

# HELIOS EVO

EROSION GRINDING MACHINE FOR PCD TOOLS

5-Axes CNC Controlled



**abm**  
Grinding Technologies



# HELIOS EVO

## EROSION GRINDING MACHINE FOR PCD TOOLS

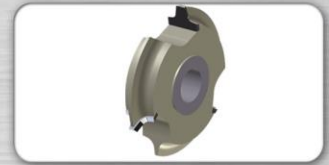
HELIOS EVO, is designed to produce and service PCD tools. Erosion process is completed in one set-up by means of integral measuring system, in order to achieve high precision and quality, machine main body is produced as single composite monoblock system. Mainly 3 type of tools can be processed by HELIOS EVO;

### GENERAL FEATURES

- 5-axes full CNC control, direct spindle system by additional 6th servo motor.
- Special plating on mechanical components ensure non-corroding and hardening.
- Integral measuring system for complex tool defining.
- Unique interfaces for tool production and service.
- 21,5" LED touch screen and operating interface in any stated language.
- Composite monoblock body ensures high rigidity and excellent surface quality.
- Rapid tool compesating by integral wheel dressing system.
- Wide capacity design to process common type of diamond tools.
- High volume and pressure of coolant to ensure the best condition for eroding process.
- Smart servo motors without requirement of calibration and referencing.
- Precise HSK-A63 system motor controlled dividing head.
- Central lubrication system.
- Windows based PC control enables update over internet or flash drive.
- Generator specially designed by ABM.
- Open software philosophy ensuring unlimited programming ability.
- Robust based constructed in ergonomic cabin.

### TECHNICAL SPECIFICATIONS

- Tool diameter  $\varnothing$  3 to 300 mm
- Grinding cycle with erosion oil.
- Resolution 0.005mm
- Tool holder HSK-A63
- Grinding wheel bore diameter 20mm
- Grinding wheel diameter max. 200mm
- Grinding wheel motor speed from 6.000 rpm.
- X-axis travel 650 mm
- Y-axis travel 350 mm
- Z-axis travel 700mm
- C-axis travel  $\pm 200^\circ$
- A axis  $\infty$
- 21,5" LED touch screen with industrial PC.
- Internal light
- Ergonomic cabin construction for tool loading/unloading operations.
- Electronic probe for tool detection and automatic positioning.
- Oil-tight casing cabin according to CE standards
- Weight 5000 kg
- Dimensions 1700x3200x2600 mm



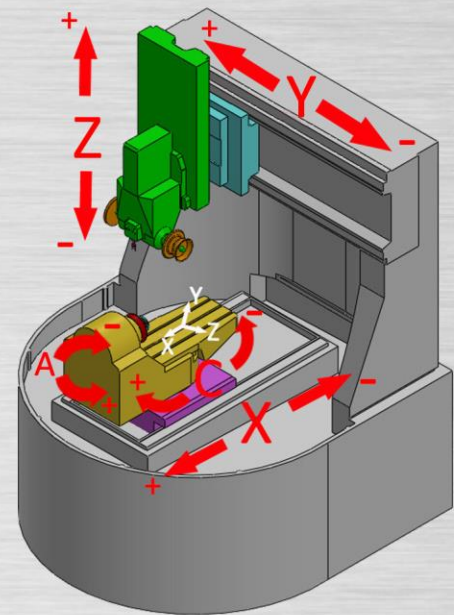
Profile knives and moulders



Helical cutters and router bits



Circular Saws and Hoggers



RENISHAW Probe Measuring Unit



HSK-A63 Tool Holder



21,5" LED touch screen with industrial PC