



OptoTech

MCP 150 CNC 6-Axis

Optical Polishing Centre for Universal Purposes



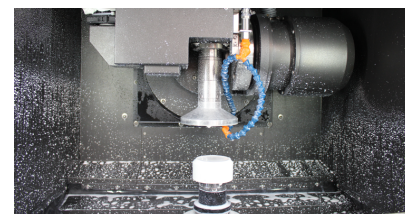
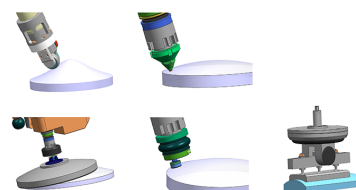
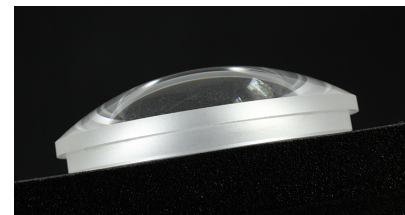
The new compact optical polishing centre MCP 150 CNC 6-Axis is one of the most recent processing centres made by OptoTech. Whatever you want to produce, whether spheres or aspheres, the MCP 150 is the perfect machine for these tasks. Multiple CNC axes and an innovative tool concept grant the requested flexibility.



OptoTech

Technical Data

	MCP 150 CNC 6-Axis
Application	Optical Polishing Centre for Spheres, Aspheres, Cylinders, Freeform Surfaces and Plano Surfaces in all Variations
Working Range Diameter	10 mm - 120 mm
Working Range Diameter Aspheres (depending on workpiece aperture)	10 mm - 180 mm
Working Range Radius	$\pm 15 \text{ mm} - \infty$
Travel A	-45 ° - 35 °
Travel B	-90 ° - 90 °
Travel C	- 360 °
Travel X	0 mm - 500 mm
Travel Y	0 mm - 250 mm
Travel Z	0 mm - 150 mm
Amount of Axes	6 (X, Z, A, B, C, Y)
Control	Siemens Sinumerik 840 D Solution Line
Tool Spindle	Speed: 0 - 2000 rpm; Interface: HD Chuck $\varnothing 25 \times 40 \text{ DIN}$
Workpiece Spindle	Speed: 0 - 2000 rpm; Interface: HD Chuck $\varnothing 25 \times 40 \text{ DIN}$
Vacuum	-0.6 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	11 kVA
Dimensions	Width: 2100 mm, Height: 2000 mm, Depth: 2500 mm
Weight (approx.)	3100 kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





Highlights

- 6-Axis polishing and correction polishing machine for pre-polishing and highly accurate correction polishing of pre-polished workpieces made of glass, ceramics etc.
- The large range of usable tools like Advanced Wheel Polishing (A-WPT), Active Fluid Jet Polishing (A-FJP), tools for spherical polishing and different pitch tools make the MCP-Series a universal machine for optical processing
- Partial pitch polishing, A-WPT and A-FJP polishing in raster and spiral mode
- Full online connection between the entire working cell (MCG Series with MCP Series and Metrology). Even freeform surfaces can be fine corrected by correction dataset
- Direct interface to tactile and optical surface measuring systems like Taylor-Hobson Form Talysurf, Mahr MarSurf, Mitutoyo or OptoTech Interferometers
- Machine base made of cast iron for highest rigidity
- 1 vertical workpiece spindle, movable in X-Z-direction and 1 tool spindle, mounted on B-Y-Axis
- Workpiece spindle combined with C-Axis
- 6 CNC Axes, AC servo motors for X- and Z-Axis
- Quick and precise tool change due to Hydro-Expansion Chuck Technology (Ø 25 x 40mm DIN)

System Advantages

- Universal machine for optical processing
- Maximum flexibility combined with the largest possible working chamber
- Different expansion options offer maximum variability

Performance Characteristics

Processing Technologies:

- Spherical and Aspherical Polishing
- A-WPT
- A-FJP Corrective Polishing
- Classic Pitch Polishing
- Partial Pitch Polishing
- Cylinder Polishing

Options

- Exhaust filter system for mist collection
- Polishing Slurry Tank