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JAPAN BUSINESS REPORT

TOURISM

THE BEAUTY OF NATURE

Shikoku, the country's smallest island, has a great deal to offer – from picturesque scenery to a beautiful shrine, hot springs and a dance museum, writes **Keith Chan**

The smallest of the four main islands that make up Japan, Shikoku is less visited compared to other parts of the country despite its mild climate, natural scenery, historical places and traditional festivals. Literally meaning "four countries", Shikoku comprises Tokushima, Kagawa, Ehime and Kochi prefectures.

Once considered a remote destination, Shikoku is now easily accessible with the connection of three highway bridges across the Seto Inland Sea to Honshu (Japan's main island). From Hong Kong, Hong Kong Express has direct flights to Takamatsu in Kagawa, and Cathay Dragon has just launched a scheduled service until March.

The estimated number of international travellers to Japan by mid-December 2018 had exceeded 30 million visitors for the first time, according to Japan National Tourism Organization.

While Shikoku is often overlooked as a tourist destination, it has some of Japan's most renowned attractions – such as the Naruto whirlpools in Tokushima, one of the largest in the world; Konpira (or Kompira) Shrine in Kagawa, a place many Japanese wish to visit at least once in their lifetime; and Dogo hot spring in Ehime, one of the oldest in the country.

With an area of 18,800 square kilometres, Shikoku is too big to be covered in a single trip. For visitors who have only a few days to spare, Tokushima and Kagawa are good starting points as the two neighbouring prefectures boast many of Shikoku's attractions and can be reached easily by bus from Osaka's airport and city centre in less than three hours. The capital of Tokushima prefecture, Tokushima is a coastal city with plenty of 3- to 4-star hotels and restaurants. A key attraction is the Awa Dance Museum (Awa Odori Kaikan), where the renowned traditional dance of Tokushima is performed throughout the year. On the top of the museum is a ropeway leading to the summit of Mount Bizan, which offers panoramic views of the city. Another attraction is Tokushima Central Park which was built around the ruins of Tokushima Castle. The city is also the gateway to the world-famous Naruto whirlpools about 40 minutes by bus from the centre. The Naruto Strait produces whirlpools of up to 20 metres in diameter, some of the largest in the world.

Crossing any of the few remaining suspended vine bridges in the Iya Valley has become a breathtaking experience for visitors. Photos: Alamy

Konpira Shrine, known as the 'God of the Sea', has been worshipped by the Japanese since ancient times.

Visitors can watch the whirlpools from the glass panel on the Great Naruto Bridge across the strait. Those who want more excitement can join one of the sightseeing boats which pass above the whirlpools.

For hikers and nature lovers, the Iya Valley and the Oboke and Koboke gorges deep in the mountains of western Tokushima are the places to go. Iya Valley is known for its hot springs and outdoor activities. It is home to the country's few remaining vine bridges built in ancient times by locals for daily commuting.

Today, crossing a suspended vine bridge has become a breathtaking experience for visitors.

At the entrance of the Iya Valley is the Oboke Gorge, which is known as the Koboke Gorge 3km downstream. These are narrow, steep-sided gorges with emerald green water and swirling rapids. Visitors can join a cruise on a sightseeing boat or take part in activities such as canyoning and white water rafting. For those who are looking for a place to relax, there are several hot spring resorts with stunning views of the valley.

Kagawa, the smallest prefecture in Japan, has few attractions but is known for its Konpira Shrine in Kotohira, about an hour by train from the capital city of Takamatsu. The "God of the Sea" has been worshipped by the Japanese since ancient times. Located on a hill, the shrine is also known for its long staircase of 1,368 steps, making the visit particularly challenging.

Back in Takamatsu, the key attraction is the Ritsurin Garden completed in 1745. It is one of the most historical gardens in Japan, with six ponds and 13 landscaped hills. There is also a teahouse within the pretty landscape.

Takamatsu is also the gateway to several outlying islands popular among tourists. Naoshima is known as an art island with a number of art installations and two art museums designed by architect Tadao Ando. It is also a place for swimming and fishing in the summer.

Another island, Shodoshima, is known for its beautiful natural scenery, including the "Angel Road", a sandbar which appears at low tide.

Both islands can be reached in an hour by ferry from the port of Takamatsu. A visit to Shikoku is incomplete without sampling its famous food, such as Sanuki (a place in Kagawa) udon noodles, Tokushima ramen, Awa-odori chicken, Honetsuki-dori chicken, and Katsuo no Tataki bonito fish.

DANCE FESTIVALS ARE A HIT WITH TOURISTS

Shikoku has several traditional festivals, but none is as renowned as the Awa Dance (Awa Odori) Festival in Tokushima city which attracts some 1.3 million tourists each year from all over Japan and overseas. The largest such event in the country is held in the summer as part of the Obon festival, a Buddhist custom to honour the spirits of one's ancestors. This year's event takes place from August 12 to 15.

Awa dance is one of Japan's representative traditional performances practised in Tokushima and elsewhere in the country. Also known as "drunken dance" or "the fool's dance", it is characterised by the rather unusual movements of the dancers, who stumble back and forth on their toes, accompanied by loud music played on common Japanese musical instruments such as the taiko drum, shamisen lute, shinobue flute and kane bell. The dancers usually bend their knees and keep their bodies low.

There are women's dance (onna odori) and men's dance (otoko odori). In women's dance, the dancers wave their hands above their heads at all times, while the men's dance is characterised by lively and dynamic movements.

Awa dance is performed by groups of dancers and musicians called ren. Different groups have different coloured costumes and flags. Women wear robes called yukata, while men wear a short yukata, called happi, over their trousers. There are both professional and amateur groups formed by office workers and students.

The dance is believed to have a history of over 400 years, but its origins are relatively unknown. One suggestion is that the dance originated from the celebration of the opening of Tokushima Castle in 1587, when the Lord of Hachisuka offered rice wine to the locals who got drunk and danced freely to celebrate.

Another suggestion is that the dance, which is performed by different groups, was influenced by the Furyu dance hosted by Sogo Nagayasu (or Masayasu) at the Shozui Castle in 1578.

There is also another theory that the dance is actually a local variety of Bon Odori (a dance by the Buddhists) performed throughout Japan in summer during the Obon festival.

Today, the Awa Dance Festival in Tokushima is a mega event held at locations throughout the city. Groups of dancers, wearing costumes, chant and sing as they parade through the streets in designated areas and on stages (with spectator stands either free or paid). Food and game stands are also available.

For some large stages, tickets can be bought in advance at convenience stores nationwide, or at the tourist information centre near Tokushima's railway station on the day of the performance.

Those who cannot make the trip to Tokushima during the festival can watch the dance at the city's Awa Dance Museum (Awa Odori Kaikan) throughout the year. There are performances several times a day by a professional dance group, and guests also have the opportunity to join the dancing.

Awa dancers show off their skills during the festival.

TRADE

Fostering stronger ties a key objective

Lee Hill-choi

Japan ranks third as the world's largest economy with a service sector that contributes to about 70 per cent of its GDP. The Land of the Rising Sun was Hong Kong's fourth largest trading partner in 2017, according to Hong Kong's Trade and Industry Department (TID). Not bad considering it was not until 2010 that Hong Kong and Japan signed a double taxation treaty, with an update in 2014.

In 2017, bilateral trade between Japan and Hong Kong reached HK$381.8 billion, TID reveals, which was an increase of 5.1 per cent on 2016. Exports from Hong Kong to Japan reached HK$995 million.

Products included metalliferous ores and scrap metal, jewellery, gold and silversmith ware as well as edible products; whereas imports from Japan totalled over HK$253 billion, including electrical machinery, apparatus and appliances.

Despite registering growth from 2016 to 2017, results from the Census and Statistics Department in its external merchandise trade statistics released earlier this week showed that compared to a year earlier, December 2018 Hong Kong exports to Japan fell by 3.6 per cent.

Nevertheless, this does not change Japan's substantial involvement in Hong Kong's economy, with many Japanese companies setting up regional headquarters in the city.

According to the Hong Kong Trade Development Council's (HKTDC) research, the latest numbers online showed that at the end of 2016, Japan's foreign direct investment (FDI) in Hong Kong reached a total stock of HK $220.7 billion, making the country the ninth largest source of FDI in the SAR.

"As of June 2017, there were 233 Japanese companies with regional headquarters in Hong Kong, while another 428 had regional offices here," the HKTDC says.

Promoting Hong Kong as a financial centre in the region has been an active campaign by Chief Executive Carrie Lam Cheng Yuet-ngor, exemplified by her speech at a forum in Japan last November on financial cooperation between the Guangdong-Hong Kong-Macau Greater Bay Area and Japanese enterprises.

In Japan, the Ministry of Economy, Trade and Industry (METI) and the Japan External Trade Organization (JETRO) are tasked with advising foreign companies on investing in Japan.

METI also has the important task of recording and advising on the topic of renewable energy in the country through its Agency for Natural Resources and Energy.

When Japan introduced a feed-in tariff (FIT) in 2012, renewable energy increased 22 per cent annually and contributed to 16 per cent of total power generation in 2017.

To lower generation cost, auctions for commercial solar PV and biomass were introduced in November 2017 and December 2018, respectively.

"To achieve the energy mix goal of renewable energy, Japan will firstly reinforce efforts at cost reduction through setting mid- to long-term price targets and utilising an auction scheme," says Akemi Ota, the assistant director at METI's International Affairs Office. "Secondly, [Japan will] secure long-term stable business operations, thirdly overcome grid constraints, and finally, secure operational flexibility."

The 2020 Tokyo Olympics will be a showcase of Japan's commitment to renewable energy use as the event's organising committee announced back in June 2018 that it wishes to power the Games exclusively through clean energy.

The Olympics are considered the fourth arrow in the wake of the country's "three arrows" strategy to reinvigorate the Japanese economy, which is referred to as "Abenomics".

HKTDC research says: "As of January 2018, Japan had concluded 15 free trade agreements and economic partnership agreements, including those with Singapore, Mexico, Malaysia, Chile, Thailand, Indonesia, Brunei, the Philippines, Switzerland, Vietnam, India, Peru, Australia and Mongolia."

Meanwhile, earlier this year, Japan's Minister of Justice, Takashi Yamashita, and Hong Kong's Secretary for Justice, Teresa Cheng Yeuk-wah, signed a Memorandum of Cooperation, which aims to promote Hong Kong as a hub for deal-making and international legal and dispute resolution services.

