



OptoTech

# MCP 150 CNC 5-Axis

Optical Polishing Centre for Universal Purposes



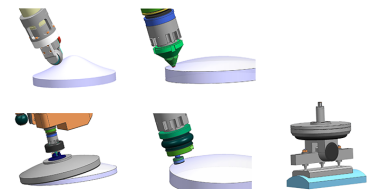
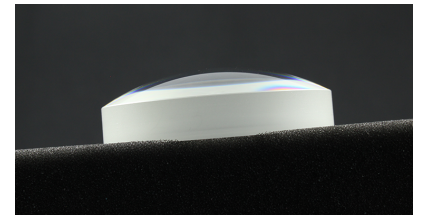
The new compact optical polishing centre MCP 150 CNC 5-Axis is one of the latest processing centres made by OptoTech. Whatever you want to produce, whether spheres or aspheres, the MCP 150 is the perfect machine for these tasks. Multiple CNC axes and an innovative tool concept grant the requested flexibility.



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## Technical Data

	MCP 150 CNC 5-Axis
Application	Optical Polishing Centre for Spheres and Aspheres
Working Range Diameter	10 mm - 120 mm
Working Range Diameter (aspheres - depending on workpiece aperture)	10 mm - 200 mm
Working Range Radius	$\pm 15 \text{ mm} - \infty$
Travel B	$-180^\circ - 180^\circ$
Travel C	$-360^\circ$
Travel X	0 mm - 500 mm
Travel Y	0 mm - 250 mm
Travel Z	0 mm - 150 mm
Amount of Axes	5 (X, Y, Z, B, C)
Control	Siemens Sinumerik 840 D Solution Line
Tool Spindle	Speed: 0 - 2000 rpm; Interface: HD Chuck $\varnothing 25 \times 42 \text{ DIN}$
Workpiece Spindle	Speed: 0 - 2000 rpm; Interface: HD Chuck $\varnothing 25 \times 42 \text{ DIN}$
Vacuum	-0.6 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	8 kW
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

- 5-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) and different pitch tools make the MCP-Series a universal machine for optical processing
- A-WPT and A-FJP polishing in spiral mode
- MultiTool Concept for processing of spheres and aspheres
- 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
- Quick and precise tool change due to Hydro-Expansion Chuck Technology (Ø 25 x 42mm DIN)
- 1 vertical workpiece spindle, movable in X-Z-direction and 1 tool spindle mounted on B-Y-Axis
- Workpiece spindle combined with C-Axis
- AC servo motors for X- and Z-Axis

## 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
- Advanced Wheel Polishing A-WPT
- A-FJP Corrective Polishing
- Classic Pitch Polishing
- Partial Pitch Polishing

## Options

- Exhaust filter system for mist collection
- Polishing Slurry Tank