and linear motors
  - HSC control concept with rapid set processing times (up to 0.1ms)
  - Concentricity of up to 3 µm through HSK 25
  - Control software under Windows®
  - Protected 16-times tool changer

- ### Options
- Fine dust extraction system for graphite
  - Minimum quantity cooling lubrication system (for copper electrodes)
  - High frequency spindles with up to 100,000 rpm
  - Rotating and rotating/swivelling axes for 4 or 5-axis processing
  - Tool length measuring switch
  - Laser for contactless tool control
  - Electronic handwheel
  - Professional CAD/CAM solutions
  - Tornado suction unit
  - Zero point clamping system

- ### Application examples
- Electrode manufacture
  - Hard metal processing
  - Microprocessing
  - Ceramic processing
  - Fine mechanical processing
  - Medical engineering
  - Electronic industry
  - Watch industry
  - Automotive supplier industry
  - Tool/mould construction

- ### Typical materials
- Graphite
  - Hard metals
  - Plastics
  - Aluminium
  - Copper
  - Brass
  - Ceramic



Technical data	PREMIUM 5030 graphite
Dimensions (W x D x H) in mm	1500 x 1220 x 2000
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	50
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	Integrated i-8000 controller or Heidenhain®
Operation	Operating terminal with 19" TFT monitor, stainless steel keyboard and trackball mouse
Software	i-8000 / Heidenhain® / isyCAM 2.8 (optional isyCAM 3.6)