



OptoTech

# SM 80 CNC-TC

CNC-Controlled Generator for Pre- and Fine Grinding of Spheres and Aspheres

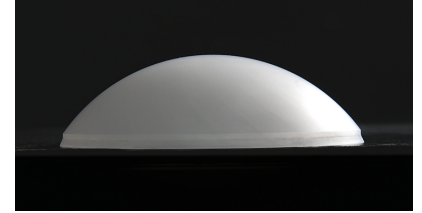


The OptoTech precision grinding machine SM 80 CNC-TC is perfectly suited for flexible and universal production of spherical and aspherical optical components. The SM 80 CNC-TC is the perfect complement to our SPK 80 CNC polishing machine, delivering a balanced cycle time for grinding and polishing.



## Technical data

	SM 80 CNC-TC
Application	Generator for Pre- and Fine Grinding of Spherical and Aspherical Lenses
Working Range Diameter	5 mm - 80 mm
Working Range Diameter (aspheres)	5 mm - 100 mm
Working Range Radius	± 5mm to plano
Travel B	-90 ° - 90 °
Amount of Axes	3 (X, Z, B)
Control	Siemens Sinumerik 840D Solution Line
Tool Spindle	Speed: 5000 - 20000 rpm; Drive: Direct Spindle, roller bearings; Interface: HD 25
Workpiece Spindle	Speed: 0 - 2000 rpm; Interface: Flange; Clamping System: Vacuum, Collet Chuck or HD
Vacuum	-0.7 bar
Air Pressure Requirement	5 bar
Power Requirement (others on request)	9 kVA
Dimensions	Width: 1450 mm, Height: 1980 mm, Depth: 1200 mm
Weight (approx.)	2000 kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





## Highlights

- 3 spindles (1x workpiece spindle, 2x tool spindles)
- All tool spindles using direct driven spindles
- Coolant control
- LAN-Connection
- Preparation for filter exhausting device
- Siemens Sinumerik One controller with OptoTech user interface

## Performance characteristics

Technologies:

- AST (Advanced Setup Technology / Touch Setting)
- Radius Processing
- 3D-Grinding for optimal utilization of the grinding tool
- Edge processing: Diameter processing using different kinematics; chamfering using different kinematics

## Options

Machine Options:

- C-Axis
- Automation (SR 80 or RPL 80)
- Processing of complex edge geometries using OptoEdge
- Processing aspheres
- Remote control
- Upper measuring pin for center thickness and diameter

Additional Accessories (available as an option)

- Coolant tanks (with or without centrifuge)
- Chiller with coolant tank
- Filter exhausting device with coolant recirculation
- Vacuum device