



PRECISION OPTICAL
ENGINEERING, TESTING AND
CONTRACT MANUFACTURING



MISSION

To provide excellence in applied optical solutions to each customer through an integrated engineering process founded on a commitment to precision, cooperation and success.

COMPANY VISION

Promet® Optics specializes in the design, testing and production of precision optical systems with an emphasis on quality, reliability and cost effectiveness. By ensuring that engineers and technicians have the latest in technology and software tools and the skills and knowledge to use them effectively, the company is able to maximize design efficiencies and pass the cost savings on to the customer.

Applied Optical Engineering requires a unique blend of technical disciplines and a tightly integrated work environment to successfully synchronize all aspects of the design process. From concept generation, to engineering, to production and testing, Promet emphasizes an engaged, collaborative approach between optical, mechanical, electrical and software engineers, technicians, administration and most importantly, you, the customer.

As a growing small business, Promet invests heavily in developing strong, long-lasting relationships with customers, vendors and highly qualified industry players. Over the last two decades, this commitment to cooperation has resulted in an extensive and reliable network of partners that has consistently helped Promet succeed.

Promet always seeks new partners with whom to pursue, improve and apply existing technology and pioneer optical innovation.

VALUES

INTEGRITY – dedicated, honest and vested in success

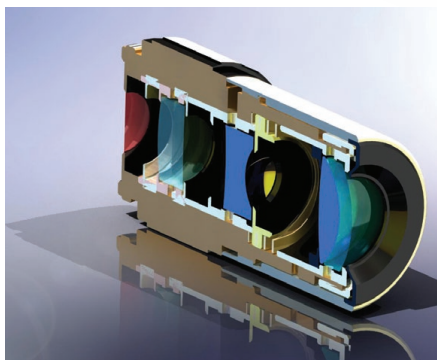
PRECISION – meticulous, methodical and thorough

CUSTOMER SATISFACTION – flexible, responsive and considerate

CORE COMPETENCIES

Optical Design and Engineering

Designing custom optical components and multi-element optical systems requires thorough understanding of complex optical principles. Promet Optics streamlines the design process with powerful software tools for 3D solid modeling, Finite Element Analysis (FEA) and integrated optical simulation tools. Whether developing new products, optimizing existing systems or designing specialized optical components, Promet delivers practical, cost-effective solutions to resolve unique application challenges.

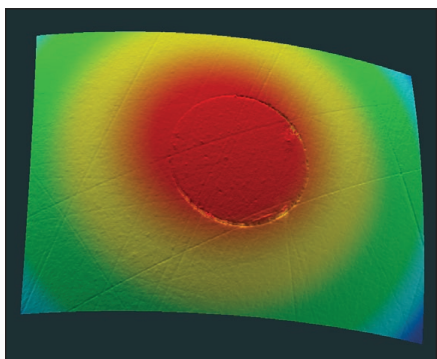


- Concept development
- Optical simulation and analysis
- Illumination design and optimization
- Optomechanical design
- Optical component specification

Optical System Production

Comprehensive optomechanical simulations and models are developed as a first step in the production process. This approach identifies and corrects potential problems prior to fabrication, maximizing efficiency and cost-effectiveness. Whether you need complete optomechanical systems, partial subassemblies or specialized components, Promet Optics offers turnkey solutions from concept development through production.

- Reliable low to mid-volume production capabilities
- Rigorous component and subassembly testing
- Advanced centering and mounting capabilities
- Class 10,000 clean room facilities
- ISO 9001 compliant quality assurance system
- Direct component sourcing



Fiber Optic Testing

High precision interferometry utilized for fiber optic endface geometry testing provides valuable insight into connector performance for both engineers and technicians. Promet Optics leveraged years of optical and optomechanical design experience to develop the FiBO Interferometer, a high precision, stable, NIST traceable and portable platform for demanding fiber optic connection testing applications.

- | | |
|---------------------------|-----------------|
| • MIL Spec Termini | • Laser Cleaved |
| • Telecom Connectors | • Ribbon fiber |
| • Specialty Interconnects | • Flat Polish |

ACCOMPLISHMENTS

Promet Optics has a proven 23-year track record of providing innovative solutions to leading organizations in diverse industries. Highlights of current and recently completed projects include:

Optical Finger Print Scanner Systems (FBI Certified Technology)

Promet has developed and manufactured several generations of four-finger slap/roll fingerprint scanning modules for a leading biometrics corporation. Used in booking systems of law enforcement agencies world-wide, these optical scanners are compliant with both NIST and Image Quality Standard FBI Appendix F standards.

LIDAR optical modules for Homeland Security applications

Promet worked closely with a leading R&D company to develop and prototype optics for an experimental LIDAR for use in a long-range personnel surveillance system. The project was successful in demonstrating the feasibility of high-resolution scanning at extended distances.

Night vision heads-up display (HUD) optical module for Apache Helicopters

Promet developed the optomechanical design for a light-weight, HUD module to retrofit legacy night vision equipment in Apache helicopters. This design was transitioned into production and has been supplied to a prime contractor for 10+ years.