Japan's Minister of Justice, Takashi Yamashita, and Hong Kong's Secretary for Justice, Teresa Cheng Yeuk-wah, sign a Memorandum of Cooperation in January 2019. Photo: K.Y. Cheng

Hong Kong's Chief Executive, Carrie Lam Cheng Yuet-ngor, makes a speech at a forum in Japan last November on financial cooperation between the Guangdong-Hong Kong-Macau Greater Bay Area and Japanese enterprises. Photo: ISD

JAPAN BUSINESS REPORT

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OSAKA SANITARY PROMOTES SAFETY AND EFFICIENCY WITH ENVIRONMENT-FRIENDLY PLANT EQUIPMENT

Reports by **Cassandra Carothers, Brittany Loveless** and **Nour Gouider**

Clients have as much to celebrate as Osaka Sanitary on its 50th anniversary this year. The company has a passion for designing and fabricating among the best sanitary or food-grade pump and piping systems for the food and beverage, biotech, pharmaceutical and cosmetic industries, giving clients the competitive edge across their respective markets. With products ranging from valves, pumps and fittings to in-line sensors and large-scale units such as sterilisation and air-extractor systems, Osaka Sanitary offers utmost safety, efficiency and environment-friendly features.

"Our products and facilities play a vital role in people's safety and health, which are indispensable components in the production of many personal products," says president Tomosaburo Uno.

Tomosaburo Uno, president

The company's love for innovation has given clients a distinct advantage against the competition. While breweries in Japan were using a mixture of different metals for their brewing equipment in the 1990s, Osaka Sanitary introduced a revolutionary idea of using an all-stainless-steel brewing system to ensure cleanliness.

"That is how the concept of Nama Biru or non-pasteurised beer came about," Uno says. "We started giving clients the option of using an all-stainless-steel brewing equipment because if you are producing something you put in your mouth, it has to be exceptionally clean."

Driven by its pioneering spirit, the company continued to develop equipment that promotes production efficiency. It was among the first suppliers to come up with pumping and piping equipment that could be easily disassembled. This feature has enabled factories to save time on cleaning and putting back together the equipment after every manufacturing batch.

Osaka Sanitary's inquisitiveness did not stop there as its in-house research and development team has again come up with another breakthrough innovation called outstanding surface pipe or "OS pipe" technology.

"In the past, you had to take down the equipment one by one and use a brush to clean each component," Uno says. "We have developed a way to keep the slurry or any liquid from sticking to the insides of the equipment. This outstanding technology provides a sort of automatic cleaning system, which raises the level of production efficiency while providing an excellent solution to countries facing labour shortages."

Osaka Sanitary has achieved this process using a distinct technique. Together with a Japanese partner, the company took more than two years of research work to finalise the revolutionary technology, and started introducing it in the Japanese market in January last year.

Osaka Sanitary is applying for a patent for the innovation, a move that will further raise the company's list of original technologies comprising approved patents in Germany. In collaboration with universities in Japan, Osaka Sanitary is again conducting research focused on pumping and piping equipment for other fields, such as medicine, while developing solutions that use less water for cleaning.

"We want to try something new given our success in the food and beverage industry," Uno says. "Given the tremendous growth across the pharmaceutical industry, we have started to focus our sights more on this area."

Osaka Sanitary is similarly optimistic with the expansion of its geographical reach as it aims to raise its international sales, which account for only about 10 per cent of overall revenues at present. Following Japanese clients as they expand overseas, Osaka Sanitary sees opportunities in other Asian countries beginning in China.

"We want to work with more international sales representatives and engineers as we grow into markets outside Japan," Uno says. "We want to share with the rest of the world our distinct concept of safety, health, efficiency and environment protection."

M. WATANABE & CO OPEN TO EXPANSION WITH PRODUCTS FOR THE SEMICONDUCTOR INDUSTRY

The third generation of Japanese conglomerate M. Watanabe & Co is celebrating its 90-year legacy with bigger future plans, and significant parts of it are international expansion and product diversification. The company is also open to more partnerships such as mergers and acquisitions and research and development (R&D) collaborations.

With four subsidiary manufacturing companies and two sister companies that provide logistical information, M. Watanabe continues to be a leading import and manufacturing company in Japan since its founding in the 1930s. From trading goods during the war to producing quartz glass, silicone rubber and other essential components, M. Watanabe has been renowned for its expertise in delivering high-quality products to the semiconductor industry.

"Our key to success is our ability to make products that fit the era," says M. Watanabe president Ichiki Kusuhara. "We are able to build a company that caters directly to what the market needs."

M. Watanabe enjoys its growth from trading and manufacturing, which account for 60 per cent and 40 per cent of business respectively, of which 70 per cent is from the domestic market and 30 per cent from international sales. There is no stopping it from dreaming bigger, however, as the company aims to make its product offerings stronger by adding quartz glass fabrication, processed quartz glass and other possible iterations.

"We welcome international companies and institutions that would like to invest in or partner with us in developing new products and technologies," Kusuhara says.

M. Watanabe also aims to reach new markets. With offices in Taiwan and the United States, and established distribution networks in South Korea, Singapore and India, the company is keen on expanding its presence in Greater China. "We are actively searching for local partners," Kusuhara says. "China is the market to be in terms of the semiconductor industry and it's where we want to be."

Ichiki Kusuhara, president

NSS GIVES MODERN COMFORTS NEW MEANING IN VESSEL INTERIOR DESIGN

Over the years, the shipbuilding industry in Asia – led by Japan, China and South Korea – has been steadily becoming as robust as, if not stronger than, its European and American counterparts. Innovation is the name of the game and with a company such as Nagasaki Sempaku Sobi (NSS) taking charge of the interior planning, companies across the globe can continue to focus on developing the next-generation solutions for the maritime industry.

Established in 1943 as Nagasaki Kansen Sobi, the company initially specialised in furniture manufacturing for warship interiors. It changed its name in 1946 to Nagasaki Sempaku Sobi (NSS) and it expanded its business focus to include planning, designing, procurement and constructing interiors of various vessels and land buildings such as commercial, medical and welfare facilities.

Kazutaka Akiyoshi, president

NSS collaborates with companies across the globe such as AIDA Cruises, Mitsubishi Heavy Industries and IHI. To successfully support their needs in a timely manner, NSS has established strong connections with a network of reliable partners and suppliers in China, South Korea and Singapore. Carrying out more than 300 ships' turnkey projects annually, the company holds more than 60 per cent of the market share in Japan, and it aims to raise this figure to 90 per cent by its 100th anniversary.

"We work closely with our clients to ensure that we meet varying regulatory requirements. NSS is the partner of choice of many companies because we execute even the very niche requirements," says president Kazutaka Akiyoshi.

Outside Japan, NSS established an office in Taiwan to cater to local clients and others from the region, particularly Singapore, mainland China and Sri Lanka. With the demand for cruise vessels continuing to grow in Greater China and Europe, NSS hopes to reach more customers with its expanding geographical scope.

"Our company's shape is infinite. We want to keep growing and innovating with our clients and partners," Akiyoshi says.

HERITAGE BRAND FUKUTARO PUTS COD ROE ON THE MAP

When talking about Fukuoka and its food specialities, steaming bowls of flavourful hakata tonkotsu ramen immediately come to mind. Yamaguchi Aburaya Fukutaro has spent over a century perfecting other signature Fukuoka delicacies using spiced cod roe to offer consumers an authentic taste of Japan.

Initially a cooking oil and condiments wholesaler, Fukutaro was among the cornerstones of many companies in Fukuoka's thriving food industry. Aspiring to diversify its business, Fukutaro banked on Fukuoka's rich bounty from the sea and developed its own spiced cod roe recipe.

"We try to introduce many products locally and internationally. We're looking for speciality products that really showcase the strengths of the Kyushu area," says vice-president and representative director Hiroyuki Tanaka.

Fukutaro harnessed the rich taste of cod roe and imbued it into products such as sardines, ramen noodles and bread. Among its bestselling products is the *menbei*: spiced cod roe-flavoured potato starch crackers available in a variety of flavours including leek, onion, bonito and more. Beyond cod roe, Fukutaro is developing a green tea paste, which is conveniently packaged and does not turn brown when oxidised, holding its green colour in food products.

While cod roe is widely popular in Japan and the rest of Asia, other countries have yet to discover this prized ingredient. Fukutaro aims to change this by partnering with restaurants abroad to develop ways of localising and incorporating cod roe in various cuisines.

The company also aims to join food exhibitions. It likewise seeks partners in Hong Kong and other Asian markets to expand its distribution network.

Celebrating its 110th anniversary this year, Fukutaro envisions a stronger brand locally and internationally. "We are marketing our products abroad, but for us, it is equally important to remind the younger generations about *mentaiko* being part of our culture. Fukutaro is a heritage brand," Tanaka says.

Hiroyuki Tanaka, vice-president and representative director

TAITEC STEPS FORWARD IN SPREADING REVOLUTIONARY INCUBATION TECHNOLOGY IN CHINA AND THE REST OF ASIA

With a 5 per cent growth rate forecast through 2020, Asia and Australasia are currently the fastest-growing health care markets in the world. Japan, in particular, ranks next to the United States among the largest markets for pharmaceuticals and medical devices. To capitalise on the market's huge potential, life science companies are moving quickly, led by industry experts such as Taitec, Japan's leading manufacturer of instruments for life science and environmental tests.

From manufacturing glass apparatus for chemical and scientific experiments when it was established in 1942, Taitec has grown to offer more than 200 products. It now corners more than 50 per cent of the market share, and has mastered and simplified the process of incubation using the basic technologies of temperature control and shaking.

"Incubator shakers are our main products, but our work has always been customer-centred. We gained our credibility from our outstanding after-sales service," says Taitec president Ayako Sakashita.

Known for its high-quality, durable and cost-efficient incubator shakers, Taitec has also become the go-to partner of research laboratories of various large private companies and academic institutions, including University of Tokyo.

Ayako Sakashita, president

Ready to explore new territories, the Japanese company is set to bring its latest revolutionary technology in vaccine production with the eco-friendly biotech incubator shaker. Primarily introducing this product through an exclusive distribution partnership in mainland China, Taitec also eyes more distribution partners from India, Taiwan, South Korea, Hong Kong and Southeast Asia.

With overseas sales comprising 20 per cent of its overall revenues, the company is working its way to expand the reach of its cutting-edge technologies and double its international distribution in the next five years.

"Our focus is to grow overseas and to capture the food and chemical industries. We are also open to collaborating with research institutions sharing similar values and vision," Sakashita says.

DRG EXTENDS WORLD-CLASS CONTENT CREATION EXPERTISE

With more than 4000 clients and almost two decades of experience in premium content creation, Discovery Reports Group (DRG) has launched Discovery Communications, a content writing services division dedicated to helping clients create relevant messaging and branding. Discovery Communications collaborates with clients to develop targeted content.

