

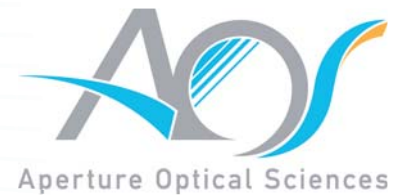


## JAPAN

Okamoto Optics Works  
8-34 Haramachi, Isogo-ku  
Yokohama, Japan 235-0008  
[Tel] +81.45.752.2233  
[Fax] +81.45.752.1954  
email: [sales@okamoto-optics.com](mailto:sales@okamoto-optics.com)  
[www.okamoto-optics.com](http://www.okamoto-optics.com)

## USA

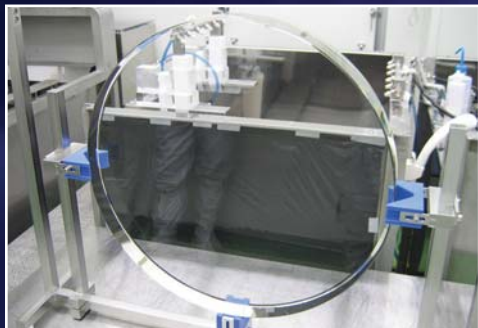
Aperture Optical Sciences, Inc.  
170 Pondview Drive  
Meriden, Connecticut 06450  
[Tel] 860.316.2589  
email: [info@apertureos.com](mailto:info@apertureos.com)  
[www.apertureos.com](http://www.apertureos.com)





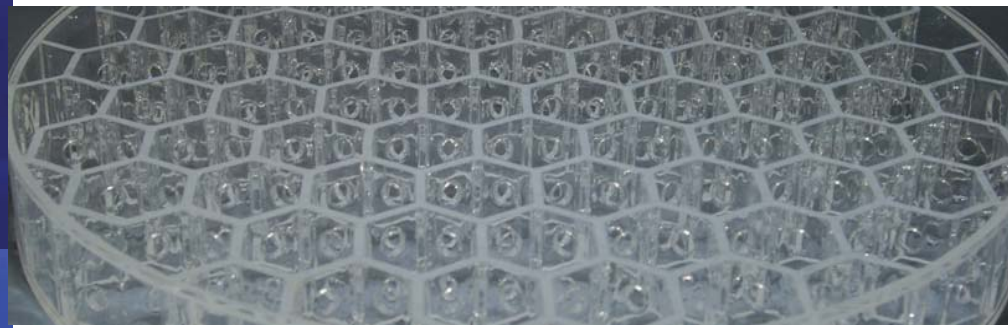
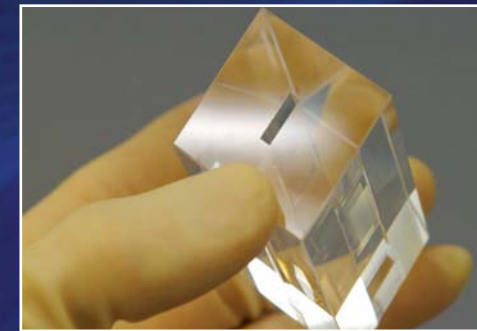
### WHO WE ARE

Okamoto Optics has been manufacturing precision optics for over 65 years. Located in Yokohama, Japan, Okamoto Optics develops and manufactures a broad range of custom optics and thin film coatings for scientific research, high energy lasers, lithography, medical and industrial products. We have fostered a culture of innovation and creative manufacturing that has enabled our business to serve the most demanding applications today. Through collaboration with both commercial and academic partners, Okamoto Optics has achieved a reputation for precision and integrity. We welcome new customers to learn more about our advanced technologies and how we may assist you in advancing your own use of optics to achieve your goals.



### LASER FUSION OPTICS AND COATINGS

In 1966, Okamoto began a relationship with the Institute of Laser Engineering at Osaka University to manufacture high performance laser optics for inertial confinement fusion. In 1991 we co-developed a lightweight foam fused silica product with Osaka University and Shin-Etsu Quartz Inc. More recently we supplied optics for the LFEX laser amplifier as well as meter scale optics and high damage threshold HR and AR coatings for the FIREX project. In 2007, and in partnership with Plymouth Grating Laboratory, we delivered the first meter size pulse compression grating optics.



### OUR SPECIAL CAPABILITIES

- Optics sizes from 10mm to nearly 3 meters
- Flats, spheres, cylinders, aspheres and lightweight optics
- Optics for semiconductor steppers and scanners
- Metal and dielectric thin film coatings up to 1.7 meters
- Materials processing including glass, crystal, metals, SiC and neoceramics
- Process development for new materials and applications
- Polishing of stage mirrors up to 2.7 meters in length
- Meter class high energy laser optics and coatings

### OUR SPECIAL TECHNOLOGIES

- Computer controlled cylinder grinding and polishing
- MRF polishing
- Numerous metrology instruments including:
  - 700 mm aperture phase measuring interferometer
  - stitching Interferometry
  - white light scanning profilometer
  - many other industry standard and custom instruments
- Large planetary polishers up to 3.5 meters
- 2-meter advanced IAD/e-beam coating chamber

### APPLICATIONS ENGINEERING & SALES AND SUPPORT

Aperture Optical Sciences, Inc (AOS) provides sales and customer support for Okamoto Optics in the United States and Europe. We also provide applications engineering, technology development and product development services. AOS develops and employs advanced technology for making high resolution satellite telescopes, aspheric mirrors, SiC optics, and optics for high energy lasers. AOS designs and manufactures optronic systems such as beam expanders, large aperture optical mounts, and custom onto-mechanical assemblies. AOS' products are used in aerospace imaging technologies, nuclear research, airborne vision systems, remote sensing, and a variety of scientific research applications.

Information on custom optics and extended services can be found at:

[www.apertureos.com](http://www.apertureos.com) and [www.okamoto-optics.com](http://www.okamoto-optics.com)

