

# Connecting Markets with Optical Precision

Japanese trading company Mabuchi specializes in advanced optical technology, semiconductor solutions and sustainable innovations, connecting cutting-edge small and medium-sized enterprises with the global market.

By Daniel De Bomford and Sean McBride



"We gather excellent technology and find the best applications to expand its usage."

Takashi Mabuchi, President, Mabuchi S&T

The international market has undergone a radical paradigm shift and supply chains have had to scramble to adapt. Japanese trading company Mabuchi S&T has positioned itself as a vital link that connects small and medium-sized enterprises to the global market. Mabuchi has a long history in high-tech industries and specializes in the coordination, development and production of advanced machinery and equipment for optical lenses.



Sustainable materials

With 68 years of expertise in the field, Mabuchi provides high-precision molding machines and innovative technology for creating spherical and aspherical lenses, among other optical components. "We understand the optical needs and applications across industries, allowing us to propose the best equipment and provide a holistic solution," explains company President Takashi Mabuchi.

Previously, the company manufactured its own branded lens polisher. It has leveraged that technical expertise and know-how to become the perfect partner to connect niche manufacturers in Japan with international high-tech producers and customers both at home and abroad. Mabuchi's collaborative work on a new type of aspheric lens mold polishing machine is a poignant example of the company's ability to blend experience with emerging technological needs.

In the semiconductor sector, major processes are highly specialized and dominated by the big tech firms, so are impossible for a small or medium-sized enterprise to break into. However, Mabuchi has seized opportunities in niche areas that the largest companies have neglected.

This focus allowed Mabuchi to make significant progress during the COVID-19 pandemic. When Japanese engineers were unable to travel to China, Mabuchi's Suzhou office stepped in, supporting Japanese semiconductor firms through on-ground service in Chinese fabs, significantly strengthening Mabuchi's market presence in the country.

In the current economic climate, Japanese companies are an attractive option for international firms—especially those based in China, Taiwan and South Korea—due to the ongoing weakness of the yen and low interest rates. Furthermore, Japan was the dominant player in semiconductor manufacturing in the past and the companies that persist have maintained that knowledge and experience in-house. "Traditionally, Japan had strong technological know-how and a connection between the workers and the companies," Mr. Mabuchi says.

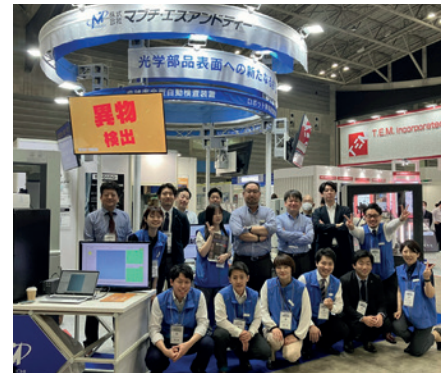
While big players in Japan like Tokyo Electron and Sony dominate this space, Mr. Mabuchi emphasizes the important role that small and medium-sized enterprises play in the high-tech ecosystem. "These companies have developed as high-technology firms thanks to the Japanese culture and tradition, mainly this mindset of craftsmanship," he says. Mr. Mabuchi further highlights how that craftsmanship and Japanese business culture foster unmatched quality of work through close attention to detail and consideration of those within the industry.



Semiconductor exhibition in Kyushu

These Japanese values are what position trading companies like Mabuchi to be the vital link between innovative high-tech Japanese companies and lucrative international opportunities. "Trading companies like ourselves don't manufacture, but we have a wide connection with other people,

and we are considerate of the people involved in this industry," Mr. Mabuchi says.



OPIE '24

Trading companies, or *shosha*, like Mabuchi are unique to Japan and are vital in the Japanese business ecosystem. Where a company has struggled to bring its technology to market, Mabuchi bridges the gap between the technology and the application. "They have been pursuing this technology so much, but they sometimes cannot find the channels for application or sales," Mr. Mabuchi says. "We gather excellent technology and find the best application for it to expand its usage." Mabuchi leverages its technical know-how and vast network to introduce high-end domestic technology to international companies. "The advantage of a trading firm is that, whereas a manufacturer can only sell its products, we can provide multiple options and suggest the optimal combination based on the needs of the customers," he says.

Environmental sustainability forms the company's third business pillar. Mr. Mabuchi envisions an energy-efficient future where optics play a crucial role in reducing electrical dependence by transmitting massive amounts of information quickly with minimal energy. He adds: "With these benefits, society will probably shift to being optics-oriented, and as an optics expert, we want to leverage this opportunity."