"Effective communication is key in this era when everyone has access to information instantly," says Angela Gaspar, DRG's managing partner. "At Discovery Communications, we help our Japanese clients convey their message to potential customers, partners and investors globally with utmost clarity, conciseness and polish."

Discovery Communications offers professional and comprehensive content creation – including editorial support for all corporate publications from web content, press releases, brochures and newsletters to annual reports and company presentations. It guarantees high-quality and high-value content adhering to international standards of editorial excellence.

The new business division leverages on the group's best-in-class team of professionals in research, analysis, reporting, correspondence, production and writing. It is also backed by DRG's expertise in connecting global businesses with a strong Asian readership of potential investors, partners, distributors and clients.

"We have worked with companies across many industries, from engineering, logistics and finance to education and consumer goods. Discovery Communications aims to help clients articulate their ideas effectively to engage their target audience," Gaspar says. "Our clients can focus on their core operations and leave the writing to us."

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NIHON KOSO STRENGTHENS GLOBAL REACH WITH ACQUISITION OF PARCOL'S CONTROL VALVE BUSINESS

Steered by its commitment to bring the highest technical capabilities to the global industrial valve market, Nihon KOSO – a world leader in valve manufacturing and engineering – completed the acquisition of the control valve business of Italy's Parcol in June last year. With more than 60 years of expertise, Parcol bolsters the global competitive strength of the KOSO brand, particularly in Europe where the Parcol name is highly respected for its consistent product quality.

"Through acquisitions, we gain added business and technological know-how that we always bring back to Asia to help in the advancement of regional manufacturers," says CEO Yuichi Ikegaya. "Asia continues to be one of our key markets, and it has been our goal to grow with our partners in the region."

Since its foundation in 1965, Nihon KOSO has produced numerous technological breakthroughs that contribute to process automation in various fields of industry, including the oil and gas, petrochemical, power generation, industrial and manufacturing businesses. In each of these sectors, many of the world's biggest names have come to trust Nihon KOSO for the design and manufacture of high-performance valves to tackle some of their biggest challenges. In the oil and gas industry, one of the primary sectors served by Nihon KOSO since inception, the Tokyo-based company has supplied valves to several offshore and numerous onshore installations for use in the processing of liquefied natural gas, liquefied petroleum gas, refinery products, petrochemicals and derivatives.

All products are made from the best materials – from small- to large-sized valves, used in low and high pressures, cryogenic to super-critical high temperatures and handling of a variety of exotic fluids – under the name of "Made in KOSO". Meeting the most stringent quality requirements, these are made in two Nihon KOSO-owned foundries and manufacturing facilities located in Japan, China, South Korea, India, Britain, Italy, Oman and the United States. As a comprehensive manufacturer of automation devices, Nihon KOSO also offers actuators, valve accessories, sensors and instrumental equipment.

To guarantee that clients receive what they need when they need it, Nihon KOSO has adopted a just-in-time policy in its production plants. Exports account for more than 80 per cent of sales, with products shipped to Europe, the Americas, the Middle East and Asia.

There is virtually no product that we do not produce in the field of control valves

Yuichi Ikegaya, CEO

"Our unceasing commitment to pursuing advanced technology stems from our creative spirit that flows throughout the organisation," Ikegaya says. "We continue to challenge ourselves to meet our clients' diverse and ever-changing needs. There is virtually no product that we do not produce in the field of control valves as we've expanded our portfolio to respond to the automation requirements of any scale in all fields of industry. We can say that our technological prowess in this field is unmatched globally – making that our most important competitive edge."

Market development and product innovation have been the pursued goals of Nihon KOSO for a long time. The broader market prospects have been brought to Nihon KOSO as a result of today's globalised market. The continuous innovation of products towards better, faster and more advanced platforms has created a solid foundation for its business. Additionally, the high-end valves used globally for high-temperature, high-pressure and severe service applications have resulted in a substantial qualitative leap.

Artificial intelligence, internet of things, cloud computing and big data create an unprecedented era for the company. Nihon KOSO has produced a series of high-end, intelligent instruments, which are devoted to serving the times, and have allowed the company to become the first intelligent valve manufacturer in the industry. This also brings Nihon KOSO to the forefront of the smart factory.

"We regard product quality as the lifeline of the enterprise," Ikegaya says. "The casted KOSO brand stands for premium quality. We will always hold quality as our priority and produce safe, reliable, high-performance products."

Three-lever switch valve

FEEL HEALTHY AND LIVE LIFE TO THE FULLEST WITH FORDAYS

In recent years, concern that modern diets are lacking in nutrients vital to the maintenance of good health has driven exponential growth in demand for dietary supplements. Fordays, one of Japan's leading supplement companies, has found success by developing supplements that support good health at the most fundamental level – the genetic level.

Established in 1997, Fordays is the third-largest multilevel marketing company in Japan, with annual sales surpassing 42 billion yen (HK$3 billion) in 2017. The face-to-face nature of multilevel marketing has been crucial to Fordays' success, enabling it to build a tight-knit community of more than 280,000 members and realise continued revenue growth for nearly two decades.

"Based on the latest science, we create products that support peoples' physical well-being, while at the same time providing them with an opportunity to achieve greater financial independence by sharing their passion for Fordays products with others. We want to help people live life to the fullest," says Fordays president Keiko Wada.

The product that put Fordays on the map is Natural DN Collagen, a nucleic acid-based supplement drink containing deoxyribose nucleic acid, ribonucleic acid and an optimal balance of other high-quality ingredients that support good health. Since its introduction in 1999, Natural DN Collagen has been reformulated on numerous occasions to keep the product at the cutting edge of nutritional science. Now in its eighth iteration, Natural DN Collagen continues to be one of the top-selling supplements in Japan, with average monthly sales of 300,000 bottles and cumulative sales projected to exceed 60 million bottles by middle of the year.

Keiko Wada, president

Spurred on by the success of Natural DN Collagen, Fordays has invested heavily in R&D, leading to the development of numerous outstanding dietary supplements, as well as an extensive range of skincare products and cosmetics.

Fordays collaborates with universities locally and abroad to discover new applications for nucleic acids and methods of synergising ingredients. Wada expressed a desire to build similar partnerships with universities and research institutes across Asia and to conduct research into the major health issues affecting people in the region, such as cancer, diabetes and hypertension.

Looking to capitalise on its success in the Japan market, Fordays is taking its top-selling products and rewarding business model to overseas markets. With operations already established in Hong Kong, Taiwan, South Korea and the Philippines, and offices due to open in Malaysia, Vietnam and Thailand in the coming months, the future looks bright for Fordays.

Fordays is taking its top-selling products and rewarding business model to overseas markets

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SATAKE PRECISION TECHNOLOGY FINDS NICHE GROWTH MARKET WITH TACTILE SENSORS FOR CONSUMER ROBOTICS

As a supplier of precision mechanical components with more than 80 years of expertise, Satake Precision Technology continues to challenge itself and evolve to respond to the constantly changing landscape of modern manufacturing and customer needs. Working towards the vision of company president Kenichi Ogata, Satake has strengthened its factory automation (FA) business to help production facilities transition to smart components and smart machines while increasing its focus on consumer robotics as a new area of expansion.

"When I assumed the leadership in 2009, I restructured the company and changed our business model so that we can be flexible and agile in finding new opportunities in up and coming markets," Ogata says. "We initially shifted to manufacturing factory automation components, but seeing that the industrial robotics market will soon hit its peak, we have ventured into the next growing market – consumer robotics."

Apart from its well-established custom-made metal processing business, Satake is strengthening its body of work on robotics for non-manufacturing purposes through its subsidiary Touchence. The Tokyo-based company sees the consumer robots market as the next stage in the FA market. Touchence, a sensor development company, offers the world's first tactile sensors that can detect three-dimensional deformation and have a naturally soft and flexible texture.

With technology licensed from the University of Tokyo, Touchence has developed the thinnest, smallest and lightest sensors that can measure forces along three axes, and can be mass produced at low costs. In addition to consumer robots, these sensors have potential applications in sporting apparatus, daily living support, nursing care, automobiles and virtual gaming. Touchence's dedicated engineering team can also customise sensor modules to specific customer requirements.

Kenichi Ogata, president

"Changing lifestyles will drive new market demands and opportunities for consumer robotics," Ogata says. "In Japan, the ageing population is increasing the need for automation in everyday life, while globally, driverless cars, smart wearables in apparel and medical/health monitoring are gaining traction."

Responding flexibly through innovations to match the new era, Satake pursues research and development (R&D) collaborations with Japanese universities and leading industry players with complementary expertise. To make inroads into the field of robot awareness and control technology, Satake has a continuing research alliance with the University of Tokyo.

"With the sensor business, open innovation is a must," Ogata says. "We're looking for partners with strong R&D capabilities and willingness to grow with us in unprecedented markets. We hope to find research partners based in Hong Kong, Shenzhen, Dongguan, Singapore and Silicon Valley, which are all prominent places for innovation."

Starting in 1937 as a manufacturer of fastening components such as nuts and bolts, Satake now offers full-fledged production and quality control capability for precision mechanical components with a focus on metal component processing. Leveraging tie-ups with more than 60 specialised manufacturing companies in Japan and overseas, Satake satisfies the changing requirements of its customers, ranging from high-mix, low-volume production and prototype design to mass production. Through a proven integrated manufacturing process at its in-house factory, Satake can handle more than 3,000 components on a short lead time, one-by-one production basis to fulfil same-day delivery.

Changing lifestyles will drive new market demands and opportunities

Kenichi Ogata, president

Through another subsidiary Sanko Kogyo, Satake specialises in making ultra-high precision fittings for manufacturing semiconductors, ultra-high vacuum products and liquid crystal displays. Using the ultra-clean technology it has developed and refined for more than 25 years, Sanko Kogyo offers revolutionary products that are valued by a wide range of customers because of their technical strength and reliability.

"We're among the few to support high-mix, low-volume and short lead time production," Ogata says. "This highlights our commitment as a reliable, trusted partner to our customers. We hope to bring this advantage to more of Southeast Asia through additional customer and distribution partners."

KOSEI PHARMACEUTICAL SAFEGUARDS STEADY SUPPLY OF LOW-COST GENERIC DRUGS

A pharmaceutical drug takes a complex route before it reaches a pharmacy, hospital or physician. To penetrate one of Japan's 60,000 general pharmacies, for instance, a drug goes through primary, secondary and tertiary wholesalers. Each level adds margins that make medicines more expensive for markets worldwide.

