

# PPM 301 CNC

Precision Polishing Machine for Optics up to  $\emptyset$  300 mm

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



# Technical Data

	PPM 301 CNC		
Application	Precision Polishing Machine for Optics up to ø 300 mm		
Working Range Diameter	80 mm - 300 mm		
Working Range Radius	± 60 mm - ∞		
Travel B	-63 ° - 63 °		
Travel X	-250 mm - 250 mm		
Travel Z	0 mm - 400 mm		
Control	Siemens Sinumerik 840 D CNC Solution Line		
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; Without operating panel		
Weight (approx.)	3100 kg		
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.		





## 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