As the global manufacturing sector continues to evolve, Mabuchi is well positioned as the major conduit between the Japanese high-tech industry and the world. Even with its vast network and strong relationships in China, Taiwan and South Korea, it keeps one eye on the future. As the U.S. and Europe rebuild their domestic manufacturing capabilities, Mabuchi has its sights set westward to grow and secure its manufacturing network.

**MABUCHI S&T INC.**  
www.mabuchist.co.jp/english

# Expanding Globally with Sustainable Innovation

Tensho Electric Industries is set for global growth, leveraging its expertise in plastics manufacturing, expanding into EV components and prioritizing sustainability to meet the evolving demands of multiple industries worldwide. By Sasha Lauture and Cian O'Neill



"We want to contribute to lighter and thinner plastic usage within product manufacturing."

Kensuke Fujimoto, President,  
Tensho Electric Industries Co., Ltd.  
www.tensho-plastic.co.jp/english

Tensho Electric Industries, a long-established leader in Japan's plastics industry, is set for expansion under its new president, Kensuke Fujimoto. Founded in 1936, the company specializes in the design, manufacture and sale of plastic products and molds for a range of industries, such as automobiles, home appliances, logistics and office equipment.

Having built up decades of know-how in plastic molding and resin technology, Tensho is known for the high-quality products that have enabled it to become a trusted supplier for a wide portfolio of clients. Listed on the Tokyo Stock Exchange since 1961, the company boasts a manufacturing system that supports mass production while ensuring reliability and customer satisfaction.

to its clients while keeping logistical costs low.

"Tensho's strength is that we have a long history of product manufacturing with a sturdy foundation of mold creation and molding technology," Mr. Fujimoto states. From resin welding methods such as vibration and hotplate welding, to advanced molding techniques including forming technology, plus emCo and E-Mold, Tensho produces unmatched quality and reliability in both industrial and consumer goods.

Mr. Fujimoto, who took office in June 2024, brings experience from his previous role as president of Prime Polymer, Japan's top polypropylene manufacturer. Under his leadership, Tensho is focused on producing lighter, more sustainable plastic components, as industries shift from metal to plastic.



TenRain system reduces impact of flooding

Tensho's deep experience in manufacturing and its six production locations across Japan, including Ryumai Plastic, have allowed it to develop in-house talent and cultivate the expertise to cope with an extensive variety of requests from its customers. Furthermore, Tensho's presence in local markets facilitates expedited services



TenRainScrum unit

"Plastics themselves are increasingly moving toward polypropylene, which is lightweight and environmentally friendly. This polypropylene is the core material that we use to manufacture our products," he says.

The global transition to electric vehicles (EVs) represents a significant opportunity for Ten-

sho. As automakers restructure production, they increasingly outsource lightweight plastic components—with weight reduction critical for efficiency and range—to specialized suppliers like Tensho.

While automobiles remain a key focus, Tensho also creates products for home appliances, office furniture and logistics containers, among others. One highlight product is TenRainScrum, a highly durable rainwater harvesting system that reduces the impact of flooding. "With global warming, there have been sudden thunderstorms and so-called guerrilla rain happening across Japan," the president explains. "In order to protect the land, we created our TenRainScrum product. We think this will be increasingly important and we expect growing demand."

gas reduction target and aim to position ourselves as an environmentally friendly company."

Global expansion is a key part of Tensho's growth strategy. The company recently strengthened its presence in North America by upgrading its Mexican factory and opening a second plant in 2022, focused on producing containers. In China, meanwhile, Tensho aims to partner with molding companies to further expand its presence there. "In the North American markets, there is a growing need for Sanko containers and pallets," Mr. Fujimoto adds. "Sanko is our biggest shareholder and the U.S. market is much larger than the Japanese market, so with the growing demand for these containers and pallets, we wish to supply our plastic products and provide services to American manufacturers and consumers."



Sanko and Tensho's Mexican plant supports sales in America

Sustainability is central to Tensho's strategy. The company recycles excess materials from production by crushing and reintegrating them into the manufacturing process. It has also upgraded its injection molding systems from hydraulic to electric, boosting both productivity and environmental performance. "Being environmentally sound is the biggest theme we currently have," says Mr. Fujimoto. "We will introduce a greenhouse

With a strong foundation in plastics technology, a commitment to sustainability and ongoing global expansion, Tensho Electric Industries is well positioned for future growth. Under Mr. Fujimoto's leadership, the company is embracing the opportunities presented by the EV revolution and the growing demand for environmentally friendly manufacturing practices.



Modern factory ensures quality



Tensho's variety of containers