



OptoTech

# SPK 201 CNC

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

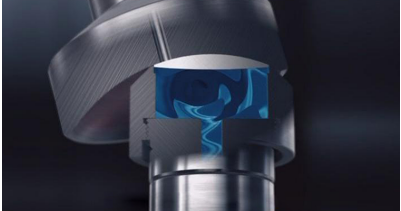


The SPK 201 CNC is a high end polishing machine with integrated polishing tool correction for the production of spherical and aspherical optics.



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;<br>Interface: Flange; HD-40 chuck optional   |
| Workpiece Spindle                     | Speed: 0 - 2000 rpm;<br>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.<br>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