High resolution, near-infrared (NIR) objectives for Homeland Security research

Promet developed, engineered and built the optical module for an experimental, ultra-high resolution NIR objective capable of non-compliant iris detection at long range. The system was successfully demonstrated to achieve new levels of performance for security applications.

High power surgical laser conditioning module

Promet designed a 40W laser conditioning module for use in cutting-edge surgical ablation system being developed by a leading biomedical company. It is a function-critical component to monitor and safely deliver the source laser energy to the surgical tool. This device has passed critical early-stage FDA approval and is currently being transitioned into volume production.



PRODUCTS

Drawing on extensive expertise in the area of precision optical technology Promet Optics has developed the FiBO brand of portable interferometers. The FiBO® is a unique, highly-compact phase-shifting interferometer for use in fiber-optic connector inspection as well as other applications requiring 3D mapping capabilities of microscopic optical surfaces. In addition, FiBO is also capable of documenting connector endface cleanliness by detecting and quantifying high-contrast defects and contaminants.



In the tenth year of production, FiBO systems are being used world-wide by fiber optic cable assembly fabricators and installers as well as research labs and critical application customers such as Lockheed Martin, Northrop Grumman, Boeing, Raytheon, NRL, US Army, NAVAIR and NAVSEA.

FiBO 200 Interferometer

- Duplex SC, LC
- Ribbon fibers
- Telecom field service
- Specialty OE interconnects
- Supplier qualification

FiBO 250 Interferometer

- Fiber production
- Supplier qualification
- Platform testing
- QA inspection and documentation
- Go/No-go evaluation
- Aerospace/military vehicle field service

FiBO 300 Interferometer

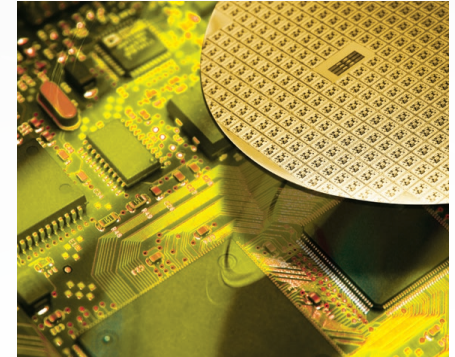
- Bare fiber measurement up to 1500 microns in diameter
- Specialty fiber endface analysis
- High power laser components
- Ribbon fibers
- Single- and multi-mode optical connector testing
- Cleaved fiber inspection
- Angle-polished fiber up to 50 degrees
- Micro-optic components

MARKETS AND CUSTOMERS

The ubiquity of applied optics in virtually every aspect of life enables Promet Optics to effectively serve customers in a wide range of industries including avionics, biometric security, defense, semiconductor manufacturing, biomedical and tele-communications. This exposure to varying design and operational requirements serves to enhance our team's expertise and results in a more open and creative approach to solving challenging design problems.

Promet has a long history of providing critical engineering and optical solutions to a number of Federal Government agencies, prime and sub-contractors:

- NAVSEA
- NAVAIR
- United Technologies Corp.
- Honeywell
- Elbit Systems of America
- Lockheed Martin
- Raytheon
- Airbus
- AgustaWestland
- Boeing
- US Army
- Safran MorphoTrust USA
- 3M
- Northrop Grumman



STRATEGIC PARTNERS

Promet Optics works closely with an extensive network of strategic partners to leverage subject expertise and experience in delivering on-time and within-budget solutions to our customers.

Scienza Systems - Innovative opto-electrical system development

Go Technologies - Advanced electronics design and rapid fabrication

Optical Engineering of Minnesota (OEM) - Optical design of advanced free-space optical systems

Diffraction International - Industry leader in specialized interferometry and optical metrology applications

OSA (Optical Society of America) - Professional organization of optical engineers

SPIE - Professional organization of industry leaders in optics and photonics

IEEE - Professional organization of electrical engineers

COMPANY PROFILE

Promet International, Inc. was founded in 1993 and rebranded to Promet Optics in 2015. The primary mission was to deliver innovative optical and optomechanical design solutions to technology companies in the Midwest. Since then, the company has grown to a full service, high-technology organization providing quality optical design, development, testing and manufacturing services to customers across the world. Today, Promet's legacy is a track record of projects successfully completed for a diverse range of customers in both commercial and military sectors.

Our closely integrated staff of engineers and skilled technicians works as a team to efficiently develop and implement creative, workable solutions for challenging optical applications. They have the necessary combination of knowledge, experience and dedication to produce the highest quality products and services, quickly, effectively and within budget.



The PROMET Advantage

An efficient, high-technology, optics focused organization with a proven track record of consistently delivering reliable solutions to mission-critical applications. With a staff of cross-disciplined, multi-lingual professionals, the company combines a diverse set of skills and backgrounds to form a cohesive, problem solving team. Supported by advanced in-house optical metrology facilities and simulation tools, Promet has what it takes to bring today's complex optical concepts into reality.

4611 Chatsworth Street N
Saint Paul, MN 55126, USA
+1 651-481-9661
info@prometoptics.com
www.prometoptics.com

