



# OptoTech

## SM 30 CNC-TC

Low-Cost Generator for Grinding Spheres or Aspheres with Cup-Type Tools or Grinding Tools with Integrated Edging



The OptoTech SM 30 CNC-TC grinding machine with 2 grinding spindles is the ideal low cost version of a high speed CNC generator for supermicro and endoscopy optics. The universal working range, the easy usage combined with up-to-date grinding technology, using standard cup type tools, offers a contemporary alternative to our long proven SM 30. The price-performance-ratio of this machine will elate you.



## Technical Data

SM 30 CNC-TC	
Application	Generator for Pre- and Fine Grinding of Spherical and Aspherical Lenses
Working Range Diameter	2 mm - 30 mm
Working Range Diameter (aspheres)	2 mm - 40 mm
Working Range Radius	0.5 mm to plano
Amount of Axes	3 (X, Z, B)
Control	Siemens Sinumerik 840D Solution Line
Grinding Spindles	Ball Bearing Motor Spindle (Pre-Grinding); Ball Bearing Motor Spindle (Fine Grinding)
Tool Spindle	Speed: 10000 - 60000 rpm (Direct spindles); Drive: Frequency Controlled AC Motor; Interface: Collet Ø 6 mm DIN
Workpiece Spindle	Speed: 200 - 2000 rpm, infinitely variable; Interface: Thread; Clamping System: Vacuum, Collet or Hydro Expansion Chuck
Vacuum	-0.7 bar
Air Pressure Requirement	6 bar
Power Requirement (others on request)	5 kW / 400 V / 50 Hz
Dimensions	Width: 890 mm, Height: 1790 mm, Depth: 1150 mm
Weight (approx.)	700 kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





## Highlights

- 3 Spindles (Workpiece spindle, 2 grinding spindles)
- Adjustment of the process parameters via 3-axis CNC-Controller
- Two tool spindles: Pre-grinding (ball bearing) and fine grinding (air bearing) with cup type tools or grinding tools with integrated edging
- One workpiece spindle for clamping with chuck or vacuum
- Easy to handle due to a CNC controller for parameter input
- OptoTech user interface, Microsoft Windows

## System Advantages

- The ideal low-cost version of an high speed CNC generator
- Ideal for supermicro and endoscopy optics
- Easy handling
- Highest rigidity due to a cast iron stand
- Energy efficient motors: Possible energy savings up to 30% (depending on required power)

## Performance Characteristics

Processing Cycles:

- Grinding of spheres with standard cup grinding wheels
- Pre-,grinding, fine grinding and edging
- Grinding of a protection chamfer (radii chamfer) with the cup grinding wheel

## Options

- Measuring pin for thickness measurement
- C-Axis
- Processing aspheres
- Coolant unit