To ease the burden of customers and patients, Kosei Pharmaceutical focuses on building an efficient system for pharmaceutical distribution. By collaborating with knowledgeable and well-connected distribution partners, the region's leading pharmaceutical wholesaler and manufacturer ensures a stable supply of safe, high-quality and low-cost pharmaceutical products.

Established as a drug wholesaler in 1952, Kosei Pharmaceutical expanded its borders in 2010 when it set up its subsidiary Kosei Pharma in Britain to develop its import business. Enjoying huge growth, Kosei Pharmaceutical entered the manufacturing space and built its own generic drug production facility in 2013. The company has since garnered 40 pharmaceutical licences and aims to increase its product line-up to 200 within the year.

"As an independent, medium-sized company, we can move quickly," says Kohei Toda, managing director of Kosei Pharm Group. "We can take on import, export and manufacturing activities efficiently, depending on what the customer requires."

Kohei Toda, managing director

Led by third-generation family owners, Kosei Pharmaceutical nurtures an online business stream apart from subsidiaries in India and Germany to further expand its reach. With 10,000 types of hospital-use medications in its portfolio, Kosei Pharmaceutical offers a fast and stable one-stop solution for customers. Partnerships are in place in China, Vietnam, Indonesia and Nigeria to grow its overseas sales, which are targeted to reach 200 billion yen (HK$13.78 billion) by 2021.

Kosei Pharmaceutical is putting significant resources into research and development activities. It seeks to create new Kosei Pharma-branded generic drugs in cooperation with industry players and universities.

"We're strengthening our network to keep prices competitive and showcase our integrity and reliability," Toda says.

NOGAWA CHEMICAL ADVANCES HIGH-PERFORMANCE SEALANTS FOR ASIA'S BUILD-UP

Generations of Shinkansen coaches showcase the evolution of high-performance sealants pioneered by Nogawa Chemical in the 1950s. An enabling material for noise insulation, high-performance sealants have helped ensure passenger safety and comfort ever since Japan's bullet trains came to commercial operation in 1964.

"Our product is the sealant used for the window shields in all of the Shinkansen coaches. It has proven reliable with zero incidents from those windows since 1964. That's why even now, our product is used for all of the window shields – 100 per cent," says Takayuki Nogawa, president.

Known in the market as Diabond and Sealing Master, Nogawa Chemical's polysulfide rubber, silicone and modified silicone high-performance sealants are extensively used by first-tier manufacturers of cars and rolling stock in Japan and China, where the company opened a subsidiary in 1994. Nogawa Chemical also manufactures a wide range of adhesives under the Diabond brand used in the electronics equipment, shoemaking and the building and construction industries. It is a recognised original equipment manufacturer (OEM) in the adhesives and sealants industry, with about 20 per cent of the company's business involving OEM production.

"We develop customised formulas based on customers' specific needs, focusing on industrial applications. For instance, we have made special formulations of adhesives and sealant to improve fatigue performance or our laboratory makes a new formula for a difficult-to-adhere material such as polypropylene plastic. We get detailed information from the customers for these customised formulas," Nogawa says.

Having acquired IRIS (International Railway Industry Standard) certification in 2017, Nogawa Chemical has raised its competitiveness as a supplier for European rail systems and to the rest of the global market. The company invites partnerships throughout Asia, especially for distribution in China and establishing a footprint in Vietnam. Research and development collaborations with industry players and universities globally are also welcome.

"We'd like to expand more internationally, starting with Southeast Asia's massive infrastructure build-up," Nogawa says.

Takayuki Nogawa, president

TOGAWA INDUSTRY PROVES THE BUSINESS IMPERATIVE OF RESPONDING TO MARKET CHANGE

From its establishment in 1959 as a manufacturer of environment-friendly plastic hoses, Togawa Industry has managed to adapt its diverse range of product offerings based on the ever-changing needs of its clients. Known for serving the agricultural, public works, automotive, construction, semiconductor, home electronics and food industries in the past 60 years, the Japanese manufacturer possesses long-term relationships with customers such as Toyota, Nissan, Honda, Sharp, Panasonic and Hitachi.

"The market needs change through time, and we manage to evolve fast enough to deliver the modified requirements," says president Ikuo Yokota. "And while our customers plan to expand outside Japan, we at Togawa are following through to address such development."

Having the imperative of responding to customers expanding internationally, the industrial hose producer aims to grow its total sales within the next three to five years. Togawa's domestic sales account for 90 per cent of total sales. With a reach that covers mainland China, Indonesia, Thailand, Taiwan, the Philippines, Vietnam, Malaysia, India and Singapore, the company aims to establish solid brand recognition and strong distributorship in Asia, particularly in Indonesia, Thailand and India.

Ikuo Yokota, president

Aside from improving its distribution and reach, Togawa also focuses on enhancing its expertise by harnessing its technologies and technical capabilities in order to continually provide new products and solutions.

The company will be adding a new industrial hose that boasts durability against high pressure and heat, a new painting hose and a new foaming hose to its wide array of hose solutions, which are superior in flexibility, transparency, pressure resistance, negative pressure resistance and oil resistance.

Togawa prides itself on its highly competent research and development team in Japan, while also welcoming strategic partnerships. "We are also interested in cooperating with research centres and government organisations in order to improve our latest technologies," Yokota says.

OPPEN OPENS DOORS FOR INTERNATIONAL PARTNERSHIPS WITH TOTAL BEAUTY PHILOSOPHY

For Oppen Cosmetics, beauty is not just skin-deep. For the skincare and cosmetics expert, looking good and feeling good go hand in hand, and this is the driving force behind Oppen's commitment to developing high-quality products that promote total healthy beauty.

Oppen celebrated its 65th anniversary last year, continuing to specialise in basic and anti-ageing skincare solutions. Complementing its skincare ranges, Oppen also develops and manufactures high-quality make-up lines. Moving deeper into the beauty regimen, Oppen targets inner beauty with its health food supplements.

"If you see our long-time, loyal customers, you can never guess their real ages. These customers are living proof of the efficacy of our products," says president Teruaki Takikawa.

A cutting-edge beauty company with multiple patents, Oppen has ongoing research initiatives to develop innovative products. One of Oppen's research studies looked into the effect on anti-ageing of a blue flower locally grown in the Shiga prefecture.

The company's breakthrough findings show that it can slow the degradation of collagen, thus resulting in more supple skin. This flower extract is a key ingredient in the Yakuyou Tae line. Oppen has also discovered that another species of this blue flower has an effect on photoaging and has incorporated it in a new product line released last year.

Oppen has always believed that the personal approach is the best way to conduct business, and this is why it leverages a network of sales personnel instead of going the traditional department store retail route. In doing so, the highly trained distributors can best advise the customers about what products would suit them the most.

Eyeing international expansion, Oppen aims to fulfil OEM and ODM orders from other cosmetics companies looking for an honest partner who can provide high-quality products. To date, it works with an Asian partner with an extensive sales channel in the region, and Oppen hopes that this partnership will open doors to Asian markets.

Teruaki Takikawa, president

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SANKYO SEISAKUSHO PROVIDES STEPPING STONE FOR CUSTOMERS' SUCCESS

Hiroumi Ogawa, owner and president

Innovation is what keeps the world moving forward, but without the right technology to support its development, brilliant concepts will only remain concepts. This is what fuels Sankyo Seisakusho to become the engine of growth that moves companies forward with its cutting-edge automation technology which helps turn ideas into reality.

"Rather than catching up with the global manufacturing industry trends, we strive to be at the forefront of the global movement. Being an industry leader is part of our company policy to ensure our continuous growth," says Sankyo Seisakusho owner and president Hiroumi Ogawa.

Born right in the midst of Japan's rapid industrialisation, Sankyo Seisakusho possesses an innate understanding and knowledge of the manufacturing industry like no other company.

As a forward-thinking company, Sankyo Seisakusho has an intensive research and development programme. It collaborates with universities to gain fresh insights from students and faculty. The company also works closely with its customers to understand their demands and adapt its solutions to their needs accordingly.

The company's core technology is the roller gear cam, which was developed in the 1970s. Since then, it has been modernised, improved and integrated into new products such as the RollerDrive precision reducers, Sandex indexing systems, Variax press material feeders, and other machine tool products.

Sankyo Seisakusho is the leading name when it comes to precision parts manufacturing devices that deliver advanced performance and outstanding reliability.

Supporting many industries such as electronics, semiconductors and precision machinery, among others, Sankyo Seisakusho sees great opportunities to develop new products to accommodate new technologies such as electric vehicles, 5G networks, robotics and internet of things. The company is in the process of developing a small-sized speed reducer in an effort to adapt its products for these new applications.

In its drive to be ahead of the competition, the company is expanding its supply and production capacity by increasing its investments in China and Vietnam. Sankyo Seisakusho aims to double its production output within three years to cater to the imminent demands brought about by new trends.

Sankyo Seisakusho is eyeing India and Europe as its next big markets, and it is opening its doors to partnerships with distribution companies that can help it gain traction there.

"Something that we've always done and will never change is striving to help customers become more efficient. We want to be a part of many more companies' success stories," Ogawa says.

SHOWA GLOVE CONTINUES TO REVOLUTIONISE THE HAND PROTECTION SOLUTIONS MARKET

Shuji Kondo, president and group CEO

Standing out means consistently delivering distinctive technological breakthroughs: a feat that SHOWA GLOVE continues to achieve since inventing the world's first fully coated polyvinyl chloride (PVC) household glove in 1954. With more than six decades of accumulated expertise, SHOWA GLOVE has emerged as a global manufacturing powerhouse in the hand protection industry. Beyond the household, its high-quality protective gloves have proved invaluable to diverse industries, ranging from automotive, construction, food service, health care, oil and chemicals, general manufacturing to commercial fishing.

At the leading edge of hand protection advances, SHOWA GLOVE has produced many firsts that revolutionised the industry, including polyurethane gloves for the hi-tech market, 100 per cent nitrile, latex-free gloves, biodegradable disposable gloves and latex foam gloves with breathable and waterproof technology. Today, its valued-added portfolio consists of more than 200 types of gloves for a vast array of household and industrial applications. This year, SHOWA GLOVE is set to unveil a new addition to its cut-resistant glove range, which is the industry's fastest-growing category, driven by rising worker safety concerns.

"We have built a solid reputation for innovation and originality," says Shuji Kondo, president and group CEO. "Always innovating and never imitating is a foundational belief that encapsulates the spirit of SHOWA GLOVE."

Since its inception, SHOWA GLOVE has been the market leader in Japan, accounting for more than 40 per cent of gloves worn by professionals and individual consumers. Key to its success is its fully owned and integrated manufacturing operations. With nine production facilities across the globe, SHOWA GLOVE has 100 per cent control over each step of the manufacturing process, from the hand mould to production through marketing, to achieve a high standard of quality.

