OptoTech

SM 201 CNC-TC

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

The SM 201 CNC-TC is a 3-axis grinding machine that is perfectly suited for pre- and fine grinding of spheres and plano optical components.

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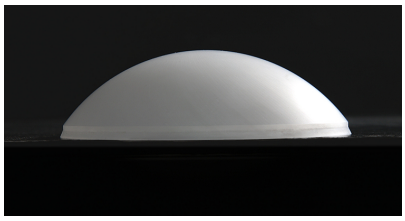
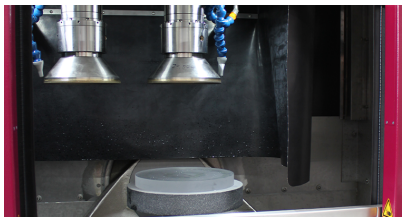
Technical Data

	SM 201 CNC-TC
Application	Grinding of Spherical and Plano Surfaces
Working Range Diameter	40 mm - 200 mm
Working Range Diameter (aspheres)	40 mm - 400 mm
Control	Siemens Sinumerik 840D Solution Line
Tool Spindle 1	Speed: 0 - 8000 rpm (HD 25); Interface: HD Chuck 40 x 60 mm DIN
Tool Spindle 2	Speed: 0 - 4000 rpm (HD 40); Interface: HD Chuck 40 x 60 mm DIN
Workpiece Spindle	Speed: 0 - 650 rpm; Interface: Flange with Collet Chuck or Vacuum Chuck
Vacuum	-0.7 bar
Air Pressure Requirement	5 bar
Power Requirement (others on request)	35 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.





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Highlights

- 2 tool spindles for pre- and cut-to-polish finish grinding
- Production of polishing tool basic bodies up to Ø 400 mm
- Optimisation of cutting process due to multi-cutting steps with adaptable feed rate and spindle speed
- Hydro-Expansion Chuck Technology (Ø 40 x 60mm DIN) for quick and precise tool change
- Microsoft Windows operating system with OptoTech user interface
- Grinding to polishable quality in one cycle due to optimised cutting parameters
- Integrated Edging and Chamfering

System Advantages

- Optimized cutting process
- Grinding to polishable quality in one cycle due to optimised cutting parameters
- 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)
- OQT (OptoTech Quality-Control Technology): Cyclic tool wear control in combination with the optional centre thickness measuring gauge. Fully automatic.

Options

- KombiTool or KombiTool+ [link]
- 3C Technology [link]
- Measuring Pin: Center thickness measuring gauge
- Measuring of Radii with Transmission to the CNC Controller
- Remote Diagnosis
- Exhaust filter system for mist collection
- Processing aspheres
- Offline programming module

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