

Locations



Head Office

1730-11 Takaba, Hitachinaka-shi, Ibaraki-ken, Japan, 312-0062 Phone: +81-29-212-6881 Fax: +81-29-212-6882



Tokai Factory

3115-5 Hibara, Muramatsu, Tokaimura, Naka-gun, Ibaraki-ken, Japan, 319-1112 Phone: +81-29-219-7262 Fax: +81-29-219-7263



Katsuta Factory

1730-11 Takaba, Hitachinaka-shi, Ibaraki-ken, Japan, 312-0062 Phone: +81-29-272-7201 Fax: +81-29-272-1163



Kanasa Factory

1075-7 Mi-cho, Hitachiota-shi, Ibaraki-ken, Japan, 313-0114 Phone: +81-294-70-3225 Fax: +81-294-70-3226

Affiliated Companies



Hiyama Tape Co., Ltd.

20-11 Juo-mae, Ishi, Juo-cho, Hitachi-shi, Ibaraki-ken, Japan, 319-1301 Phone: +81-294-20-2311 Fax: +81-294-20-2317



Hiyama e-Film (Suzhou) Mfg. Co., Ltd. 7C-D Suchun Industrial Square, No. 428 Xinglong Road, Suzhou Industrial Park, Suzhou, Jiangsu, China

Phone: +86-512-6283-3218

Hiyama e-Film (Hong Kong) Mfg. Co., Ltd.

Unit 02B, 11/F, Ocean Centre, 5 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong Phone: +852-3102-0325

Received the Outstanding Company Award at the 2009 Good Company Awards



Katsuta Factory Tokai Factory Kanasa Factory ISO 9001 certified





Declaration of Sustained Support for Work-Family Balance

Visit the Hiyama Industry website here: https://www.hiyama-ind.co.jp/





Hiyama Industry Co., Ltd.

We create new value through our world-class processing technology.



and value of products.

Our industry-leading

slitting technology and

management system were

the basis of our founding

Connect

Photonic devices

Our high-precision optical fiber arrays have earned a solid reputation in the telecommunications industry.

Cut

Cutting

We provide reliable products with the desired dimensions through high-performance cutting mac and skilled craftsmanship.

Hiyama Industry has a history spanning over 60 years. As a company of material processing specialists, we develop diverse products for the Japanese and international markets and contribute to the development

Guided by the concept of creating new value through innovation, we react to new eras of change and new business needs as a one-of-a-kind company with services that are in high demand.

Creating New Value Through Innovation

Coatings

We handle all kinds

of coated products with high quality

and speed.

The ever-evolving Hiyama Group is poised for another leap forward.

Our Philosophy

Creating New Value

We create new value by innovating and taking on challenges without fear of change.

Technological Innovation

We are committed to using our proprietary technology to solve customer problems, and we continue to be an unrivaled and indispensable partner.

Work Style Reform

We pursue the happiness all employees through material and emotional support, and we strive to make even difficult jobs enjoyable and fulfilling.

Message from the President



Our company was founded in 1961 to do slitting for insulating electrical tape. Since then, with the support of numerous people and with a basic policy of creativity, innovation, and taking on challenges, we have diversified into the businesses of coatings and optical fiber array manufacturing. The former involves adding diverse functionality to film substrates, and the latter is indispensable for high-speed, high-capacity telecommunications. At Hiyama Industry, we shall continue to fulfill our corporate obligations by meeting the expectations of our diverse stakeholders, including employees, and by earning their trust. I sincerely appreciate your continued support.

