

Bron James: A Hero for Our Time

INTERNATIONAL

22.02.2019

Newsweek

AMERICA'S NEXT HONYWAR



**WILL
IRAN
BE
TRUMP'S
IRAQ?**

ident
Rouhani
Iran



ABU DHABI DH35	CYPRUS C6.50	GIBRALTAR £6.05	KUWAIT K03.00	NEW ZEALAND \$14.00	ROMANIA LEI 42.00	SPAIN C6.50
ALBANIA C6.25	CZECH REP C2K180	GREECE C6.50	LATVIA C6.50	NIGERIA \$3.40C	SAUDI ARABIA SR35.00	SWEDEN SKR60
AUSTRALIA \$11.00	DENMARK DKK49.95	HOLLAND C6.50	LEBANON LL10.000	NORWAY NKR45	SERBIA RSD1035	SWITZERLAND CHF8.90
AUSTRIA C6.25	DUBAI DH35	HONG KONG HK80	LITHUANIA C8.99	OMAN OR 3.250	S LEONE SLL30.000	UK £4.95
BAHRAIN BD3.5	EGYPT E£ 65.00	HUNGARY FT1.800	LUXEMBOURG C6.25	POLAND PLN28	SINGAPORE S\$11.95	US \$8.99
BELGIUM C6.50	FINLAND C760	IRELAND C6.25	MALTA C6.50	PORTUGAL C6.50	SLOVAKIA C6.50	ZIMBABWE ZWD4.00

Japanese SMEs: industry's hidden innovators

Largely unknown to end consumers, Japan's SME manufacturers are the hidden champions on which global industry depends.

70%

SMEs represent 70% of Japan's total employment

50%

SMEs represent 50% of Japan's added-value manufacturing output

39%

of Japanese SMEs have overseas offices

67.8%

of Japanese SMEs plan to expand exports over next 3 years

Japan is best known for corporate giants like Sony, Toshiba, Honda, Toyota and Panasonic. However, the nation's economic backbone is not made up of these large multinational corporations, but the small and medium-sized enterprises that represent 97 percent of all Japanese businesses.

Japan's SMEs employ 70 percent of the total workforce and are responsible for 50 percent of total manufacturing output. And without them, companies like Honda and Sony could not exist – for these SMEs are the manufacturers that supply these larger firms with the vital parts, components and machines needed to make their end products. And it's not just Japanese firms that depend on them, but companies in the U.S. and across the world.

While their products are largely invisible to the general public, these SME manufacturers are the strength and hidden innovators of Japanese industry. It is for this reason they have been often called the 'hidden champions', pioneers of high-performing technologies and high-quality products on which their clients depend.

And while many Japanese SMEs are already serving clients around the globe, in recent years, these companies have undertaken ambitious internationalization strategies to boost their worldwide operations in response to Japan's shrinking domestic market due to its aging population.

Japan's hidden innovators are using their technological prowess to develop new applications for their products as they look to expand and diversify into new business segments – from lighting manufacturers developing award-winning indoor grow-light systems, to companies in the molding industry applying their technology to new areas and to address new challenges.

Plastic injection molding is the common process used to create plastic parts, from everyday objects like garden chairs and toys to more high-precision parts for the medical industry. As the name suggests, the parts are created by injecting molten plastic resin into a mold to create the desired shape. The part that distributes the molten plastic resin into the mold is called a runner,

of which there are two types, cold runners and the more advanced hot runners, which came into use in the 1970s and 80s.

Hot runners, or "runnerless", systems offer many advantages over cold runners, such as shorter cycle time, design flexibility, enhanced operational efficiencies, and plastic waste reduction. As hot runners are complex systems, most manufacturers depend on highly-specialized companies to design and make the equipment and components for these systems – and one such company which has been doing so for more than 60 years is Seiki Corporation.

Since its establishment in 1954 as a pioneer in the development of hot runner systems and runnerless equipment, Seiki has been committed to solving the major challenges in the plastic injection molding industry, helping its customers around the world to work more efficiently, and thus contributing to their profitability.

Seiki's customers are spread across several industries (number one being automotives, followed by medical, packaging and closures, and OA system) and depend on the superior technology and quality of the company's products – technology and quality that cannot be replicated by its competitors, as president Shuichi Kawabata stresses.

