



SENKO
SENKO GROUP® Advanced Components



Your Source for Optical Interconnect Solutions

Design • Test • Manufacture

www.senko.com

OUR COMPANY

Senko Advanced Components is a wholly owned subsidiary of the SENKO Group, which is headquartered in Yokkaichi, Japan. From its humble beginnings in 1946, the SENKO Group currently has an estimated annual revenue of \$1.4 billion globally. SENKO Advanced Components itself has 14 offices and dozens of design and manufacturing facilities providing local support to customers all around the globe.

SENKO Advanced Components was incorporated in the United States in the early nineties and has since being recognized as one of the industry's specialists in passive fiber optics interconnect and optical components.

This is due in great part to the design capabilities and high manufacturing capacity in CNC machining, injection molding, and component assembly. To date, SENKO has 46 awarded patents, with more than twenty-five pending.





Our Mission and Our Commitment

To be recognized as the global leader for interconnect solutions by providing customers the highest quality optical connectivity.

We will do this by:

- Putting customers first to understand their needs and collaboratively working together to solve their problems using our design and engineering capabilities.
- Continuously developing new products to address diverse market applications and segments; if a solution doesn't already exist, we aim to develop one.
- Providing global design, testing and high-quality manufacturing capabilities to serve our customers' needs locally.

DESIGNING FOR YOU

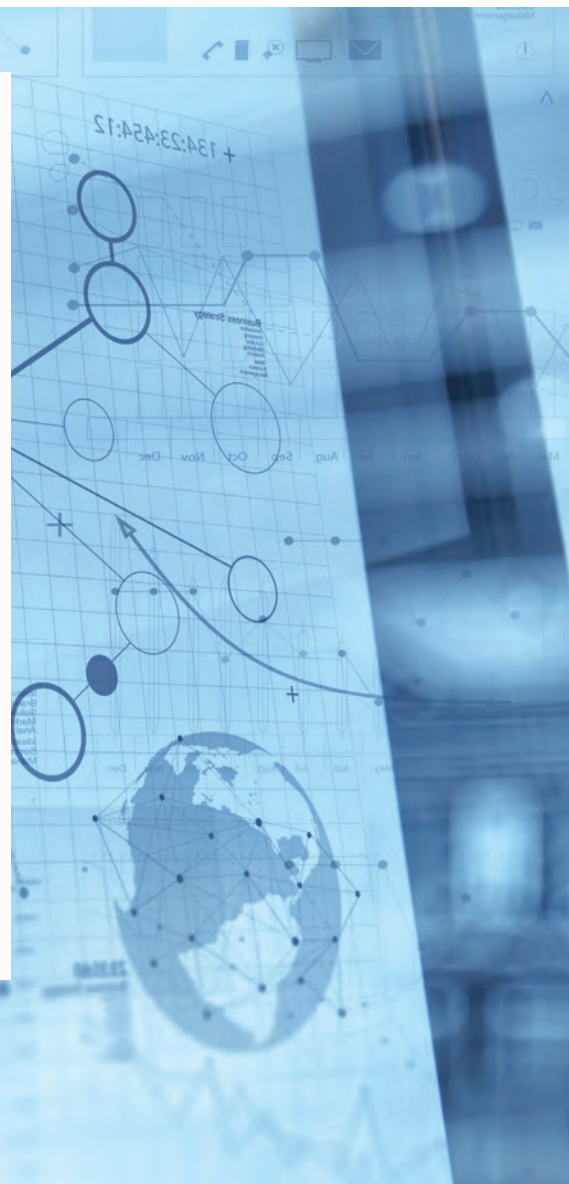
Experience: When “off the shelf” solutions just won’t work, the highly experienced Senko product design and engineering staff are ready to collaborate with you to design and develop solutions that meet your stringent requirements.

Speed: At Senko we measure design and prototyping time in weeks, not months.

Creativity: Senko is prepared to work with you to solve the most complex interconnect dilemmas, whether they be space requirements, optical performance, or the need for new technology.

Innovation: We combine focused creativity, experienced insight, and a big-picture perspective to deliver breakthrough product design and engineering innovations that meet manufacturing requirements and budget constraints.

Committed: We are committed to supporting our customers with engineering and product development capabilities, which includes mechanical, electrical, software, and systems engineering.





1

Concept Design

Before we design, we define the product's functionality and manufacturability including parts, materials, and potential supply chain options. Our product specification solutions provide the foundation for a successful development process.

2

Functional Prototyping

This phase involves the design and development of working models of the product, using our in-house high-quality 3-D printing capabilities. The objective of this step is to confirm that the product will perform and to verify that there are no production barriers.

3

Engineering Design Development

We further refine product specifications during engineering design. Senko applies analytical rigor during this phase to evaluate how product specification changes will impact functionality, performance, reliability, and cost.

4

Design Validation

Certified 3rd party environmental and mechanical testing and verification of the applicable standards or client requirements is the last phase before finalizing product design. Our verification process ensures that the product design meets the client's desired specifications.