SHOWA GLOVE expanded its reach to the international market in the early 1990s and has been achieving increasing success, particularly in Europe and the Americas. The company ventured into Asia in the early 2000s, and it is seeing the immense growth potential in the region, especially with the adoption of more stringent industry regulations to minimise occupational hazards. SHOWA GLOVE's innovative products are available through its strong distribution partners located everywhere in the world.

"We're quite new in the Asian market," Kondo says. "We realise that we can expect much more from the region if we can get more people to see the superior quality, flexibility and durability of our gloves. Our trusted distributors play a key role in this initiative and in the development of high-level protective products."

SHOWA DENKI RAISES BRAND TO THE GLOBAL STAGE WITH JAPANESE QUALITY BLOWERS

Kensaku Kashiwagi, CEO

Venturing outside a home market can be a daunting endeavour, but when a company specialises in products that help raise the operational productivity of many industries, it becomes less of a risk and turns to an effective strategy. This is exactly what Japanese firm Showa Denki has accomplished.

Taking its solid portfolio of electric blowers, environmental equipment and dust collectors, Showa Denki expanded its horizons – initially to Thailand and eventually the rest of the globe. The company first ventured beyond Japan in 2010 and has since continued to strengthen its presence internationally.

"We want the rest of the world to see the difference our products can make. Additionally, I want them to experience *magokoro*, a uniquely Japanese way of showing hospitality and sincerity from the bottom of our hearts," says CEO Kensaku Kashiwagi.

Building on its 69-year-long experience serving local manufacturers, Showa Denki established a subsidiary office and warehouse in Thailand to serve the robust automotive manufacturing industry in the country. Its products are also used in the pharmaceutical, electronics and food beverage sectors.

Showa Denki moved next to Taiwan and South Korea to better support its clients' business outside Japan and to collaborate with locals in addressing specific market demands. The company also built a network of distributors to serve the Americas, Europe, the Middle East and Asia as Showa Denki attracts increasingly more attention from global automotive manufacturers.

In extending its geographical scope, Showa Denki broadened its offerings to become a fully integrated provider offering after-sales service. "We are first and foremost a manufacturing company, but we also want to push a 'solutions idea' business. We want to help our customers come up with solutions to their requirements," Kashiwagi says.

Showa Denki welcomes partnerships with universities, research centres, environmental organisations and government agencies that can lead to new products and solutions. Kashiwagi is the visionary that masterminded Showa Denki's expansion to Thailand. A seasoned fisherman with a passion for exploration, he frequently travelled to Thailand for fishing expeditions, and it was during these trips that he realised the potential for Showa Denki to contribute to the growth of the automotive industry in the country.

As a pioneering figure for the company, he is also the man behind the company's foray into boat distribution. Kashiwagi turned his passions into a new enterprise for the company. With this new business, Showa Denki imports boats from the United States for local distribution.

ICHIEI FOODS BUILDS LOYALTY AROUND UNCONVENTIONAL AND FUN SNACKS

Eiichi Ikeda, founder and president

Authentic Japanese food has an international following that transcends trends or borders given its association with healthy eating. For snack manufacturer Ichiei Foods, the affinity is more personal because it comes to the market with clever word play and unexpected products that evoke merriment.

"We would like to have that factor of humour and dream in our products, and above all, satisfy the craving for authentic Japanese delicacy," says Eiichi Ikeda, founder and president.

Ichiei snacks have a cult following in Japan. Marine delicacies Yokattara, which combines the Japanese terms for squid, cod and "if you please" and Aisurume, a snack that pays homage to women, are staple items in senior citizen meetings. Meanwhile, multiflavoured baked scallop snacks, dried sour plums and *dorayaki* – sweet-filled pancakes which Ichiei has innovated with Amaou strawberries and Yame matcha from Fukuoka – are party favourites. Wasabi-flavoured snacks – beans and cutlets, cheese or fresh scallops dipped in wasabi – have likewise gained popularity in Hong Kong, Taiwan and South Korea.

"Our products are created for children but can also be enjoyed by adults over drinks. That unexpectedness is something we're known for," says Ikeda, whose lighthearted approach to creating bestsellers was featured on Japanese television in March.

Ichiei seeks to expand its rich resource of raw ingredients to sustain its prolific launch of new products and flavours. The company's facilities are equipped to produce snacks from raw ingredients as diverse as scallops and smoked quail eggs using the same techniques.

"Innovation is everything. It's been 26 years since our foundation, but year by year, our core products are different," Ikeda says.

The Ichiei founder welcomes reliable distributors that can bring his bestsellers to mainland China, the United States and all across Asia through speciality channels such as health food shops or children's and duty-free stores. Trusted partnerships are most important to Ikeda in tackling the company's market expansion.

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FUTAMURA CHEMICAL'S FOCUSED GROWTH DELIVERS ENDLESS BENEFITS TO CLIENTS

Focus makes perfect. Such is the case of Futamura Chemical, which for nearly 70 years has concentrated its efforts on being the best in three product categories – plastic film for packaging, cellulose film which is drawing public attention for its biodegradability, and activated carbon used in water and gas filtration.

"Our emphasis on areas where we have already established a distinct advantage in terms of quality, technology and production capability significantly benefits our clients," says president Yasuo Nagae.

In the plastic film for packaging business, where Futamura holds the leading market share in Japan, the company's flexible production capabilities and huge inventories across the country ensure next-day delivery for most orders. As a result, clients no longer need to carry large amounts of stock and can immediately receive the plastic films they need, even for sudden orders. Futamura has been highly acclaimed as the key to the stable supply of plastic films in Japan.

Yasuo Nagae, president

"We foresee substantial growth in our activated carbon and cellulose businesses as we uncover new applications and markets over the next three to five years," Nagae says.

For activated carbon, the company is working with several Japanese universities to pursue the development of new technologies and products. Futamura is also promoting initiatives for the practical application of lead removing agents and solid acid catalysts. Moreover, in the field of molecular sieving carbon that has molecule filtering functions, the company has entered the equipment business by acquiring Adsorption Technology Industries (Adsotech).

With an advantage in air separation facilities, Adsotech is also involved in the treatment facilities for effluents and exhaust gas, using ozone efficiently. Futamura strives to enhance its cooperation with reliable suppliers of high-quality raw materials and with companies capable of developing products to be sold in Asia, especially in China and India.

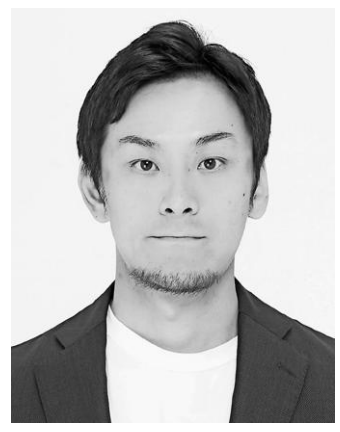
For its cellulose film segment, Futamura will use the wealth of technology it has accumulated thus far and the distinct cellulose processing technology it has newly developed to accelerate the development of not only film but of cellulose products with distinctive functions.

Futamura welcomes partners who share its corporate philosophy that values long-term growth founded on genuine relationships. It has cultivated such relationships early on. Since its inception, the industry expert has stood on the principle that the company exists to ensure the daily lives of the people working for it.

"We do not really worry about short-term revenues, but seek partners with whom we can build lasting relationships," Nagae says. "For us, building a family is key."

TEXTILE SUPPLIER TOYAMA MAXIMISES CUSTOMER SATISFACTION IN NICHE HIGH-FASHION MARKET

In the highly fragmented global textiles market, Toyama has built an excellent track record as a supplier of high-fashion fabrics, with almost a century and a half of expertise. Founded in 1877 as a family-owned cotton yarn business, Toyama has become a trusted partner to leading apparel makers in Japan and overseas, and is valued for helping clients come up with concepts for their new product lines. Its wool materials business also forms a significant part of its operations, with Toyama being among the top Japanese exporters to the United States.



Takuro Toyama, CEO

"We've stayed competitive not only by focusing on quality and on-time delivery, but by keeping abreast and adaptable to perpetually moving sector trends," says Takuro Toyama, CEO and ninth generation of family management. "While constantly changing with the market, we've remained true to our founding principles of sincerity, ingenuity and consonance."

Sourcing first-class raw materials from all over the world while closely working with quality-focused Japanese spinning mills, weavers and dye workshops, Toyama continues to develop differentiated textile products, including wools, cotton yarns and polyester fibres.

A recent offering from the company is the *sasawashi* fabric, an innovative material woven from the Japanese traditional plant, *washi*. This eco-friendly fabric is infused with antibacterial and natural-deodorising properties and provides good ultraviolet protection. Meanwhile, Toyama's silky powder fabrics, noted for their anti-electrostatic and wrinkle-free attributes, have gained a following among European high-fashion brands.

"We aim to strengthen our presence in the European market to help boost our reputation as a reliable supplier in Asia, primarily to Chinese apparel makers," Takuro Toyama says.

With the growing popularity of smart and athleisure clothing, Toyama seeks to develop technologies to adapt to these emerging trends and welcomes opportunities to collaborate with other textile manufacturers and fashion brands. It is also open to strategic partnerships to move into new applications such as household textiles.

ANGES OPEN FOR PARTNERSHIP TO REMAIN A HERO IN GENE THERAPY

Dr Ei Yamada, president and CEO

Biotech venture company AnGes is readying itself for another era in its long-established history in the life science industry of Japan. With the ageing of the Japanese population and the demographic shrinkage in the country, Japan has become a life science laboratory for pharmaceutical companies and a model of innovation for the rest of the world.

"AnGes looks forward to a future of improving human health and quality of life through pioneering in the development of innovative medicines," says president and CEO Dr Ei Yamada. "We focus on research and development (R&D) of next-generation biopharmaceuticals such as genetic medicines, and aim to achieve practical use of new drugs."

Since its establishment in 1999, AnGes has been collaborating with various organisations and universities, including Osaka University and Stanford University. Its plans of commercialising its developments are set to roll out this year, upon the conditional approval of its breakthrough gene therapy drug, the Hepatocyte Growth Factor (HGF) plasmid discovered by professor Ryuichi Morishita, founder of AnGes. The drug promotes revascularisation, and has been filed for approval as a treatment for Critical Limb Ischemia in which the vascular flow in limbs is severely compromised.

Other ongoing projects include the development of nucleic-acid drug NF-kB decoy oligonucleotide with the University of California San Diego, and the DNA vaccine as the new type of therapeutic vaccine of genetic medicine. While forging alliances to continue being a global innovator in the field of gene medicine, AnGes is also planning to expand its reach worldwide.

