

ANNUAL REPORT 2020

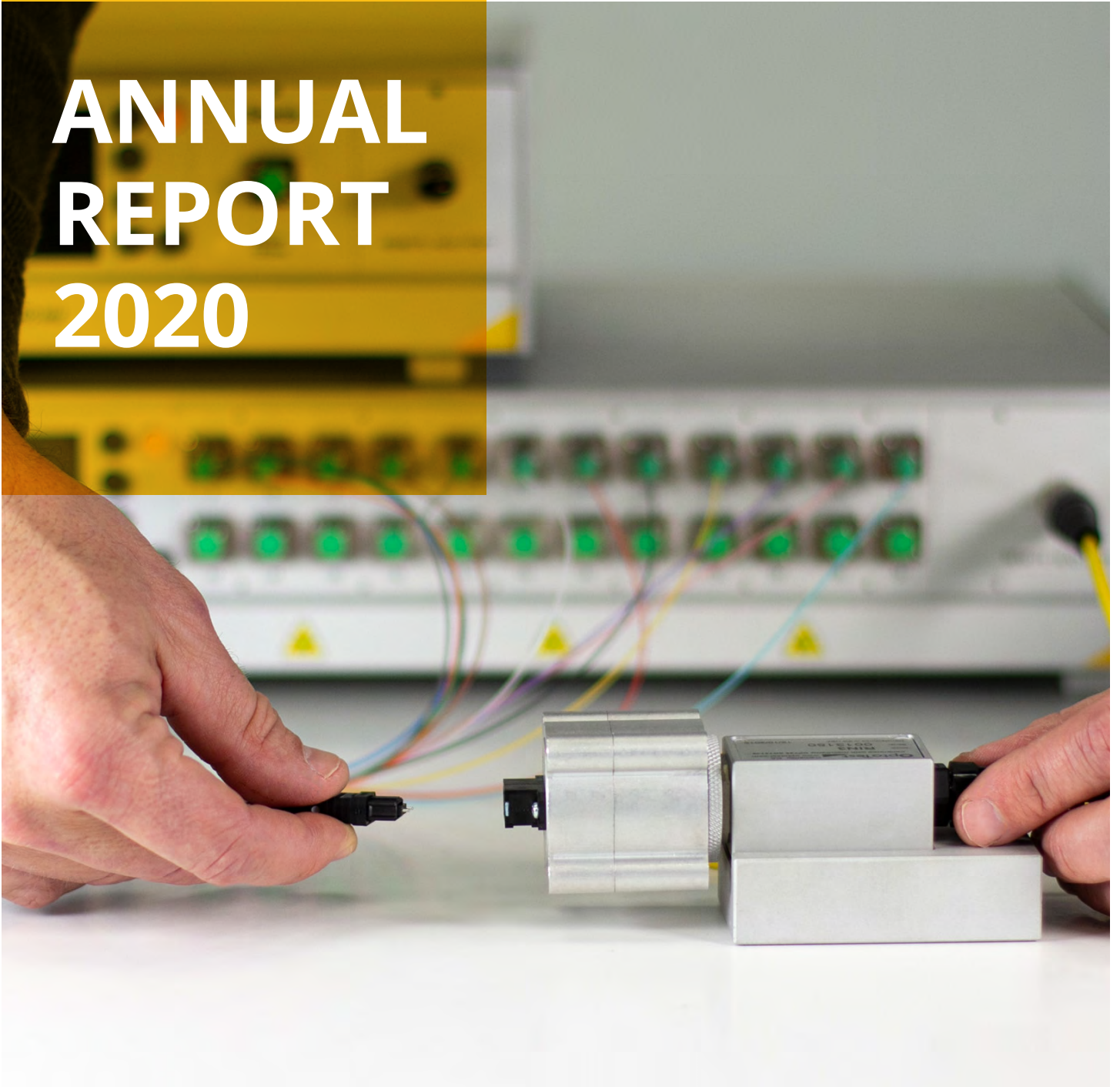


TABLE OF CONTENTS

A Letter from the CEO	3
Our Core Values	4
What We Do	5
Our Customers	6
Our Marketing	6
Global Customer & Technical Support . . .	7
Technical Sales.	8
Team Safety	9
World-Class Manufacturing	10
Innovation	11
Design & Customization Capabilities . . .	12
What's Next	13

A LETTER FROM THE CEO



Caroline Connolly, President and Chief Executive Officer

OptoTest is stronger than ever, pandemic notwithstanding. 2020 was brutal for all of us across the globe. We all experienced new levels of stress, fear, and financial concern; we are all human. But my biggest lesson has been understanding the importance of a strong company culture and teamwork in the face of adversity. Since starting OptoTest in 2002 in a garage with a small Ikea table and a flip phone, we have since developed into a vertically integrated industry leader that still provided outstanding customer support and product improvements even in a pandemic. Our partnerships with key suppliers and our redesigned-for-safety headquarters enabled us to actually improve our service and support levels in 2020.

