



OptoTech

PPM 301 CNC

Precision Polishing Machine for Optics up to \varnothing 300 mm



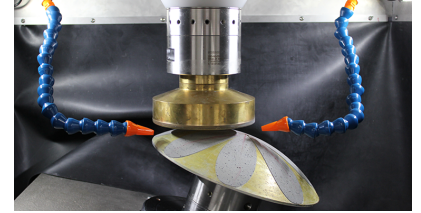
The PPM 301 CNC is a high-end polishing machine for the production of high precision lenses with integrated dressing technology for polishing tools.



OptoTech

Technical Data

	PPM 301 CNC
Working Range Diameter	80 mm - 300 mm
Working Range Radius	$\pm 60 \text{ mm} - \infty$
Travel B	$-63^\circ - 63^\circ$
Travel X	-250 mm - 250 mm
Travel Z	0 mm - 400 mm
Tool Spindle	Speed: 0 - 650 rpm; Interface: Flange; HD 40 on option
Workpiece Spindle	Speed: 0 - 1500 rpm; Interface: Flange; HD 40 on option
Vacuum	-0.7 bar
Air Pressure Requirement	6 bar
Dimensions	Width: 1450 mm, Height: 2290 mm, Depth: 2300 mm
Weight (approx.)	3100 kg





Highlights

- Polishing of 2D aspheres
- 2D corrective polishing of spheres and aspheres
- High dynamic AC servo drives for all axes
- Machine base made of cast iron for higher rigidity
- Quick and precise tool change due to Hydro-Expansion Chuck Technology (Ø 40 x 62 mm DIN)
- Optimisation of the polishing process due to auto correction during polishing cycle (form error correction)
- Operating system with graphical OptoTech user interface
- Design according to latest EMV and CE regulations
- Siemens Sinumerik One controller with OptoTech user interface

System Advantages

- Advanced polishing technologies
- Optimized polishing process due to auto correction
- Robust machine base with higher rigidity

Performance Characteristics

Polishing Technologies:

- OCT (OptoTech Correction Technology): integrated polishing tool correction technology
- AST (Advanced Setup Technology, Touch Setting): Machine measures the contact point of lens/tool; decreasing set-up time
- ORT: OptoTech Reverse Technology: Polishing tool sits on lower spindle; polishing pressure can be reduced down to zero, so that the lens is polished out under its own weight, causing less deformation and resulting in a much better fringe irregularity pattern

Options

- HydroSpeed® Polishing Technology
- C-Axis
- Polishing of 3D aspheres
- 3D corrective polishing of spheres and aspheres
- Offline Programming Module