"While there are competitive products from China, Korea, EU and even the U.S., what we were able to do was acquire patents for our unique systems in the world of hot runners. As a manufacturer of hot runner systems and a pioneer in runnerless equipment, we have been determinedly addressing and devotedly working on every challenge in the field of plastic injection molding," he says.

"In the hot runner business there is fierce competition coming from all directions. We have China, Korea, the EU and the U.S. all competing to gain market share but our competitive advantage lies in the quality of our

products," says Mr. Kawabata. "You can see that the level of quality when compared to other products on the market is unmatched. This is what creates value to our product line and improves customer trust, creating a brilliant future for our customers."

In Japan, Seiki's products are used by the likes of Toyota, Nissan, Honda and all the other major carmakers, but its main customers are Tier 1 and Tier 2-level suppliers. With the shrinking domestic market, the company has been expanding its presence abroad. It has established five overseas facilities and part of its international strategy is to expand its collaborative efforts in Germany, North America and in China.

As Mr. Kawabata explains: "Within the last several years, we have established offices in Germany and the United States to get closer to our customers and focus on developing collaborative alliances with suppliers to the automotive market in order to strengthen our global position; by introducing our hot runner system that will surpass any expectations."

Looking ahead over the next decade, Mr. Kawabata hopes to develop the business on a global scale, by combining Seiki's design skills and technologies for plastic molding and hot runners to solve future industrial challenges.

"The sky is the limit when it comes to manufacturing plastic products, which requires high-standard technologies," he says. "We're looking into how we can continue to provide solutions in areas with different levels of complexity and a high-tech environment."

Sanwa Shoko is another company involved in the molding industry – an industry, which president Kohei Hori acknowledges, is fundamental to manufacturing. As such the companies involved in the development, production and maintenance of molding systems like Seiki and Sanwa Shoko are hidden-champions whose existence and importance goes unnoticed by the general public.

"While molds support the international manufacturing supply chain, their importance is largely unknown to end consumers and even to certain manufacturers," says Mr. Hori.

"The mold industry is fundamental to any country. More and more people should know about the importance and role of the mold industry. While many people know about Toyota, Nissan and Honda, they are unaware of the manufacturing process. Molds are at the basis of the cars and products they love."

Sanwa Shoko manufactures washing, welding and polishing machines used in the maintenance and repair of equipment for molds, such as the its series of Wave Clean supersonic wave mold washers, and its most popular product, the ultra-precision mold padding welder, SW-V02 – a tried, tested and trusted analogue machine that has hardly changed since it entered the market more than 40 years ago.

"On the one hand, we utilize sophisticated techniques and expertise when it comes to repair and maintenance. On the other hand, our hardware remains analogue," says Mr. Hori.

"We have continuously sold the same machine for 42 years. Our end users call us a 'big miracle'. Of course, it was updated from SW-V01 to SW-V02, but the basic function has not changed, which is why our customers consider it a miracle."

Another popular Sanwa Shoko innovation is the supersonic lapping machine, which is used to polish molds with ultra-high precision using the power of supersonic waves. The latest in its series is the LAPTRON ALL III – hailed as the crowning work of its 50-year-long efforts in R&D and another product reinforcing the company's reputation as "the pioneer in mold maintenance."

With a sales network spanning Europe, East Asia, the United States and Mexico, the majority of Sanwa Shoko's customers are in the automobile industry, with rest coming from electronics and home appliances. As it looks to expand its operations globally, Sanwa Shoko sees opportunities to expand the use of its machines and is partaking in exhibitions to demonstrate the exciting



Olympia Lighting Fixtures Industries, Ltd.
2-9-8 Honkomagome, Bunkyo City,
Tokyo 113-0021, Japan
TEL: 81-3-5940-6773 FAX: 81-3-5976-4955
URL: <http://www.olympia-jp.co.jp/world/>



Kohei Hori, President
Sanwa Shoko



Shuichi Kawabata,
President, Seiki Corporation



Junya Asano, Managing
Director, Olympia Lighting
Fixture Industries

"While molds support the manufacturing supply chain, their importance is largely unknown to end consumers. Molds are at the basis of the cars and products they love"

"We have China, Korea, the EU and the U.S. all competing to gain market share but our competitive advantage lies in the quality of our products"

"We aim to systematically deliver high quality in order to fulfill the requirements and desires of our clients"

things it is working on outside the mold industry.

