

Aspherical Lenses



- Material from DUV to IR
- Custom dimension and shapes
- Diameter from 5 to 200 mm
- Clear aperture: Central 90% of diameter
- Irregularity : $\lambda/10@632.8\text{nm}$
- Surface quality: 10-5 S/D
- Centration: $<3'$
- Standard and custom coating options available
- High laser damage threshold

Aspheric lenses have its advantages in a range of applications where eliminated spherical aberration or (and) single element design is required. CASTECH offers CNC precision-polished aspherical and acylindrical lenses, with or without anti-reflection (AR) coatings. Our CNC polished aspheric lenses are iteratively ground and polished by a software supported computer-controlled processing center to provide better controlled surface quality, irregularity and focal length deviation.

Metrology

CASTECH employs rigorous verification procedure to guaranty the high performance of our each aspheric lens. Taylor Hobson Form Talysurf PGI profilometer allows contact measurement in grinding process while Taylor Hobson LumphoScan 260 non-contact 3D optical surface profilometer performs ultra precision optical surfaces form measurement in polishing process.



Taylor Hobson Form Talysurf PGI
Measure range: from 0.1 to 200 mm
Resolution ratio: 0.8nm



Taylor Hobson LumphoScan 260 for irregularity measurement
Measure range: from 5 to 260 mm
High surface accuracy: $\pm 50\text{nm}$