TESTING

Senko has an interdependent ISO-17025:2005 accredited reliability test laboratory at our Massachusetts facility. Here, an extensive range of environmental and mechanical reliability test equipment is used to qualify passive components, along with our connector based products.

All of our products are qualified to internationally recognized industry standards, specifically Telcordia GR-1209, GR-1221, GR-326, and IEC 61300. Optical measurements are taken automatically during testing to observe any degradation in performance.

At SENKO, we believe that when you are building quality, reliability, and durability into your network, then you need to be sure that the components you use are fully tested and comply with internationally recognized standards. As data rates rise, the quality of connections becomes ever more important. Don't rely on vendor's specifications, get it checked independently and be sure you are getting the quality and reliability that you expect.

Testing Solutions

Our extensive knowledge and expertise allows us to offer complete project management and step-by-step guidance for our customers through the testing process. Along with standardized test plans, we can customize any test plan to meet our customers' specific needs.



ENVIRONMENTAL TESTING

- Thermal Aging
- Thermal Cycling
- Humidity Aging
- Accelerated Life



MATERIAL TESTING

- Flammability
- Fungus
- Glass Transition Temperature



MECHANICAL TESTING

- Vibration
- Flex
- Twist
- Cable Retention
- Impact



RELIABILITY TESTING

- Salt Spray
- MFG
- Dust

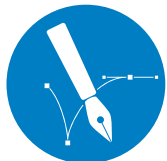


MANUFACTURING

Over twenty-five years Senko has grown to be a global leader in the industry and is responsible for pioneering new fiber optic products and manufacturing methods.

Senko has been awarded many patents on design, building and packaging various optical fibers and integrated optics based components with high optical specifications and harsh environmental operating conditions.

Senko is a leading worldwide manufacturer and supplier of premium passive fiber optic components and specializing in fully tested integrated fiber optic solutions and services. Our components can be found in data centers, DAS, MDU, and FTTA systems. Senko fiber optic products make your application more reliable because of their excellent performance in all conditions.



**Component
Design**



**Design
Analysis**



**In-house
Tooling**



**High Volume
Molding**



**Automatic
Assembly**



**QA
System**

The background of the slide is a photograph of a large industrial machine, likely a CNC lathe or mill, in a factory setting. The machine is white with yellow safety railings. A control panel with a screen and various buttons is visible on the right side. The lighting is bright, and the overall color scheme is dominated by blue and white, with yellow accents from the machine's safety features.

Quality system

SENKO's commitment to ISO 9001:2008 is evidence of the value we place on customer satisfaction, teamwork, and the continuous process improvement engendered in the ISO 9000 standards for quality management systems. Each of our offices has been independently audited and certified by regional testing authorities.

Markets

Telco/FTTx



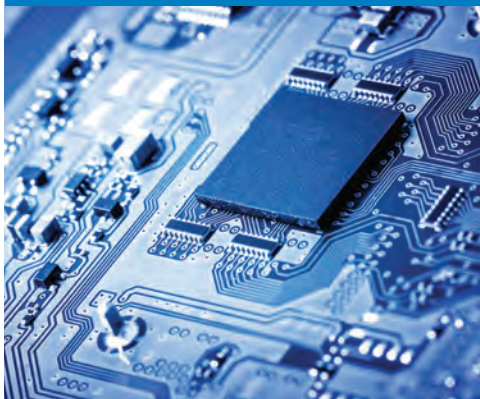
Wireless



Data Centers



Silicon Photonics/ On-Board Optics



Medical Fiber Optic



Security



What our Customers are saying

We have utilized the engineering and manufacturing resources willingly provided by Senko for many years and highly value their design expertise and in-depth knowledge of optical interconnect products.

Johnny Hill, COO, Clearfield, Inc.

We operate a state of the art fiber optics network across the heart of Kuala Lumpur, transporting essential information that ensures the smooth operations of the city and its occupants. We cannot afford to take chances, we rely on SENKO's high quality and reliability so that we can deliver our commitment to our customers

Christoph Zillian, COO, Volksbahn Technologies

Senko stands above others for their continuous innovation and unique value driven product development, knowledge of forward thinking products and processes, response times, customer support, and most of all – trust. At Centric LLC, we have capitalized on these elements numerous times in the development of unique new product ideas to serve our marketplace.

William L. DiBella, President and CEO, Centric Solutions, LLC

Senko's responsiveness, design capabilities, and volume production capabilities, along with their global reach, has significantly helped Communication System Inc. bring product to market in a timely fashion.

G. Wakileh, CSI CTO

Affiliations:





SENKO

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Senko Advanced Components, is a recognized global leader in the design, production, sales, marketing and distribution of over 1000 fiber optic products. It is headquartered in Boston, Massachusetts, USA and is the fiber optic division of the Japan-based SENKO Group.

The SENKO Group is a family of companies serving clients in the Electronic / Electrical, Telecom / Fiber Optic, and Automotive / Industrial industries. We continually expand our product line to suit your business needs, both through innovations in product design and via international partnerships. Our top quality products are backed with superior technical support and logistic services provided by our worldwide facilities.