

This high-power laser beam delivery subassembly is precision-made to allow copy-exact, drop-in replacement in a cleanroom environment.

Contract Optical Design and Manufacturing

Advanced electro-optical systems for industrial, commercial and government customers

AOA Xinetics designs, develops and manufactures a wide variety of standard and custom electro-optical and opto-mechanical products. Since its inception in 1976, AOA Xinetics has steadily expanded its engineering and manufacturing capabilities to provide its customers with the highest quality products, systems and services.

AOA Xinetics has extensive customer relationships with industrial, commercial and government customers, providing solutions to our customers' most challenging requirements. With more than 30 years of experience as a systems integrator, AOA Xinetics has the design expertise and manufacturing capability to meet the most demanding development schedules. We strive to provide innovation, quality, and experience.

In Contract Optical Design and Manufacturing, a part of AOA Xinetics' Systems and Service business area, optical systems are developed and manufactured for several application

areas such as machine vision, laser beam delivery, graphic arts, metrology, and defense and aerospace. The full services provided by this group include concept development, design, prototype fabrication, test and evaluation, and small-, medium-, or large-volume manufacturing.

Value Proposition

With design and manufacturing support from AOA Xinetics' Contract Optical Design and Manufacturing, partner clients can concentrate on their core competencies and outsource specialized functions, thus allowing them to minimize their staff and facility requirements. In addition, we can simplify our partner clients' project management tasks while shortening time to market and reducing overall risk and cost.

Areas of Specialization

This group specializes in the design, development, and manufacturing of:

- High-performance electro-optical systems
 - Imaging systems

- Real-time machine vision
- Custom camera design
- Laser beam delivery
- Optical metrology instrumentation
 - Laser dimensioning
 - Wavefront measurement
- Adaptive optics systems
 - Wavefront correction
 - High frame rate cameras

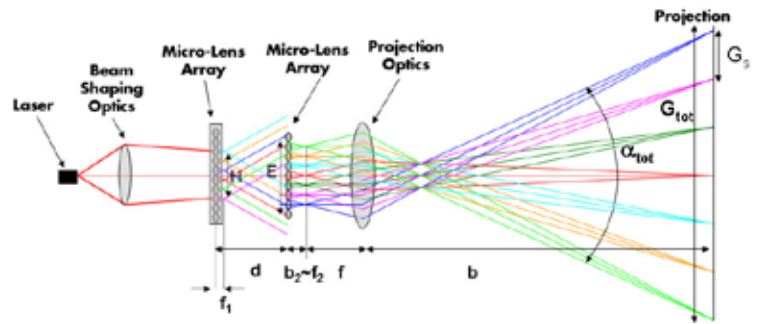
Capabilities and Facilities

The following items highlight some of Contract Optical Design and Manufacturing's distinguishing characteristics and capabilities:

- Cleanroom facilities
- Rapid prototyping
- Hardware and software design tools
- Design for manufacturing
- Management of government/ITAR programs

Engineering and Manufacturing Facilities

AOA Xinetics' Contract Optical Design and Manufacturing facilities are in Cambridge, Mass. and East Hartford,



AOA Xinetics manufactures electro-optical systems that operate over spectral regions from ultraviolet to long-wavelength infrared for industrial, commercial and government customers.

Conn. Its flagship facility is a custom constructed, 76,000 square-foot facility in Cambridge. It houses AOA Xinetics' Contract Optical Design and Manufacturing's engineering development team and includes 10,000 square feet of Class 10,000 cleanroom space plus an additional 10,000 square feet of industrial production space.

Additionally, there are clean tent systems with laminar flow through HEPA filters. These tents provide 3,500 square feet of Class 1000 workspace. Within the tents are laminar flow benches that provide Class 100 workspace.

Customer Alliances

Northrop Grumman's AOA Xinetics' team thrives on solving our customers' challenging optical problems. We form close partnerships with our customers to understand and fulfill their evolving requirements. Our experience and capabilities enable us to deliver mission-critical systems. Our reputation is built on our customers' success.

With contract design and manufacturing from AOA Xinetics, our customer base can:

- Focus on their core capabilities
- Minimize staffing and facilities
- Simplify project management
- Speed time to market
- Reduce risk
- Control cost



Northrop Grumman's AOA Xinetics houses its manufacturing headquarters in Cambridge, Mass.

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