While a tremendous challenge, last year was about getting back to basics as we took the opportunity to strengthen our core competencies to better serve our customers. We supply some of the largest companies in the industry, like Intel, Leviton, Raytheon, Northrop Grumman, H+S, R&M, Glenair and US Conec. Our on-site manufacturing, engineering and services teams worked seamlessly together to ensure we never had to call our customers and tell them we couldn't meet a deadline. We even made custom products based on very specific requirements and still delivered on-time ahead of deadlines.

Our team adapted to serve our customers; we evolved to meet customer needs in new ways, like remote demonstrations, managing calibrations and even closely managing our vendor relationships



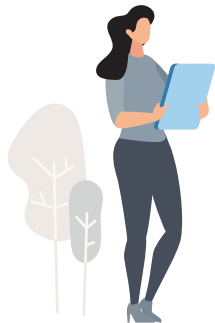
to maintain our superior quality and super-fast lead times. We also focused on starting the development process at the end by truly understanding our industry and customers.

OptoTest and its team has risen to the occasion and is emerging from the pandemic stronger than when we entered it. Our newfound strength will support our industries increased demand for 5G and emerging applications, and be felt by our customers for many years.

"OptoTest and its team has risen to the occasion and is emerging from the pandemic stronger than when we entered it."

OUR CORE VALUES

What we live and breathe everyday!



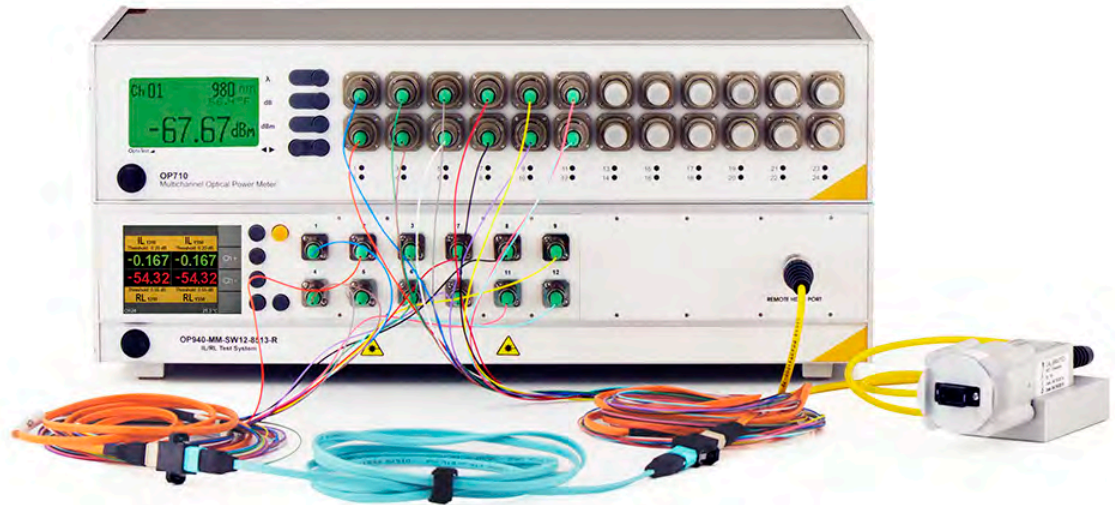
Do the right **thing**



At OptoTest, we work hard to ensure company goals and values align with new and existing team members. This is a focus area during our onboarding process and in our weekly "all-hands" meetings. This ensures we have motivated and collaborative team members to satisfy customers for years to come.

Teresa Poddig, Controller

WHAT WE DO



Headquartered in Camarillo, California, OptoTest Corporation is a worldwide leader in the fiber optics industry, producing the fastest, most accurate, and most reliable test solutions.

