



OptoTech

UPG 1000 CNC

4-Axis Ultra-Precision Processing Center

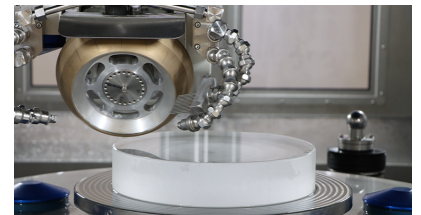
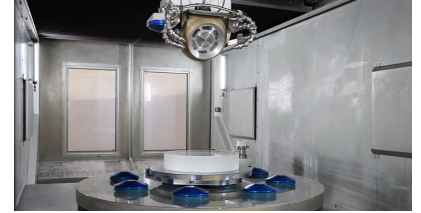


The Ultra-Precision Grinding Machine UPG 1000 CNC was especially designed for cut to polish complete processing of high-end ASTRO optics up to diameter 1000 mm. Whether spheres, aspheres, or freeform surfaces, the UPG 1000 CNC offers highest precision grinding (all axes mounted hydrostatically). This compact and high efficient design allows an optimal production of all important future parts in the area of ASTRO-Optics, EUV-Optics and aerospace technology.



Technical Data

| | UPG 1000 CNC |
|--------------------------------|--|
| Working Range Diameter | 0 mm - 1000 mm |
| Working Range Workpiece Height | 0 mm - 300 mm |
| Tool Spindle | Speed: 0 - 22000 rpm |
| Disclaimer | All data are subject to change without notice. Please verify details with OptoTech. |



Highlights

- „Grind to polish“ complete processing: Fine grinding, finest grinding, edge processing and InSitu Metrology
- Ultra-Precision generating of spheres, aspheres and freeform surfaces. Ideal for hyperbolic surfaces of astropics.
- Machine base made of granite for highest rigidity
- 4 CNC-Axes for maximum flexibility
- Hydrostatic guide ways
- Absolute Heidenhain linear scales
- 1 grinding spindle for ultra-precision grinding and one dressing spindle for dressing the grinding tools
- Integrated high-precision measuring technology
- Siemens Sinumerik One controller with OptoTech user interface

Options

- Grinding tools
- Different clamping systems
- Coolant tanks
- Precision chilling system for cooling the axe- and spindle drives and the hydraulic aggregate
- Hydraulic aggregate to supply the hydrostatic guide ways