



OptoTech

SM 501 CNC

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



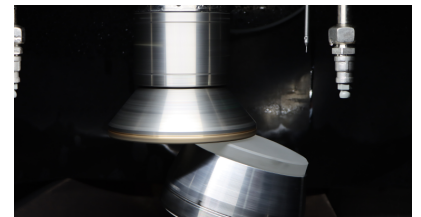
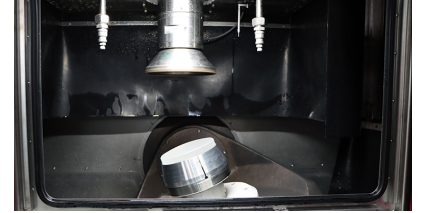
The SM 501 CNC is a CNC-controlled 3-axis grinding machine for processing high precision spherical and plano components made of glass or ceramics.



OptoTech

Technical data

	SM 501 CNC
Application	Grinding of Spherical and Plano Surfaces Including Edging
Working Range Diameter	80 mm - 500 mm
Control	Siemens Sinumerik 840D Solution Line
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 Vacuum 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; without operating panel
Weight (approx.)	3100 Kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





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