Fiber optic links enable ultra-fast communications over greater distances than traditional radio and copper alternatives. They have changed the way society works and interacts and are a key enabler for the emergent 5G technologies. These links are highly sensitive to imperfections within the cables and connections that attenuate and reflect the light thus degrading the signal. OptoTest manufactures and sells the equipment used by our customers to measure the performance and quality of the products they make.

The core of OptoTest's business is the **Insertion and Return Loss (ILRL) Meter**. These meters are comprised of **optical sources, optical power meters and a back-reflectance meters**. We offer dozens of options to suit our customer needs for **channel count, source types, wavelengths, modal conditions, power levels, fiber types, and connector types**.

The functional elements of the ILRL meter such as **light sources, optical switches, power meters and modal conditioning** are available as independent blocks to further **customize solutions** to specific technical needs and budgets. OptoTest also offers **complimentary solutions** such as **high-performance reference cables and cleaning products**. In 2020, we began distributing the Sumix brand of microscopes and interferometers, thus becoming a one-stop solution provider for manufacturers and users of optical cables.

OptoTest solutions are noted for their **high-speed, high accuracy and solid reliability**. Our nimble architecture lets us create custom solutions quickly and adapt to ever-changing customer demand. Optional control software enables factory automation, data logging and overall support for quality control functions.

OUR CUSTOMERS

OptoTest largely targets clients focused with **Fiber Optic Components Manufacturing (70% of 2020 revenues)** and **Aerospace/Defense (30%)**. Satisfied clients include Boeing, Lockheed Martin, Honeywell, Government Agencies, and others. OptoTest is established and growing within the biomedical, oil and gas, audio and visual, data center telecom, and military aerospace fields.



Biomedical



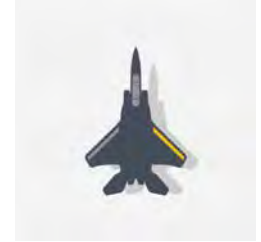
Oil & Gas



Audio & Visual



Telecom



Military

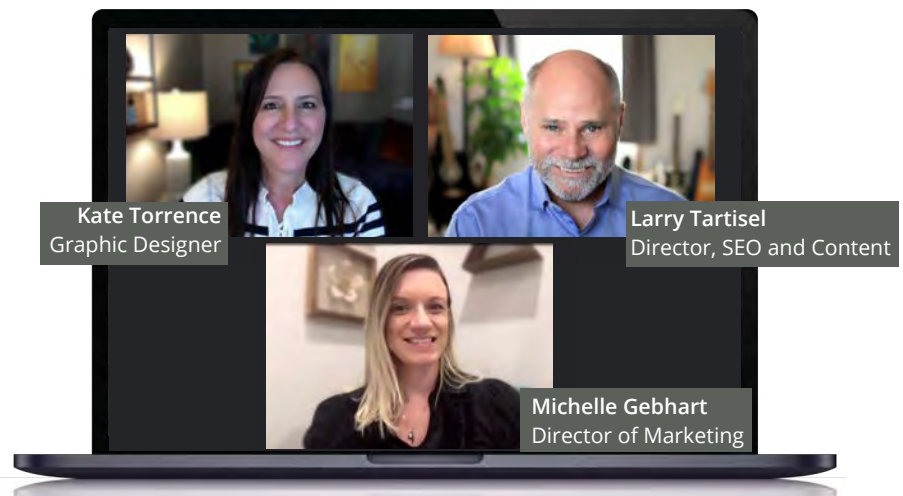
OUR MARKETING

There's an old saying "circumstances don't make the man, it reveals him." And like the other teams at OptoTest during the pandemic of 2020, our marketing team sprinted full speed into this challenging period. They produced an unprecedented amount of new and improved marketing content, tripling the number of videos, and created many more marketing materials and tech notes than ever before.

We improved the quality of our marketing deliverables based upon our constant internal drive to understand how our customers' needs have changed and continue to change. The results were substantial.

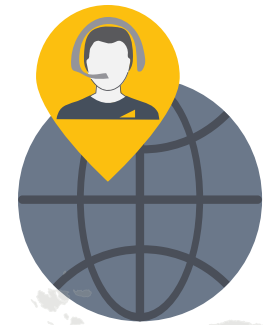
The year provided us with the time to reflect, research and produce better marketing impact. This resulted in **56% more online content downloads, 31% more online quote requests, 17% more website views** and a **50% increase in our LinkedIn subscribers**.

