ZM 50 CNC-TC

## CNC-Controlled Centering Machine for Optics up to Ø 80 mm

The ZM 50 CNC-TC is a simultaneously working edge processing machine in highest precision. The high quality software module allows even the production of complex edge geometries.

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Technical Data

	ZM 50 CNC-TC
Application	Centering Machine for Edging of Spherical and Aspherical Lenses
Working Range Diameter	0 mm - 80 mm
Axis X	0 mm - 60 mm
Axis Z	0 mm - 50 mm
Amount of Axes	5 (X1, X2, Z1, Z2, W) - C-Axis on option
Centering Spindles (top and bottom)	Feedrate: 5 - 250 mm/min
Tool Spindle	Speed: 100 - 5600 rpm; Interface: Ø 20 H5 DIN 58742 Form H
Working Range Lens Height	max. 30 mm with HD 12 Bell; Clamping Method; max. 12 mm with Automation
Air Pressure Requirement	6 bar
Dimensions	Width: 1290 mm, Height: 1975 mm, Depth: 1305 mm
Weight (approx.)	1700 kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.
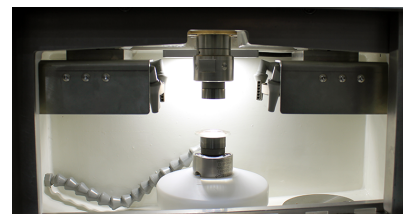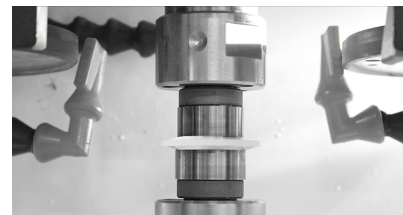
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Highlights

- High precision bell clamping centering machine for centering and edging with CNC quality
- 2 tool spindles (TwinCut) with simultaneous processing for cycle time savings up 30-40%
- Bell clamping method with OptoTech Hydro-Soft centering for the most precise centering, even for small centering angles
- Centering of blocked lenses using the interchangeable arbor process
- Edging spindles are mounted in a torsion resistant cast iron "box-in-box" system that assures maximum accuracy
- The completely new designed software package „OptoEdge" allows programming of complex edge geometries
- Automatic program correction by measuring the center thickness
- Combined recess and correction cuts with individually adjustable feed rates and speeds of rotation allow even complex processing steps to be peformed without having to change tools
- Simple tool changing due to the clamping system used. Tools comply with DIN standards.
- All standard clamping chucks with HD12 connection can be used

Performance Characteristics

New clamping technology:
Clamping spindle (W-Axis) equipped with a new, electronic (servo) clamping force- and positioning control, which allows repeatable adjustment and regulation of very low clamping forces. The combination of new, innovative clamping spindle guides leads to maximum dampening and rigidity. Due to this, higher stock removal rates can be achieved and unwanted marks of the centering bells can be eliminated
The completely new designed software package „OptoEdge" allows programming of complex edge geometries:

- Programming of user-defined multi-step processing (multi-pass edging) with different edge geometries
- User-defined combination of round- or form-processing
- Free arrangement of the processing cycle sequences
- New innovative laser centering software for high-precision alignment of low aperture lenses

Options

- Laser centering device for transmission and reflection of lenses with a small clamping angle
- C-Axis Package for rocessing non-rotationally symmetric lenses
- Camera for monitoring pre-profiled workpieces while loading
- Automatic handling for disk magazine