Corporate Overview

Trade name Representative Head office address

Phone

Hiyama Industry Co., Ltd. Kan Hiyama, President and CEO 1730-11 Takaba, Hitachinaka-shi,

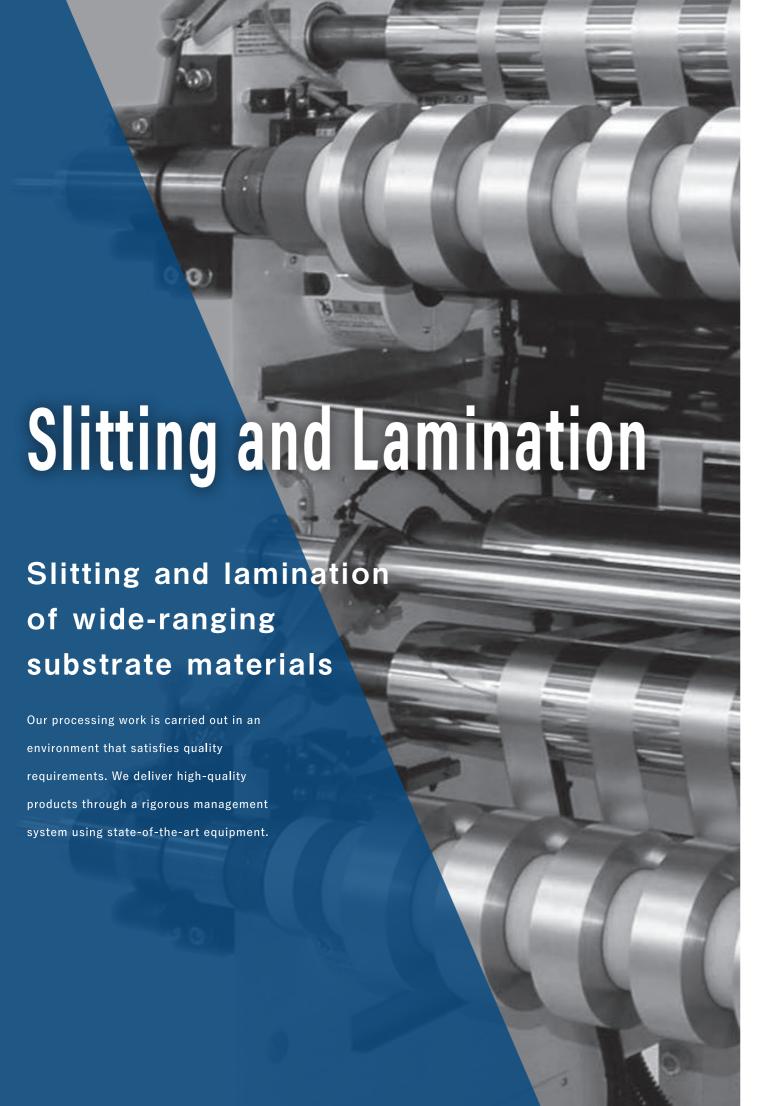
Ibaraki-ken, Japan, 312-0062 +81-29-212-6881

FAX 029-212-6882 Established October 1961 99 million JPY Capital

Number of employees

160 (as of October 2023) Description of business Film, metal, and tape slitting

> Manufacture of adhesive coated products. manufacture of photonic devices, and glassworking



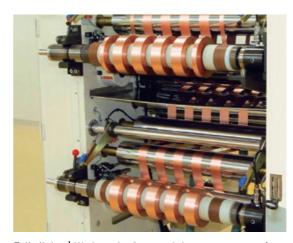
Lamination We can handle a wide variety of products, including those used for pharmaceuticals and electronics.





Lamination | We can laminate materials up to 1,150 mm wide. We can do slitting at the same time as lamination and delamination.

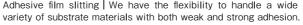
Slitting technology We operate multiple slitters and provide high-precision processing through skilled craftsmanship.





Foil slitting | We have implemented rigorous measures for preventing wrinkles and edge burrs by applying our many years of expertise, and we are able to process copper foil, aluminum foil, and stainless steel foil.







in both general and clean-room environments. We use the environment that is best suited for various materials and ensure that the most ideal equipment is used.

General climate-controlled rooms

Hiyama Group processing environments we have clean-room environments and can be required. We have clean-room environments and can perform

Clean rooms

Coating Processing technology that achieves beautiful, high-quality finishes We have the flexibility to meet the needs of customers through our integrated processing system that includes large coating machines to apply coatings to a wide range of substrate materials, pressure lamination using in-line laminating machines, and heat lamination. We also develop in-house products using our own proprietary technologies.