Because of the foundation-strengthening work done in 2020, 2021 will certainly earn OptoTest even better results. Our website search engine presence, improved site content, and other high-impact initiatives give great promise to even brighter results in the years to come.



www.optotest.com

GLOBAL CUSTOMER & TECHNICAL SUPPORT



OptoTest has nearly two dozen **distributors covering** all parts of **Europe, Middle East, Asia** and **Latin America**. These partners also sell complimentary fiber optic products such as cleavers and polishing equipment. They are dedicated to the industry and knowledgeable about our products. Many have been servicing our customers with the utmost quality since OptoTest was founded nearly two decades ago.

OptoTest offers a variety of **calibration services** to meet customer demands for quality and efficiency. Our **in-house calibration** department services the full range of OptoTest equipment and provides a full spectrum of troubleshooting and repair services. We also offer **on-site calibrations** where a member of the OptoTest team travels to and performs the

calibrations at the customer site. In 2020 we added **remote calibration** services as well. We can remotely supervise and/or perform the calibration via online collaboration tools with assistance from a local operator thus giving us true worldwide reach.

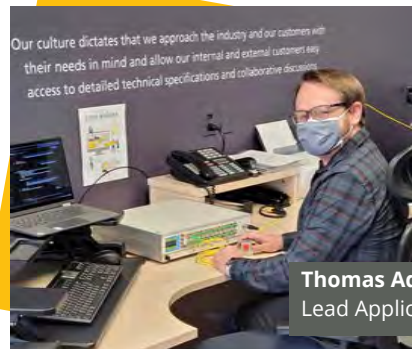
OptoTest **certified calibration centers** are set up throughout the world and can provide local calibration & services. In 2020, we doubled the number of distributors that can offer calibration services to their clientele and those in nearby territories.

Europe: Poland, Switzerland, UK

Asia: China, India, Japan



Angel Aragon
Customer Service Rep.



Thomas Addison
Lead Applications Engineer

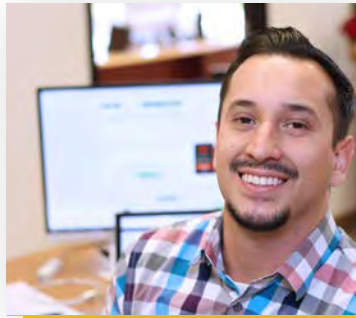
Angel joined OptoTest 2-years ago after graduating cum laude from California State University of Northridge with a degree in history. His professionalism and efficiency is only matched by his kindness. When you need a logistics miracle, Angel is the guy that gets it done. Angel is also an avid trumpet player that is adept with just about any brass instrument including the tuba, French horn and trombone. His other love is his 3-year-old dachshund-chihuahua pup. In his spare time, he enjoys Japanese Manga, video games and reading up on history and current events.

Thomas is our lead Applications Engineer who works with OptoTest's team of professionals to address your technical questions. Thomas graduated from California State University Channel Islands, a few miles from OptoTest's headquarters with a bachelor's degree in Physics. He is our Applications Engineer and excels at customer support. Whether it means doing on-site calibrations, remote demonstrations, or asking general fiber optic questions, Thomas is able to it all! In his spare time, Thomas is an avid bowler.

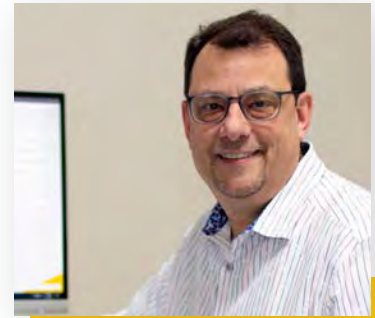
Technical Sales



Daniel Galindo



Isaac Camacho



Jonathan Novick

OptoTest takes great pride in tailoring the optimum solution for each customer. Our in-house team combines over 100 years of technical sales expertise to analyze each customer request and present the optimum solution for speed, accuracy, reporting and budget. This team is even able to offer **custom product variations** when necessary without a minimum purchase requirement.

The in-house team is further supported by a **worldwide network of distributors**. Many of these companies have represented OptoTest since the company was founded. They possess an intimate knowledge of the fiber industry as well the OptoTest solutions. Travel restrictions in 2020 created new challenges for selling, as demos were conducted using video collaboration tools. The team also doubled the number of **online training videos available for customer self-help**. A side benefit of the reduced

travel schedule was that the team rededicated themselves to enhancing their technical knowledge with each person spending at least 5% of their time weekly in training activities.

