

SPK 201 CNC

CNC-Controlled Polishing Machine for Optics up to Ø 200 mm



The SPK 201 CNC is a high end polishing machine with integrated polishing tool correction for the production of spherical and aspherical optics.



OptoTech

Technical Data

	SPK 201 CNC
Application	Polishing of Spherical Lenses with Integrated Polishing Tool Correction
Working Range Diameter	50 mm - 200 mm
Working Range Radius	40 mm - ∞
Control	Siemens Sinumerik 840 Digital Solution Line
Tool Spindles	Speed: S1: 0 - 2000 rpm; S2: 0 - 650 rpm; Interface: Flange; HD-40 chuck optional
Workpiece Spindle	Speed: 0 - 2000 rpm; Interface: Flange; HD-40 chuck optional
Vacuum	-0.7 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	8 kW
Dimensions	Width: 1750 mm, Height: 2300 mm, Depth: 2580 mm
Weight (approx.)	2800 kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.







Highlights

- High dynamic digital drives for all axes
- Quick and precise tool change due to Hydro-Expansion Chuck Technology (Ø 40 x 60mm DIN)
- Optimisation of the polishing process due to auto correction during polishing cycle (form error correction)
- Automatic calculation of the polishing tool height in relation to the radius centre point with 3 axes kinematics
- Microsoft Windows operating system with OptoTech user interface
- Machine base made of cast iron for higher rigidity

Performance Characteristics

Process Technologies:

- ORT (OptoTech Reverse Technology): Reverse arrangement of the tool and the workpiece. The lens is held in the upper spindle during the polishing process and allows for working pressure to be applied, or for polishing to be done without any working pressure using just the workpiece's own weight. This produces much better surface accuracy compared to those achieved with the conventional configuration
- OCT (OptoTech Correction Technology): Integrated polishing tool correction technology without tool change (third spindle for dressing tool included)
- AST (Advanced Setup Technology, Touch Setting): Machine measures the contact point of lens/tool; decreasing set-up time

Options

- ⁻ HydroSpeed[®] Polishing Technology
- Offline Programming Module