"We are currently exploring the possibility of entering new fields. We are certain that our products can be applied to other markets than molds," he says. "For example, we believe that our welding machine can be applied to metal-working or tool processing. Slowly and with care, we are seeking new pillars of growth."

Whether they be in the molding industry or the lighting industry, one thing all Japanese SME manufacturers have in common is a deep commitment to *monozukuri*, the philosophy behind high-quality Japanese craftsmanship.

"What distinguishes Japanese *monozukuri* from manufacturing in other countries is the concept of craftsmanship. Japan's way of perceiving *monozukuri* goes beyond the simple creation of an object," says Junya Asano, managing director of Olympia Lighting Fixture Industries.

"We aim to systematically deliver high quality in order to fulfill the requirements and desires of our clients."

As such, Olympia Lighting is renowned worldwide for its outstanding product quality and technological innovation. One of the company's latest innovations is Akarina, a hydroponic indoor plant grow-light system with integrated LED technology that was voted a 'Best Buy' product by British newspaper *The Independent* in July, 2018.

Lighting for indoor plant cultivation is an area in which the company sees big opportunities. "At our Niigata Factory, we are pursuing plant cultivation experiments using LEDs, which has led to the accumulation of know-how. Olympia Lighting is one of the few

companies in Japan with both LED lighting technology and cultivation technology," says Mr. Asano.

As the company looks to expand in the B2B segment, a market in which Japanese SMEs have always been strong, Olympia Lighting is focusing on office and interior design. "LED has various business uses, and Olympia Lighting is a company that can explore all these different possibilities," says Mr. Asano. "I think

that this diversification will be the foundation for future developments."

From Seiki and Sanwa Shoko, and onto Olympia Lighting, these relatively small and unknown companies will continue to diversify, find new applications for their technologies and play an increasingly bigger role in global industry. They are the hidden innovators representing the through strength of Japanese manufacturing.

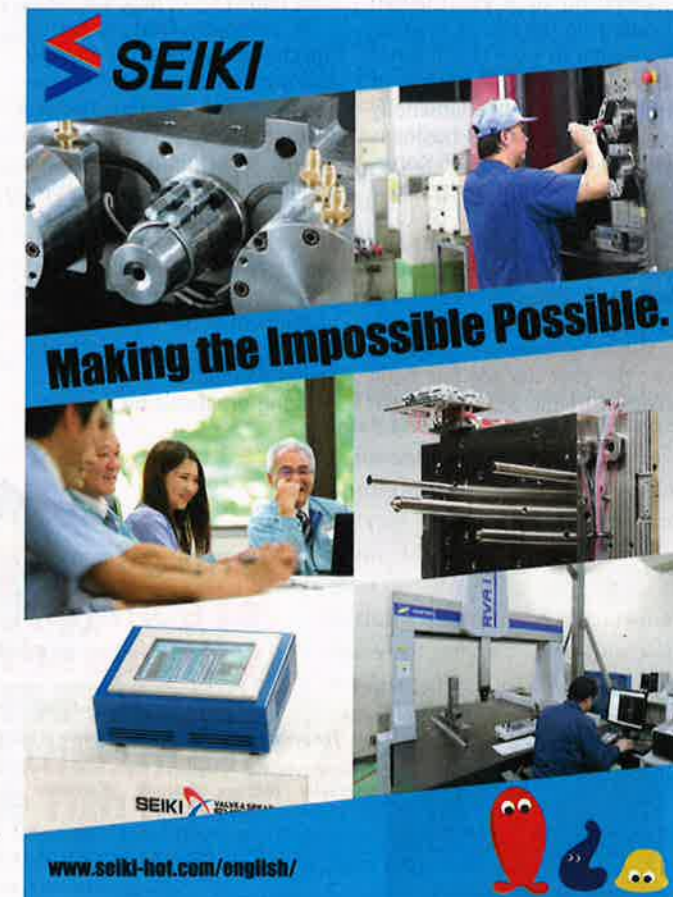


SANWA SHOKO CO., LTD.

SW-V02

OMNI-DIRECTION
MOLD WASHER
MOLD PADDING WELDER
LAPPING MACHINE
PREVENT SCUM RISERS

WWW.SANWASHOKO.CO.JP/EN



SEIKI

Making the Impossible Possible.

SEIKI

www.seiki-hot.com/english/