Webinars replaced trade shows in 2020. OptoTest partnered with customers and industry organizations to comprehensively cover a variety of technical challenges. These outreach efforts proved highly popular to audiences and served as an effective means of outreach to potential customers.

OptoTest saw nice growth in certain parts of its market during 2020 despite the challenges faced by the pandemic. The new skills and strategies employed last year put us **in a stronger position to capitalize on opportunities in 2021** and the post-pandemic economy. We look forward to being able to meet with our customers in person again soon.

Chris Heisler Chief Technology Officer



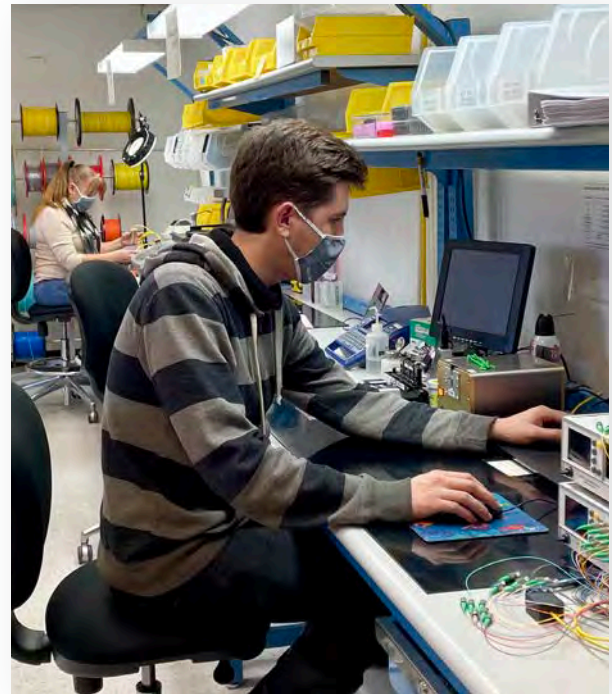
Chris Heisler graduated from CalPoly San Luis Obispo with a Bachelor of Science in Electrical Engineering with a focus on Communications and Fiber Optics. He continued with his Master's Degree at CalPoly in Digital Signal Processing and Photonics. Chris has been working in the fiber optics industry for 15 years, and currently holds the position of CTO at OptoTest Corporation, where he has helped to refine the return loss measurement process and push development of test equipment that satisfies customer's needs. Chris is also a regular contributor to the TIA TR42 Fiber Optic Engineering Committees and participates in IEC fiber optic working groups.

TEAM SAFETY



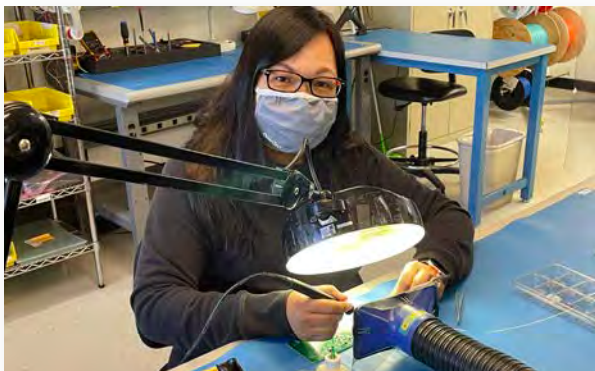
MANUFACTURING HEALTH & SAFETY

Our efforts to protect the safety of our team has paid off. Last March, OptoTest invested in technology resources to ensure our engineering, sales and support teams could immediately and effectively work remotely. Next, we implemented **a comprehensive safety program** at our headquarters, including health evaluations and temperature checks. We purchased OptoTest masks, implemented hand and workstation cleaning, and installed social distancing protocols that far exceeded requirements to significantly limit the potential for the virus to spread. We highlighted the **importance of safety to all team members** three times: in our weekly safety meeting, our weekly department meetings and in our weekly “all-hands” virtual meetings. We communicate public safety and vaccination updates and emphasize the importance to keeping each other safe. As important, we needed to create **new workspaces** for our on-site team members.



