Optical Assembly





- Component types: Glass-Glass and Glass-Metal
- Bonding methods: Epoxy bonding, Optical Contact, Optical diffusion bonding
- Diameter ranged from 1 to 400 mm
- Transmitted wavefront Distortion : up to λ/20 @632.8nm
- ullet Transmitted & reflected beam deviation : \pm 1 " to \pm 5"
- Customized design available
- High laser damage threshold

CASTECH has integrated various polishing and coating technologies to address optimized solutions to different applications focusing on ultra-precise finishing with even fine subsurface properties or costs-efficiency. We work closely with our customers on engineering building and mass production of a complete portfolio of optics components including aspherical lens, spherical lens, cylinders, gratings, mirrors, windows, prisms and beamsplitters made out of an extensive range of materials.

By combining manufacturing with our advanced bonding processes, we are able to produce high quality multi-optical elements and optomechanical assemblies. Some typical parts include optical diffusion bonded polarization beamsplitter cubes used in high power laser systems, customized lens solutions like objective lenses, telecentric F-Theta lenses and collimators for a wide range of applications.

Metrology

CASTECH has strong testing capabilities to precisely characterize the performance of our optical assemblies. A variety of advanced metrology systems are applied to guarantee the precise measurements of optical, mechanical, and reliability properties.



Trioptics OptiSpheric



ZYGO GPI-XP Interferometer for wave front & parallelism measurement With $\lambda/50$ accuracy Parallelism measure accuracy: 0.5 "