Coatings We can apply a large variety of coatings using our rigorously managed equipment.



LARGE COATING MACHINE SPECS | Our large coating machines can apply up to three coatings in a single pass: the backing agent, primer, and main coating agent. This is helpful for reducing costs. (Maximum effective width: 1,800 mm)

Dry laminating

This bonding method works by applying adhesive and then applying pressure or a combination of heat and pressure.



Our coating line includes a heat laminator to enable high-precision lamination. We also have an extensive track record in copper foil and aluminum foil processing.

Corona treatment

Electrical discharges are used to improve adhesion by increasing the wettability to the substrate material.

(Maximum effective width: 1,800 mm)





SMALL COATING MACHINE SPECS | Our small in-line lamination machines are available for product development and small-quantity prototypes. (Maximum effective width: 450 mm)

Aging

If you need aging (heat-curing) only, leave it to us.



We are equipped with a range of furnace sizes and can handle both small and large quantities. (Temperatures handled: 40°C to 100°C)

Proprietary product: HIYAMA Film

UV-hardening film: Hiyama UV Tape



Hiyama UV Tape has sufficient adhesive strength for fastening, protecting, and masking workpieces. It can easily be removed from workpieces by irradiating it with UV after processing.

Thin base material transport support film: Hileap Support Film



Hileap Support Film prevents wrinkling and tearing of thin films during transport for processing. We can also use it for

Photonic Devices We can handle diverse fiber array manufacturing needs. We can manufacture a number of different fiber arrays to meet the most advanced needs, including customizing the core pitch precision, polishing angle and

Characteristics of Hiyama fiber arrays

Our equipment aligns the edges of the lid substrate and V-groove substrate, making it easier to hold them in place with mass-produced FA connection equipment.

Alignment time is reduced by good fiber position reproducibility with respect to the holding portion of devices.

We can also manufacture fiber arrays with asymmetric structures.



We use an integrated system in pursuit of the utmost quality.

We offer various solutions for both large-scale and small-lot production, and we can handle special processing for end faces, including different connectors for the fiber arrays. We also offer development and product testing services, which many of our customers have asked us for.

	Width	Length	Thickness	Core pitch precision
1 to 8 channels	2.5 to 3.4 mm	6.0 to 12.0 mm	1.0 to 3.0 mm	As low as R \leq 0.5 μm
12 to 32 channels	3.4 to 5.0 mm	8.0 to 15.0 mm	1.0 to 3.0 mm	As low as R ≦ 1.0 μm
48 to 64 channels	9.0 to 15.0 mm	12.0 to 15.0 mm	2.0 to 3.0 mm	As low as R ≦ 1.0 μm

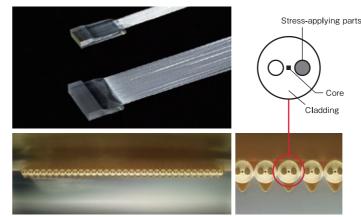
Note: Other channel counts and special pitch configurations are also available upon request.

Hiyama Industry's technical prowess in optical fiber arrays

Digital coherent communication, which is needed for modern optical networks, requires more precise coupling alignment between optical fiber arrays and optical waveguide elements. Under these conditions, installation space for optical transmission devices is a problem that requires miniaturization of optical interfaces in order to achieve future improvements in speed and capacity. At Hiyama Industry, we use ultra-precise processing technology to fabricate high-precision V-groove substrates, and we can miniaturize and customize optical fiber arrays through high-precision optical fiber array fixation.

Polarization-maintaining fiber arrays

We can provide high-precision alignment of stress-applying parts.