Devan Aptaker and Juana Navarro, Mechanical Assemblers

REDESIGNED WORKSPACES



Annalyn Solomon, PCB Assembler



David Morales, Warehouse Coordinator

- Daily temperature checks.
- Safe individual areas with clear safety screens.
- A team culture of safety and care for coworkers.

Redesigning OptoTest’s workspaces for team members remaining at our headquarters required a significant effort. First, we prevented access to visitors, maintenance and delivery personnel from entering our facility. Next, we **relocated our mechanical assembly and final testing work centers into their own individual areas** of the building, preventing exposure between team members. Last, we **installed clear safety screens and improved ventilation around each production work-station** to further prevent transmission. While government estimates 30% of southern Californians have contracted the virus, **no employees have contracted the virus at work.**

WORLD-CLASS MANUFACTURING



OptoTest was uniquely positioned to support customers last year as the only company in our market segment with **Made in the USA** in-house manufacturing, design, and service. Our vertical integration enabled us to improve our average lead-time to just over a week in 2020 and our repair and calibration cycle times to just a few days.



- ✓ *“OptoTest attracted new customers last year because we continued to improve service and quality levels. While others increased lead-times and costs due to dependance on offshore contract manufacturers, we were working to fulfill their orders and provide more value”*
Rob Holmes, Chief Operating Officer

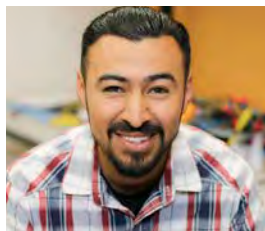
OptoTest made significant improvements in quality in 2020. OptoTest implemented a “Voice of the Customer” program to ensure customers’ needs are identified and acted upon. Customers reported that **reliability and accuracy are essential**, as line downtime and customer rejections are catastrophic for them. OptoTest integrated this program as part of their **ISO9001 certified** process improvement efforts.

- ✓ *“Being the only ISO9001 certified company in our market segment is unique because it provides transparency and assurance needed by critical infrastructure and defense companies. This delivers proof that OptoTest uses best business practices and stands behind our products.”*
Cerise Smith, Quality Assurance Manager

Listening to the customer paid off: While the majority of OptoTest’s units build **17 years ago are still in service**, OptoTest’s **warranty rate further reduced to 0.06% last year**, and currently offers a **3-year warranty** on newly sold equipment.



Cerise Smith
Quality Manager



Freddie Martinez
Manufacturing Manager



Lourdes Madrigal
Buyer



Bernadette Garcia
Production Supervisor



Eric Andersen
Production Supervisor

INNOVATION

OptoTest Launches New Software

Software Innovation that delivers results well beyond industry expectations.

Our software team, led by Ed Navarro, envisioned our **“endless solutions” OPL-CLX software** to go well beyond traditional test equipment software. The team ruthlessly pursued a user experience and features that delivered much more than expected by the various types of OptoTest customers.

OPL-CLX is a unique software package developed from OptoTest’s “Voice of the Customer” program to ensure **features and operation truly meets the demanding requirements for the actual users of test equipment**. OPL-CLX is not the typical bare-minimum software normally available from test equipment manufacturers.

This test and measurement software is a complete and significant improvement for most types of fiber product

testing environments. From the ground-up, OPL-CLX is designed for both **administrators and test operators to speed up, simplify, and optimize the setup and testing process**. The pleasant and intuitive interface helps users effortlessly make the challenging testing tasks more enjoyable. This simplicity is accomplished while meeting the rigorous testing demands of a wide array of fiber cable and products specifications.

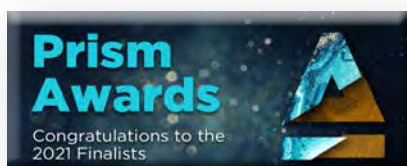
OPL-CLX is a Software-as-a-Service (SAAS) application that will grow with our customers and add innovative features every year. One of the core systems in this platform is our **plug-ins feature that allows easy implementation of customer demands for customizations and new features**. This constant upgrade and innovation aids our customers to become and remain leaders in their industry.



Ed Navarro

Embedded Systems - Software Engineer

Ed Navarro leads our team of software engineers at OptoTest. We are proud of his accomplishments and feel lucky to have him leading the way through our software development journey. Ed came to OptoTest 10 years ago after completing his Bachelors of Science in Computer Engineering from California Polytechnic State University. His growth through the years has earned his position as our lead software engineer. Ed’s fingerprints are on enormous amounts of code and on all parts of the vision for OPL-CLX.