The global gene therapy market is growing. To keep pace with the expected industry growth, AnGes understands that it has to keep the company open for investments.

MIYAZAKI'S WIRE MACHINES RAISE PRODUCTIVITY ACROSS INDUSTRIES

Renowned in Japan for high-performing wire forming machines, Miyazaki Machinery Systems cuts across industries with technology that is rooted in a total commitment to quality.

"Because of the demanding requirement of the Japanese market, we have reached 90 per cent domestic market share for our combined drawing machines. Globally, no other company can provide the high quality of these machines," says Kazuaki Miyazaki, president. A family-owned business that traces its roots to 17th century Japanese metalworking, Miyazaki Machinery Systems is celebrating its 75th anniversary this year with a newly renovated headquarters in Osaka and a trading subsidiary in Shanghai that is turning 10 years old.

The company has long-standing relationships with well-known Japanese companies such as Nippon Steel & Sumitomo Metal, JFE Steel, Kobe Steel, Sumitomo Electric, Hitachi Metals and other industries whose overseas forays were supported by speciality machines designed by Miyazaki engineers to precision requirements. It also collaborates with Tokyo's University of Electro-Communications and Vesuvius McDonnell.

"We can present various proposals to any industry based on our successful history of innovation in this niche business," Miyazaki says.

As the only comprehensive wire forming machine maker in Japan, Miyazaki Machinery Systems is the highest-level provider of integrated systems for combined drawing machine (coil to bar) and wire drawing machine (coil to coil) and wire stranding machines. Equipped with the latest microprocessor-based control systems, these machines produce the high-quality wire for power cables; electric wires, parts used in vehicles, fasteners, appliances, electronic products and communication systems; and structural wire ropes.

Kazuaki Miyazaki, president

Miyazaki machines are increasingly being used in the automotive and heavy industries across China and Southeast Asia. In China alone, up to 2.4 million vehicles – whether hybrid, electric or internal-combustion engine – are equipped with control cables, fasteners or springs made by Miyazaki machines. The company is keen on doing the same for the home appliance industry.

"We want to keep giving our customers the support and raise our service level to satisfy their needs anywhere in the world," Miyazaki says.

FJ HOTELS ENSURES LEISURELY AND STRESS-FREE STAYS AT HYATT AND HOME-GROWN FORZA HOTELS

Steadily gaining prominence among tourists from South Korea, Taiwan and Hong Kong, Japan's third-largest island, Kyushu, presents a distinct culture. Unlike the business-like demeanour commonly encountered in Tokyo, Kyushu locals exude a more relaxed vibe, and FJ Hotels seeks to showcase this unfamiliar trait to visitors by rapidly expanding its own branded establishment, Hotel Forza, across Japan while managing the Hyatt brand of hotels in Fukuoka.

"We offer a different kind of hospitality in Fukuoka," says Kunihiko Kiyohara, president of FJ Hotels. "Our people have a stronger sense of community. We have a rich local culture that may not be so famous outside of Japan, and we'd like to express that through our hotels."

The hospitality management company has been nurturing a partnership with Hyatt for 23 years, managing the 5-star Grand Hyatt and the 4-star Hyatt Regency in Fukuoka. This wealth of experience in high-end hotel management equipped FJ Hotels in creating Hotel Forza, offering comfortable and smart lodging. Guests at Hotel Forza enjoy stress-free stays at locations that put a premium on accessibility and centrality while delighting in relaxing amenities such as larger rooms and beds, in-room iPads and coffee machines. In just 10 years, FJ Hotels opened four Forza hotels in Kyushu, and aims to operate 15 hotels in popular destinations across Japan by 2025.

"We have diversified to get the different layers of customers from abroad, and that grew our brand and occupancy rate," Kiyohara says.

FJ Hotels sees potential in establishing more comfortable and smart hotels with straightforward service across Southeast Asia, particularly in Thailand and Vietnam.

Kunihiko Kiyohara, president

With a continuing collaboration with Richmond Hotels and the company's Singapore branch office, it welcomes partnerships with foreign brands looking to build hotels that promote a different aspect of Japanese culture.

"We bring new value and philosophy in Japan and within the Southeast Asian market through smart, lifestyle hotels," Kiyohara says.

CRUSHING, FILTRATION AND DRYING TECH SHARPEN MAKINO'S INDUSTRY EDGE

Makino is a leader in advanced manufacturing machine tools with a highly specialised advantage in crushing, filtration and drying technologies refined over 85 years. Its customisable crushers, mills, filter presses and dryers play an active role in helping industries and the environment.

From purifying factory waste water and helping with the construction of Japan's railways and airports to assisting the government in rebuilding the nation after the 2011 earthquake, the family-owned business' first-rate machines, systems and services satisfy the Makino brand motto: "Our machine makes everyone happy."

"We want to be No 1 in Japan in any of our core technologies," says Yoshinobu Makino, president. "Our success lies in our long history. One of our customers has been using our machines for more than 50 years – attesting to the strength, durability and quality of our products."

Established in 1932, Makino designs and produces advanced manufacturing machines with environmental and industrial applications such as water treatment, tunnel digging, manufacture of ceramics, batteries, semiconductors, and recycling.

Wet and dry crushing systems such as jaw crushers, roll crushers and ball mills guarantee less contaminants in coarse crushing or fine milling processes. Meanwhile, simple feed and diaphragm types of manual, automatic and semi-automatic filtration machines are used in waste water treatment and various production processes such as brewing, mining and manufacturing.

Yoshinobu Makino, president

In drying, Makino excels in spray dryers – eco-dryers for fragile products and humidity-controlled rapid dryers that guarantee shortened drying times with less cracks and deformation. "Research and development is important to us," Makino says. "We are working on developing automation, robotics and remote control technologies, and have connected with universities to help us."

With markets in China, South Korea, Thailand, Malaysia, Vietnam and Indonesia, Makino is prepared to help build Asia-Pacific's growing economies – and work towards a global expansion as it invites distributors from the United States.

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TRANSFORMER EXPERT HIRAI DENKEIKI THRIVES WITH CENTURY-OLD EXPERTISE IN EPOXY MOULDING TECHNOLOGY

Almost 100 years ago, Hirai Denkeiki pioneered epoxy moulding technology for the manufacture of transformers. Today, the Kyoto-based company continues to thrive with its proprietary "super" technology that is relied on by an expanding customer base consisting of Japan's leading power generation companies and electric utilities along with prominent manufacturers across industries.

"The sustainability of our business is anchored in our century-old expertise," says Takaya Hirai, president. "We also attribute our success to keeping our company family-owned, which allows us to make quick decisions and focus more on ensuring customer satisfaction."

Starting in 1921 as a supplier of indicating instruments and meter transformers, Hirai Denkeiki has created a solid reputation for supplying high-performance current transformers that are noted for lasting 30 to 40 years as compared to traditional transformers' 15 years. After its release of Japan's first small-sized, high-precision wound magnetic core window-type current transformer in 1958, Hirai Denkeiki has progressively expanded its portfolio of ultra-precise current transformers and has also unveiled general-type voltage transformers, auxiliary current transformers, coupling transformers, and transformers for extra high voltage. Additionally, the company custom-designs transformers for any purpose, such as for low and high voltage or frequency, for extra precision and for general use. "We see ourselves contributing to the safety and security of society by helping prevent electricity-related accidents in facilities where our epoxy mould transformers are installed," Hirai says.

Hirai Denkeiki continues to refine its expertise to create environment-friendly transformers that are lightweight and smaller in size, while delivering higher performance. The company has also begun exploring the possibility of incorporating light-emitting diode technology, and is open to joint research and development projects to develop new applications and products.

Domestic sales account for about 90 per cent of the company's revenues, with several big-name clients as part of its established customer base. Beyond Japan, Hirai Denkeiki has secured sizeable projects, including the supply of precise current transformers for an installation in Malaysia and the development of a zero-phase sequence current transformer for a project in Thailand. Hirai Denkeiki has also carved out a presence in China and South Korea through sales agents.

"Our goal is to increase the share of overseas sales from 10 per cent to 30 per cent," Hirai says. "We believe the opening of our new factory this year, which will increase our capacity threefold, will play a major role in achieving this target. We also hope to find more quality-minded distribution partners to help boost our sales and cultivate business opportunities abroad."

Takaya Hirai, president

SAKAE LACE, THE WORLD'S LEAVERS LACE MARKET LEADER, GOES BEYOND LINGERIE

There's a big chance that the lace one sees in lingerie shops is made by Sakae Lace. That's because the company makes 60 per cent of the world's Leavers lace, and is crafting more designs and making more innovations than ever before.

Sakae Lace started in 1958 with just two Leavers lace machines. It has nearly 90 machines today, maximised with a small lot production strategy that enables the company to create elegant lace designs. Each year, nearly 2,500 sketches are created in order to provide customers with 800 new sophisticated designs.

As much as 20 per cent of these new designs are results from collaborations with its clients. "The benefit of working together with customers on design development is they can purchase directly from us," says company president Tetsuya Sawamura.

With output consisting of 80 per cent Leavers lace and 20 per cent Raschel lace, the company is the partner of choice for high-end European fashion brands such as Chantelle and Simone Perele.

According to Sawamura, Sakae Lace grew to market dominance because of several factors. The company started producing lace in China in 1992, long before outsourcing to China became a worldwide trend. Its Chinese employees soon became leaders as the company expanded into Thailand in 2003. Today, the company has sales representatives in up to 14 countries, spread across the globe.

Beyond geographic growth, Sakae Lace also maintains partnerships that improve its product line. The company works with universities on using cameras to detect damage and leveraging artificial intelligence to explore ways to reduce labour costs.

While Sakae Lace draws most of its sales from underwear, it is using its lace expertise to expand sales to outerwear such as haute couture, wedding dresses and kimonos.

The next frontiers of growth, particularly for outerwear, are China and India, where the company seeks to expand its sales presence.

Tetsuya Sawamura, president

NICHIRYO MARKS 75TH YEAR WITH THE LAUNCH OF NEW NICHIPET MICROPIPETTE

Celebrating 75 years of innovation and dedicated work, liquid handling device manufacturer Nichiryo strengthens its commitment to meeting the utmost requirements of clinical laboratories and the life science sector worldwide. This is showcased by the continuous evolvement of the company's flagship Nichipet series of micropipettes, which will see a new model unveiled within the year.

Based on a dispensing technology developed and refined since its establishment in 1944, Nichiryo offers a broad range of pipettes and dispensers for handling different liquids, including solvents and high-impact liquids. Its market-leading Nichipet Premium autoclavable model is noted for innovations in durability, precision, stability and comfort. To meet specific client requirements, Nichiryo also supplies custom-made liquid handling products.

