

PPM 301 CNC

Precision Polishing Machine for Optics up to ø 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

Working Range Diameter

Working Range Radius

Application

Travel B Travel X

Travel Z

Control

Tool Spindle

Precision Polishing Machine for Optics up to ø 300 mm

80 mm - 300 mm

± 60 mm - ∞

-63 ° - 63 °

-250 mm - 250 mm

0 mm - 400 mm

Siemens Sinumerik 840 D CNC Solution Line

Speed: 0 - 650 rpm; Interface: Flange; HD 40 on option

Speed: 0 - 1500 rpm; Interface: Flange; HD 40 on option

-0.7 bar

6 bar

Width: 1450 mm, Height: 2290 mm, Depth: 2300 mm; Without operating panel

3100 kg

All data are subject to change without notice. Please verify details with OptoTech.

Workpiece Spindle

Vacuum

Air Pressure Requirement

Dimensions

Weight (approx.)

Disclaimer

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 it's 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