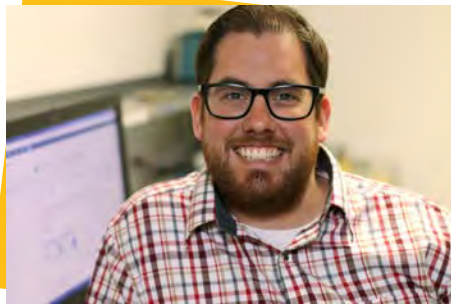
We are honored to be selected as one of the 2021 SPIE Prism Award finalists with OPL-CLX.

DESIGN & CUSTOMIZATION CAPABILITIES

OptoTest's custom-designed products have solved some of the world's most difficult and involved fiber optic test and measurement challenges.

For almost two decades, OptoTest has differentiated itself as a trusted partner worldwide for organizations that develop and manufacture fiber optic cables, connectors and numerous other fiber optic products. An important driver for delivering on our customers' needs has been our **ability to custom-design products exactly as desired.**

Our custom-designed products have **provided unique and impactful results** for our global customers such as Intel, Cisco, Huber+Suhner, Boeing, Lockheed-Martin, US Conec, Corning, Amphenol, 3M, Rosenberger, Leviton, and Sumitomo. From fiber product research, innovation, development and manufacturing, OptoTest products gave these companies exactly what they needed to lead in innovations and optimizations.



As OptoTest's **Engineering Supervisor, Jesse Orosco** is responsible for our hardware, software, test and engineering teams. Jesse graduated with his Bachelor of Science degree in Engineering from the University of California San Diego. Jesse made multiple contributions at OptoTest since joining almost 10 years ago. He ensures his team listens to customer's specific requirements and tailors' solutions based on exactly what is needed. Jesse and his wife are proud parents to their new baby boy.

Many organizations simply cannot find testing instruments that fit their needs through normal off-the-shelf inventory from other test equipment manufacturers. **Through our ability, willingness, and passion for custom-designed products we have helped** some of the biggest internationally known entities innovate and **develop their products and optimize their manufacturing workflows.**

Our custom-designed products help our customers avoid fitting into a product that doesn't exactly fit their needs. We provide **product customizations for both hardware and software.**

While our competitors force you to buy what they have even if it's not a perfect fit, OptoTest gives you the choice to use off-the-shelf products -OR- have products customized exactly how you need them.



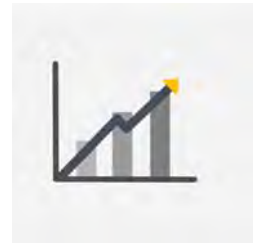
Bernard Ryan, our Senior Hardware Engineer, is our hardest-working team member. He is directly responsible for implementing significant design improvements that will make our next generation of equipment faster and more accurate. Bernie earned a Master of Science in Electrical Engineering from the University of Arizona and brings a 30-year proven track record of innovation. In his spare time, Bernie grows and distributes roses, a perfect hobby with the perfect Southern California weather.

What's Next:

Notes from our COO, Rob Holmes



OptoTest's team is stronger than ever. Continuing to harness the strength of every team member, OptoTest is uniquely positioned to support the industry growth expected in 2021 and 2022. Global communications providers are projected to continue to grow revenues and capital expenditures over the next several years, with service providers like China Mobile, AT&T, and Verizon leading the way. Increased consumer demand and reliability due to remote work and education significantly increased due to Covid-19. At the same time, lockdowns caused the industry to be cautious in capital spending, creating built-up demand for our products. OptoTest is prepared for this demand.



We are so proud of the improvements made by our team this last year. We adopted new ways to support our customers, business partners, and each other. Our team strengthened their commitment to customers and each other at a time our competitors are pulling back. We commit to continue innovating, with a several major initiatives on track to be launched early in the year. Our strong team culture, proven track record, and strengthened foundation will ensure we are even stronger in 2021.

Source: OSA Industry Development Associates (OIDA) Market Update—February 2021.

On behalf of everyone at OptoTest, we would like to express our gratitude to our loyal customers, team members, industry partners and suppliers for your ongoing support.



4750 Calle Quetzal, Camarillo, CA 93012 USA

Phone: +1 805 987 1700

E-mail: sales@optotest.com

www.optotest.com



Proudly Made in the USA



www.optotest.com