



OptoTech

# MCG 150 CNC

CNC Controlled Optical Machine Center



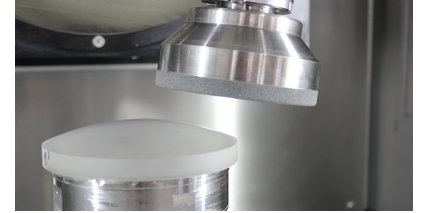
The new compact optical processing center MCG 150 CNC is one of the latest processing centers made by OptoTech. Whatever you want to produce, whether aspheres, spheres, edging, prisms, cylinders, 3D-optics or drilling holes, the MCG 150 is the perfect machine for these tasks. Up to five CNC axes and an innovative tool concept grant the requested flexibility.



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## Technical data

	MCG 150 CNC
Application	Optical Processing Center for Universal Purposes
Working Range Diameter	10 mm - 200 mm
Working Range Radius	5 mm - $\infty$
Travel B	-90 ° - 270 °
Amount of Axes	4 (X, Y, Z, B)
Control	Siemens Sinumerik 840 D solution line
Swivelling Angle B-axis	-90° / +270° (Travel 360°)
Tool Spindle Speed	Speed: 0 – 20000 rpm; Interface: HD Chuck $\varnothing$ 25 x 40 DIN
Working Range C-Axis (on option)	360° or as spindle operation
Workpiece Spindle Speed	Speed: 0 – 1500 rpm; Interface: HD Chuck $\varnothing$ 25 x 40 DIN
Vacuum	-0.6 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	6 kW
Dimensions	Width: 2100 mm, Height: 2000 mm, Depth: 2500 mm; Without control panel
Weight (approx.)	3100 kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





## Highlights

- Prism grinding by manual CNC-DIN-Programming
- Machine base made of cast iron for highest rigidity
- 1 vertical workpiece spindle, movable in X-Z-direction
- 2 vertical tool spindles, mounted on B-Y-Axis, rotatable on the B-Axis
- Workpiece spindle combined with optional C-Axis
- AC servo motors for X- and Z-Axis
- Up to 5 CNC Axes
- Microsoft Windows operating system with OptoTech user interface
- Interfaces to Taylor Hobson Form Talysurf, Mahr MarSurf, Mitutoyo Measuring System, OptoTech Workshop Interferometers of the OWI XT Series (Others available on request)

## System advantages

- Multi spindle concept for pre- and fine grinding of spheres and aspheres. Even grinding of complex shapes is possible.
- High flexibility due to up to 5 CNC axes and an innovative tool concept
- Quick and precise tool change due to Hydro-Expansion Chuck Technology ( $\varnothing$  25 x 40mm DIN)

## Options

### Machine Options:

- C-Axis
- 3D-Measuring Pin
- Exhaust Filter System for Mist Collection
- Software Package for Cylinder and Applications like Drilling, Sawing or Freeform Processing and Edging
- KombiTool / KombiTool+ [\[link\]](#) or diamond cup wheels for processing spheres or rotationally symmetric aspheres
- KombiTool / KombiTool+ [\[link\]](#) or grinding wheels for processing aspheres, cylinders and freeform surfaces

### Software Options:

- F<sup>3</sup> Software for asphere and freeform processing
- ShopMill Software for drilling holes and milling of pockets etc.