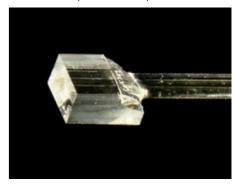


Polarization-maintaining fiber array end face image (32 channels) (Magnified)

- Specifications:
 Up to 68 channels
 - Standard specifications: Polished surface stress-applying part angle tolerance: ±3° (capable of 0° vertical and 0° horizontal: compatible with mixed fiber arrays, such as SMF and PMF)

Small fiber arrays

We can handle lengths as short as 2 mm. This is ideal for products that require miniaturization.



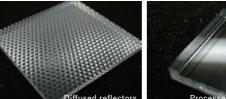
Specifications:

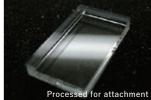
- Diameter: Widths of 1.0 and up (depending on the number of fibers)
- Length: 2.0 mm and up
- Fiber types: SMF, PMF, SMF/PMF Fiber count: 1 or more channels

handle glass processing for a variety of applications.

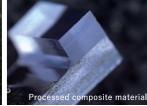
- Core pitch accuracy: $\leq 0.5 \, \mu \text{m}$ Our extremely advanced cutting technology can

Glass product lineup with special processing









Glass types supported: · Tempax, Pyrex, quartz, etc. We can cut glass pieces as small as 4 inches square.

Processing specifications: Cutting minimum: ≥±0.02 · End face polishing: Optical mirror finish *Diamond finish, surface roughness processing and special coating erous angle jigs are readily available to accommodate a variety of end face angles. • Planar lightwave circuit (PLC) polishing is also available.

- Cutting is also possible for composite materials (e.g., glass + silicon + adhesive).
- Hiyama offers a number of solutions other than those shown above, including special processing and ultra-small configurations.

dimensions.



Hiyama Group Hiyama Tape

HIYAMA Tape

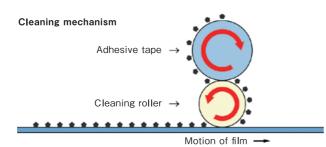
Slitting specialists who uphold the spirit of the company's founding

Hiyama Tape's main business is the slitting of insulating tape, which was the starting point of the company. We have the flexibility to accommodate diverse needs through our insatiable curiosity with regard to manufacturing, which has been passed down from generation to generation since our founding, and through the technological prowess we've developed since then.

Cleaning

In clean environments, even the smallest dust particles and contaminants are eliminated.

By passing films through cleaning rollers, we can remove even fine dust particles and other microscopic contaminants that adhere to films and other substrate surfaces. Slitting and laminating can also be performed at the same time.



Product inspection

We can detect defects, foreign matter, and flaws in products and clearly indicate where they occur.



Detection method: transparency | We can adjust the detection settings to look for foreign matter, fish-eye defects, holes, and scratches in accordance with customer requests.



Tension testing

testing equipment

In-line foreign matter detector / ball tack tester / viscometer / film thickness meter (contact type) / haze meter / tensile testing machine / water contact angle tester / pencil hardness tester / FT-IR / 3D measuring machine / infrared spectrophotometer / contact angle measuring machine / electrostatic potential measuring instrument / electronic microscope / electronic balance

Slitting



Microslitting | We specialize in slitting narrow widths of 2 mm to 6 mm. We can also handle record winding and traverse winding.



General environment (Thicknesses of 10 μ m and up / widths of up to 1.250 mm)



Class-10,000 clean room (Thicknesses of 10 μ m and up / widths of up Our slitting track record spans diverse fields. including pharmaceuticals and food.

Cutting







Sheet cutter (thicknesses of 50 μm and up / widths of up to 1,000 mm) Our sheet cutter can cut and laminate adhesive substrate materials simultaneously.

10



Hiyama e-Film Mfg. Co., Ltd.

China is our gateway from Japan to the world. In order to provide stronger support for the global business development of our customers, we have established our international locations in China (Suzhou, and Hong Kong), a country that continues to grow in importance for global markets. We have established slitting centers at major Chinese industrial cities in the east (Suzhou) in order to ensure timely delivery to customers. In Hong Kong, we have a logistics center that allows us to provide logistics and commercial distribution, including intermediary trade, in accordance with our customers' needs.