Three Nichiryo pipettes are on display at the Nobel Museum as commemorative gifts from Dr Shinya Yamanaka, the winner of the 2012 Nobel Prize for physiology or medicine. Yamanaka has been using the Nichipet EX micropipettes for a long time, including in his award-winning stem cell research – a testament to the quality of Nichiryo's products.

"We attribute our success to our unrelenting focus on delivering superior product quality and customer service," says Takayoshi Ito, president. "This has been key to becoming a trusted partner to our customers."

Nichiryo exports its liquid handling instruments worldwide, with international sales currently accounting for 20 to 30 per cent of the company's sales. In 1996, Nichiryo established a subsidiary in the United States to better serve its expanding client base in the Americas.

Over the medium term, Nichiryo is considering opening local branches in Asia to provide genuine customer support. It also aims to work with quality-minded distributors and service partners who can offer the same top-notch, "super-express" calibration and repair services provided by its Japanese subsidiary Scimec.

"Asia is an important market for us," Ito says. "We see growth opportunities in China, India and Southeast Asia, and future possibilities in developing countries in other parts of Asia."

Takayoshi Ito, president

ANRITSU METER AFFIRMS NO BETTER WAY TO MEASURE SUCCESS THAN WITH UNQUESTIONABLE QUALITY

Since its establishment in 1949, Anritsu Meter has continuously proven that there is only one way to remain strong in business, and that is through delivering unquestionable quality.

Through the years, the company has created its mark as a leader in temperature measurement technology, and played an active role in the enhancement of measuring techniques in all types of industry, especially the semiconductor and automotive segments.

"Our competitive edge is rooted in our strength that comes from our long-term relationships with our customers, from our tailor-made and durable products, and our quick response time," says president Masatsune Senbokuya.

A pioneer in the field of surface temperature measurement, Anritsu Meter commits to producing high-quality products that answer the market needs and adapt to advanced technologies.

"We are proud to share that we're almost done working on new probes that are quite rare with the use of optical fibre technology," Senbokuya says.

While gaining recognition worldwide for producing more than 10,000 kinds of temperature probes, Anritsu Meter proves to be a proud carrier of the Japanese stamp of excellence across its wide sales network in Asia. The company aims to grow its international sales, which currently constitute 20 per cent of its overall sales, by enhancing its steady presence in South Korea, Thailand, Hong Kong, Taiwan and mainland China, as well as expanding its distribution in Vietnam and Indonesia.

"We are open to partnerships," Senbokuya says. "But our focus is to educate the agencies about our products."

Anritsu Meter looks forward to further increasing its sales in the United States and Europe by leveraging its wide range of products, outstanding quality and remarkable 40 years of history. It aims to capture a slice of the global temperature sensor market, which is expected to grow at a compound annual growth rate of 4.5 per cent to reach US$6.26 billion by the end of 2022.

Masatsune Senbokuya, president

NEW TECHNOLOGY AND STRATEGY EXPAND HIGASHIMOTO KIKAI'S MEAT PROCESSING BUSINESS

Asia-Pacific's population of 4.5 billion people is driving the demand for food and food processing machinery – an industry expected to reach US$93.5 billion globally by 2026. Celebrating its 50th year as Japan's leader in meat and ham processing technologies, Higashimoto Kikai is responding to this challenge with a new offering, an upcoming factory and robust plans for expansion.

Founded in 1969 as a business maintaining imported meat processing equipment, Higashimoto Kikai started manufacturing its own machines to answer Japan's growing market for ham and sausages at the time. It merged European-standard product technologies with its own know-how to provide customer-tailored machines.

Products range widely from vacuum mixers and cutters, meat tenderisers and grinders to frozen crushers, lift boys, smoke houses and super injectors. These highly durable and resilient processing machines offer unsurpassed food safety standards for ham and sausage manufacturers, meat processing companies and frozen food brands.

Using its expertise, Higashimoto Kikai is developing an automated meat processing technology that will replace manual operations. It also plans to open a new factory in Vietnam in five years to boost production capacity, and aims to increase international sales to 10 per cent of its overall sales volume.

"We develop and manufacture new products based on requests from clients and with their collaboration," says Shinya Okada, president. "Our portfolio has expanded because we met customer needs of different periods over time. So we are still selling products that we developed 40 years ago as these represent our core technologies."

Present in China and South Korea through its clients, and targeting to expand into Thailand and Vietnam, Higashimoto Kikai aims to attract new clients and further grow its product portfolio. It welcomes research collaborations with universities, and is interested in automation and internet-of-things technologies.

"Our company needs to be on the same trend as our customers five years from now," Okada says.

Shinya Okada, president

JAPAN BUSINESS REPORT

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Isao Tsukamoto, president

PEACOCK SEEKS TO EXPAND HOME DELIVERY BUSINESS WITH PARTNERSHIPS IN ASIA

Hectic, on-the-go lifestyles paved the way for the emergence of a convenience-store culture of consuming ready-to-eat frozen food. However, choosing prepacked meals could be hit-or-miss since not all food manufacturers are equal. Combining its discerning tastes with the latest food manufacturing technologies, Peacock changes the perception on frozen food with its expertly curated line of flour-based frozen products that deliver taste, quality and value.

"There is an internal rule that unless I taste and approve the product, the company cannot sell it. There are risks in that but I want what's best for our customers," says Peacock president Isao Tsukamoto.

Established in 1971, Peacock is a household name in the Japanese food industry, particularly in the fast-food and frozen-food segments. With its time-tested recipes for fast-food fare capturing the tastes of the people, Peacock's hotplate, ramen, udon and sweet shops continued spreading like wildfire across Japan. The company is looking to open restaurants and shops internationally with the help of partners interested in bringing an authentic Japanese experience to their home markets.

Gaining a wealth of expertise from its fast-food arm, the company broadened its scope to produce the ready-to-eat counterparts of best-selling fast-food products such as *takoyaki* and *okonomiyaki*. When it comes to frozen goods, food moisture is the differentiating factor and the company employs the latest solutions to preserve it – ensuring quality and freshness the customers can taste. Peacock's products are available in supermarkets and through home-delivery service.

Peacock serves the local market through its Oguni facility, while factories in Vietnam and Indonesia primarily cater to international markets. The company implements stringent quality measures in these overseas factories to ensure that products meet its exacting standards.

To support growth outside its home market, Peacock aims to partner with home-delivery providers in Vietnam, Indonesia and other countries throughout Asia. In doing so, Peacock can share its excellent manufacturing practices while bringing genuine Japanese products to more homes.

UTAX PIONEERS SEAMLESS BONDING SOLUTIONS FOR SOFTER, MORE BREATHABLE AND SUPPLE FABRICS

Good, quality intimate apparel should fit the body like a second skin ensuring maximum freedom of movement. The best undergarments use fabrics that are stretchable, soft to the touch and do not curl or fray easily, but the secret is in the bond. Many garment manufacturers today benefit from seamless bonding solutions that make the most out of any fabric. Thanks to seamless bonding technology innovator UTAX, markets today can delight in comfortable, "no bumps" yet tough inner wear and apparel.

"Seamless bonding has become a trend in Japan and worldwide," says UTAX president and CEO Daisuke Jackson Utaka. "We pioneered this technology and continue to develop it. We use a special kind of liquid glue instead of film for the bond, which makes the fabric softer, more breathable and easier to shape."

Preferred by top-tier intimate wear brands in Japan for its high-quality bra accessories and bonded seamless garments, UTAX is backed by decades of technical expertise that also go into its own-designed automated production machinery. The company's original bonding technology is not only behind every hook and eye, underwire, tape or bra component it makes, the specialisation also extends into fabric applications for sport, compression and active wear, and even vehicles.

"Originality is our strength, and we developed all our bulk production machines so we safeguard the engineering and production know-how," Utaka says. "Bonding technology is not just for intimate apparel. Many industries use fabrics that need bonding so we collaborate with textile companies, garment manufacturers and suppliers to offer solutions to any industry."

UTAX seeks to collaborate with more local and international partners to grow its sales overseas. With a master facility in Nishiwaki, Japan, followed by two production sites in China and one in Thailand, UTAX is eager to further penetrate the sportswear, medical and automotive markets in China, Southeast Asia, North America, India and Saudi Arabia.

Daisuke Jackson Utaka, president and CEO

NIPPON FUSSO DEVELOPS ORIGINAL FLUOROPOLYMER COATING SOLUTIONS WITH CUSTOMERS

Non-stick, corrosion-resistant and possessing high-purity features, fluoropolymer has been making industries greener, more efficient and safer. When coated with the super plastic, mixing tanks for viscous materials become environmentally friendly and more efficient as manufacturers do not have to clean the tanks afterwards with toxic chemicals. Meanwhile, vessels for petrol chemicals with fluoropolymer underlining or reinforcement become explosion-proof. Such a growing range of applications has been the focus of Nippon Fusso, which for more than 50 years has been developing fluoropolymer solutions carefully tailored to client needs.

"Solving customer problems is our key business philosophy," says president Satoru Toyooka. "Each case is unique, and we draw on our vast technical know-how, ultramodern facilities and solid customer ties to come up with the best original solutions."

True to its pioneering spirit, Nippon Fusso became the first company in Japan to receive the highest award from DuPont for its improvements on Teflon coating technology. Today, Nippon Fusso has preserved its reputation as a leading innovator in fluoropolymer applications. The Japanese company developed the world's first antistatic fluoropolymer coating, a variety that prevents coated materials from releasing electric discharge that can cause ignition.

Serving various industries ranging from semiconductors and flat-panel displays to pharmaceuticals and petrochemicals, the company works closely with clients through its technology development department. Nippon Fusso boasts of its Surface Treatment Technology Research Center, which analyses products, develops new surface technologies and studies new materials. ISO-certified, the facility is equipped with one of the largest ovens and clean rooms in the world.

Such dedication to research and development has resulted in many highly tailored fluoropolymer coating solutions. These range from ultrahigh-precision electronic applications to large projects such as vessels 6 metres high by 16 metres long used in the polyethylene production process. To minimise losses due to shutdowns, Nippon Fusso guarantees clients on-schedule resolution of maintenance problems.

Satoru Toyooka, president

We are focused on growing our customer base, especially in China

Satoru Toyooka, president

Up ahead, the company is looking to expand international sales while exploring fresh fluoropolymer uses in the battery, sensor, automatic technology and automotive verticals aligned with Industry 4.0. With the establishment of its factory in Thailand, Nippon Fusso expects to intensify its presence in Asean before going to India and southwest Asia.

