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SM 501 CNC

Generator for Pre- and Fine Grinding of Spherical and Plano Optics

The SM 501 CNC is a CNC-controlled 3-axis grinding machine for processing high precision spherical and plano components made of glass or ceramics.

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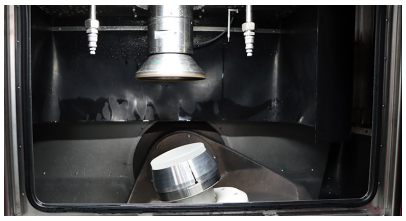
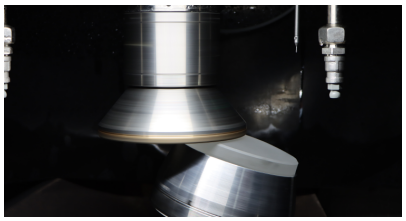
Technical Data

	SM 501 CNC
Working Range Diameter	80 mm - 500 mm
Tool Spindle	Speed: 0 - 4500 rpm; Interface: Flange (HD 40 or HSK 63 on option)
Workpiece Spindle	Speed: 0 - 650 rpm; Interface: Flange (HD 40 on option) with Collect Chuck or Vaccum Chuck
Vacuum	-0.7 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	18 kW / 400 V / 50 Hz
Dimensions	Width: 1450 mm, Height: 2290 mm, Depth: 2300 mm
Weight (approx.)	3100 kg





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Highlights

- High dynamic AC servo drives for all axes
- Quick and precise tool change due to Hydro-Expansion Chuck Technology (Ø 40 x 60mm DIN)
- Optimisation of cutting process due to multi-cutting steps with adaptable feed rate and spindle speed
- Production of polishing tool bodies
- Microsoft Windows operating system with OptoTech user interface, thereby a minimum of set up times
- Grinding to polishable quality in one cycle due to optimised cutting parameters
- Integrated Edging and Chamfering

System Advantages

- Optimisatized cutting process
- Pre-grinding or cut-to-polish finish grinding due to optimized cutting parameters in one working cycle
- Quick and precise tool change

Performance Characteristics

Technologies:

- AST (Advanced Setup Technology, Touch Setting): Machine measures the contact point of lens/tool, decreasing set-up time
- AFT (Advanced Feedrate Technology): Variable feed rate depending on pre-selected cutting capacity (spindle load)

Options

- Direct driven tool spindle with HSK 63 interface
- KombiTool or KombiTool+ [link]
- AFT (Advanced Feedrate Technology)
- Measuring Pin
- Center Thickness Measurement Gauge
- Exhaust Filter System for Mist Collection
- Offline Programming Module
- Asphere processing with optional software package

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