OZ Optics Limited

Fiber Optic Components for Optoelectronic Packaging

June 2016



- Company founded in 1985;
- Corporate headquarters located in Ottawa, Canada;
- Manufacturing facility in Ottawa/Canada, Izmir/Turkey, and Jiaxing/China
- Seven Product Groups: Laser-to-Fiber Delivery Systems, High Power Fiber Optic Components, Polarization Maintaining Products, Attenuators, Opto-**Electronic Packaging, Test Equipment, Fiber Optic Sensor Systems**
- > Sales offices in Canada, USA, Turkey and China







Three Product Groups:

Optical Test Fiber Optic Equipment 25% Fiber Optic Sensors **Components** 70%

- Over 1,000 products
- Leading Edge R&D

OZ Optics Products





OZ Optics Products





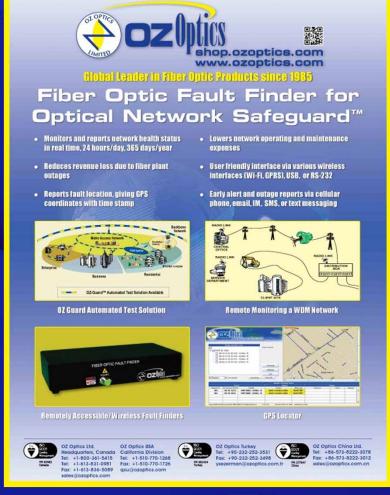
OZ Optics Products





Product Innovation





Product Innovation







Over 470 employees worldwide:

- 260 in Ottawa and US
- 50 in Turkey
- 160 in China

OZ China



OZ Canada





OZ Turkey



OZ Optics is lead by an experienced team:

- Ömür Sezerman, Chairman, President & CEO
 - Founder and CEO since inception (31 years)
- Zahide Sezerman, VP of Human Resources
 - With OZ Optics since inception (31 years)
- **Garland Best, VP of Components Division**
 - 24 years at OZ Optics
- **Gordon Youle, VP of Test Equipment Division**
 - 17 years at OZ Optics
- Martin Powell, Operation Manager
 - 12 years at OZ Optics
- Sarah Miller, Controller
 - 3 years at OZ Optics
- Metin Sezerman, General Manager of OZ Turkey
 - 15 years at OZ Optics
- Bing Li, General Manager of OZ Optics China
 - 12 years at OZ Optics PRIVATE AND CONFIDENTIAL



- ISO9001:2008 certified
- Broad patent portfolio
- Advanced proprietary processing technology











> Using our strong direct sales and distributors, we address the following markets:



OZ Optics has resellers and distributors in over 30 Countries & Regions and over 10,000 customers globally:



In-House Production Capabilities

Experienced and well-trained staff in following fields: - optical, mechanical, electronics & software

CNC Machine Shop



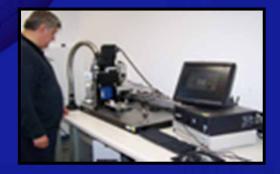
Clean Room



AR Coating



Laser Conditioning/Cleaving



Femtosecond Laser Lab





Branch Network







Facility – Ottawa Headquarters

- 60,000 sq ft. Manufacturing and R&D Facilities
- 15,000 sq ft. Admin, Sales and Marketing
- 15,000 sq ft. Training and Fitness Facility
- R&D, Product Design, Engineering, Final Assembly & QA







Facility - Ottawa Headquarters









OZ Optics – Turkey Factory

- Operational since 2000
- 33,000 sq ft. Manufacturing Facility
- Located in Free Trade Zone
- Low Tax Rates
- Sub Component Parts Manufacturing
- Cost Effective Manufacturing
- High Quality Labor







OZ Optics China

- Operational since 2009
- Wholly Foreign Owned Enterprise
- **Subcomponent Parts Manufacturing**
- **Cost Effective Manufacturing**
- **High Quality Labor**
- **Extensive Training** 3-6 months in OZ Canada)









OZ China Facility

Jiaxing, China

- Located in Economic Development Zone
- 500 sq meters Admin, Sales and Marketing
- 1500 sq meters Manufacturing Area
- 100 sq meters Class 10,000 Clean Room
- 100 sq meters ESD Working Area









Manufacturing Strategy



www.ozopties.com

Industry Standards

All products manufactured are in strict accordance with international industry standards:

> Telecordia Compliance



CE Compliance



RoHS Compliance



- ➤ ISO 9001:2008 Certified (China, Turkey and Canada)
- Controlled Goods Directorate Registered

Core Competencies

- Pioneer in Polarization Maintaining (PM) Components
- Leader in Wavelength Flattened, High Power
 & Low PDL Components
- Leader in High Power Fiber Optic Delivery Systems
- Custom Test Equipment, Including Polarization Test Equipment and FTTH Equipment
- Widest Range in Attenuator Product Offering
- Fiber Optic Distributed Strain and Temperature Sensors
- Complete product line for OCT applications & 2 Micron



Leading Technology



- power handling > 50W
- low loss, low cost turnkey solution



High Power

Collimators/Focusers

Distributed Stain and

Temperature Sensors

Pioneer in Polarization **Maintaining (PM) Components**

- wavelength flattened
- high power & low PDL
- PM test equipment

Fiber Optic Sensor

- fast and simultaneous measurement of strain & temp
- large structure health monitoring

Leader in High Power Fiber Optic Delivery Systems

specializes in custom design



OUR VISION

- Be the preferred Supplier of choice
- Capture and expand market share
- Maximize shareholder value



OUR MISSION

To become the leading provider of innovative optical products to telecom and non-telecom sectors

OUR CORE VALUES

- Leadership
- **Teamwork**
- **Boldness**
- Commitment
- Innovation
- Rewards

OUR QUALITY POLICY

- **Provide our Customers with a competitive** advantage, leveraging performance, price and delivery, through a continuous process of Quality advancement in all areas of our Company
- Communicate effectively to our Customers, Suppliers and Shareholders our commitment to **Quality and continuous improvement**
- **Promote opportunities of professional** development for all members of our Company through education, training and personal challenge

Ömür Sezerman **President**



Fiber Optic Components for Optoelectronic Packaging

- Silicon V-Groove Substrates
- V-Groove Assemblies
- Metalized Fiber
- Hermetically Sealable Patchcords with Metal Solder
- Glass Solder Preforms
- Hermetically Sealable Patchcords with Glass Solder
- Inline Optical Taps and Monitors
- Soldering Stations and Polarization Test Equipment
- Tapered / Lensed Fibers
- Pigtail Style Fiber Collimators / Focusers
- Polarization Maintaining Patchcords and Connectors



V-Groove Substrates

- Up to 48 Fiber Substrates
- Better than 0.5 Micron Accuracy
- Use with Either UV or Thermal Epoxies



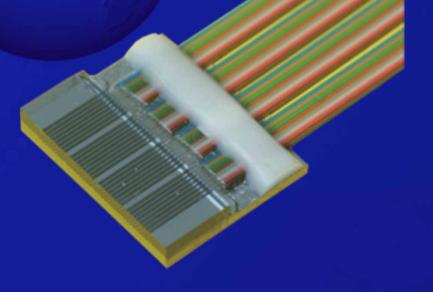
- Up to 48 Fibers in a Single Array
- 127, 250, & 500 Micron Spacings
- SMF, MMF & PMF



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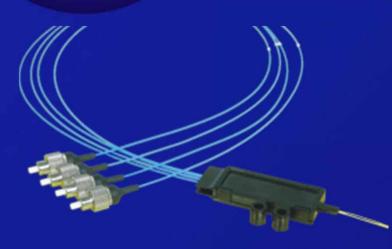
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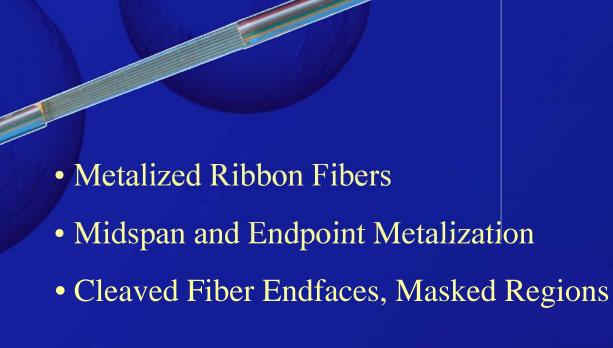
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Metalized Fibers



Metalized Fibers



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- Meets Telcordia Specifications
- SMF, MMF & PMF Versions
- Customer Specific OEM Designs

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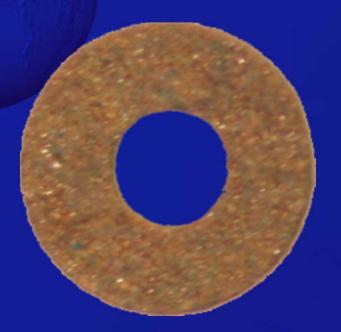
- Solders Glass Directly to Metal
- Ideal for Hermetic Sealing, Device Packaging
- Circular & Oval Preform Shapes



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- No Metalization Required, For Lower Costs
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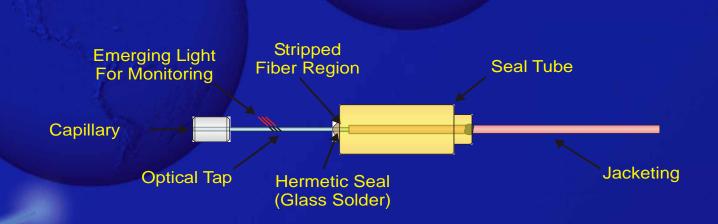
Inline Optical Taps and Monitors

- No Interruptions to the Optical Path
- •Can be Integrated into Assemblies and Packages
- Low Insertion Losses, Return Losses and PDL



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- No Interruptions to the Optical Path
- Can be Integrated into Assemblies and Packages
- Low Insertion Losses, Return Losses and PDL



Tapered/Lensed Fibers

- As Small As 2.5 Micron Spot Sizes
- Circular And Oval Spot Profiles
- Custom OEM Designs, Metalized Versions



Tapered/Lensed Fibers

- As Small As 2.5 Micron Spot Sizes
- Circular And Oval Spot Profiles
- Custom OEM Designs, Metalized Versions



Pigtail Style Fiber Collimators/Focusers

- > 2 Micron Spot Sizes, Up to 5W Power
- Up to -60dB Backreflection SMF, PMF & MMF
- 1.6mm, 2.5mm, 4mm & 8mm OD Housing



OZ Optics

Your solution provider for existing and next generation fiber opticcomponents and test equipment

Please Contact Our Sales Dept:

Tel: 613-831-0981 ext 3370

Toll Free: 1-800-361-5415

Email: sales@ozoptics.com.

OZ Optics

Thank You for Choosing OZ!