"We are focused on growing our customer base, especially in China where we see the biggest opportunity," Toyooka says. "We have committed ourselves to the fast delivery of highly reliable products in the past half century, and promise clients the same excellent service ahead as we strive to become a global company in the next 50 years."

REGENCY STEEL JAPAN HELPS GLOBAL COMPANIES TACKLE OFFSHORE AND STRUCTURAL CHALLENGES

Delivering 21 offshore rigs in a single year is no easy feat, but Keppel FELS did this in 2013, aided by niche steel components maker Regency Steel Japan (RSJ). The achievement was so unprecedented that the global rig design and construction company received the Guinness World Records title "largest manufacturer of offshore rigs" the following year. Keppel FELS continues to successfully deliver many of the world's jack-up rigs and semi-submersibles using RSJ's quality rack and chords, welded structures and other durable steel products.

"We have adopted Keppel's core values including being quality-obsessed, and this makes us a very reliable supplier," says Wong Chun-yu, RSJ president.

A joint venture of Keppel Offshore & Marine subsidiary FELS Offshore, Mitsui & Co., and Nippon Steel & Sumitomo Metal, RSJ applies its parent companies' 40-year steel manufacturing expertise to support some of Japan's major landmarks. These include the Tokyo Skytree and parts of the Tokyo International Airport at Haneda.

Wong Chun-yu, president

RSJ's high-level steel is remarkably strong, lightweight, and resistant to fracturing and corrosion – features that are vital in rack and chord fabrication. The company's innovative steel production techniques together with its heat treatment furnaces and 10,000-tonne press machines also allow it to offer various services that conform to customers' objectives, budget and schedule.

Expanding its Asian and global business, RSJ exports steel components to many of Keppel Group's projects overseas. Plans to widen its know-how in steel materials and methodologies that will allow it to adapt more quickly to market demands are underway. To continue delivering offshore applications such as offshore wind farm jackets and other services, RSJ welcomes strategic research and development collaborations with universities and partners globally and across Asia, particularly in mainland China, Taiwan and Vietnam.

"We are starting to diversify our offerings, but we will continue to do projects that we are good at," Wong says. "We are open to partnerships where we can maximise our facilities and apply our niche proficiencies."

HOKUSHO LIFTS CUSTOMERS' MANUFACTURING EFFICIENCY WITH LEADING GOODS DISTRIBUTION SYSTEMS

Industries today face many challenges such as wage increases, labour shortages and demand for more sophisticated products. To improve production speed while maintaining exceptional results for customers, the implementation of the right material handling system is crucial. As industries increasingly turn to automation and other Industry 4.0 solutions, the region's leading material handling equipment maker Hokusho evolves with the market changes as it upholds manufacturers by providing material distribution equipment backed by the latest Japanese technologies.

Starting as a machine trader and distributor, the decades-old family business developed its first product, a slat conveyor, in the 1950s after the company's founder witnessed the cumbersome way Japanese farmers lifted and stockpiled 60-kilo rice sacks. Hokusho has since created a range of patented material distribution systems under the helm of third-generation scion and president Takahiro Kitamura.

Takahiro Kitamura, president

"As investments in automation grow, we act fast to incessantly develop new solutions while regularly improving and modifying existing ones," Kitamura says.

Some of the company's standard products used in multilevel factories and warehouses are the vertical transfer system, automated sortation systems such as the piece assorting system and the sorting and transfer system, and the clean vertical transfer systems. Hokusho also carries system engineering products such as palletising, production line, and packaging systems that save on labour costs and streamline operations.

Hokusho applies its solid technical know-how to develop environmental systems that improve frozen warehouse efficiency. As consumers demand fresher produce and food products, companies are looking for more innovative and reliable food storage and handling solutions. Hokusho seeks to penetrate China's burgeoning frozen warehousing market in addition to cementing its presence in Japan, South Korea and across Southeast Asia.

"Our company exists to contribute to society," Kitamura says. "We serve customers by continuously bolstering our capabilities to meet delivery, cost and quality demands."

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EMBROIDERED PRODUCTS MADE MORE ACCESSIBLE WITH TAJIMA INDUSTRIES

It is not easy to carve a niche in the dizzying industry that is fashion. Creativity becomes the key to distinguishing one designer from the next. However, concept and execution are two different things that can sometimes be conflicting. With its 75-year expertise in manufacturing embroidery machines, Tajima Industries has been a loyal partner of many companies in giving life to intricate designs and patterns.

Tajima put a modern spin on needlework – mechanising the art of sewing to make many customised and original creations. Since its establishment, it has developed about 3,000 embroidery machine models used in many industries in more than 100 countries worldwide. It has become the partner of choice for embroidery machineries by the apparel, technology, automotive, aerospace and medical industries.

"As an embroidery machines specialist, we always stay on top of trends to adapt our products to client requirements. We add value by supporting the innovation of our clients in their exploration of new applications. Companies actually approach us to test-sew new materials such as sensors, carbon fibre, heater wire and other technical textiles," says president Hideki Tajima.

One such product of the company's market intuitiveness is the Tajima SAI. The compact embroidery machine makes it easy for artisans and smaller businesses to benefit from the know-how and expertise of Tajima. Even with its compact appearance, the Tajima SAI is equipped with the same features as the company's other flagship products such as durable mechanical and electrical parts, precisely adjusted components, easy to use for inexperienced operators, among others.

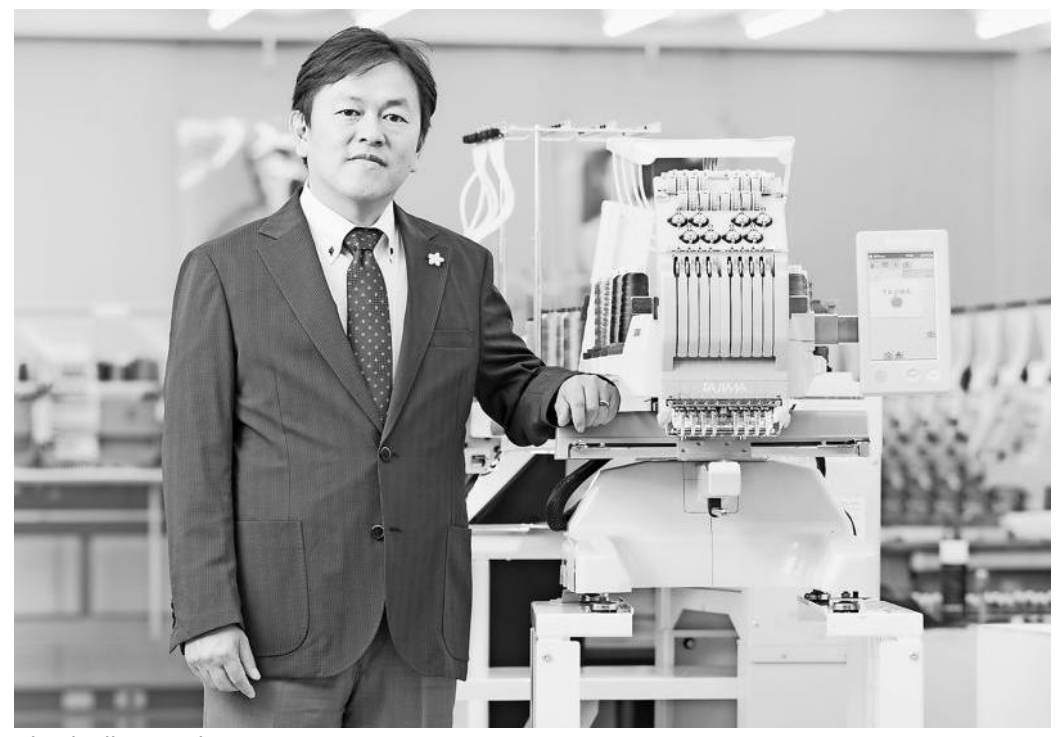
With international companies making up almost 90 per cent of its customer base, Tajima has stitched together a strong support network with more than 60 distributors worldwide. Aside from manufacturing and distributing subsidiaries in Japan, it has established an assembling factory in Shanghai and representative offices as sales and technical service bases in the United States and France.

Tajima envisions that its market share in Japan will increase in the future, especially as domestic sales in the apparel and automotive industries continue to rise. Outside its home market, the company sees great opportunities to grow its market share in India, Bangladesh, Pakistan and Russia, as these countries are mass production hubs of many apparel companies. Tajima is also seeking partners such as sales representatives who can help it navigate the African market.

"Our customers invest in our products because they know they can succeed with our technology. We will continue to develop new technologies to maintain the trust of our customers and gain new ones," Tajima says.

We add value by supporting the innovation of our clients in their exploration of new applications

Hideki Tajima, president



Hideki Tajima, president

NITTO REINETSU SEEKS TO BRING OPTIMAL AIR ENVIRONMENT TO ASIA'S FACTORIES AND CLEAN ROOMS

Leading up to its 45th anniversary, air cleaning and cooling solution specialist Nitto Reinetsu is moving towards a stronger internationalisation strategy and opportunities to grow in Asia.

"This expansion is prompted by our commitment to further serve our predominantly Japanese customers who have expanded their manufacturing presence across Asia," says CEO Eiichi Ichikawa. "We also aim to serve a wider market and help bring an optimal air environment to the region's factories and clean rooms."

Nitto Reinetsu specialises in the production of energy-saving heat and humidity control units, air purifiers and cooling devices. It has become renowned for its *monozukuri* approach to manufacturing – a guarantee that its products are made with the highest level of workmanship, manufacturing excellence and continuous improvement. The company is trusted to keep dust-free and sterile clean air at many food factories, chemical plants, laboratories and hospitals, and manufacturing facilities with precision work spaces, including the semiconductor and automotive sectors.

Its flagship product, the eONE-A1W/A05W super-energy-saving type precision temperature and humidity air conditioner, has won the grand prize for excellence in energy efficiency and conservation. Serving as a replacement for the air handling unit and external air conditioner, it cuts energy costs by up to 80 per cent. The eONE efficiently cools, dehumidifies, humidifies and heats the entire surface through which air passes.

Other key offerings from Nitto Reinetsu include various air showers and air curtains, fixed and easy-to-assemble clean booths, pass boxes and fan filter units. Nitto Reinetsu can custom-design its devices, in terms of dimension and functionality, to match specific client requirements.

"As we seek to expand our geographical footprint, it's vital that we broaden our collaboration network," Ichikawa says. In Asia, Nitto Reinetsu seeks distribution partners, particularly in Malaysia, Thailand, Indonesia, Vietnam, India and China. It is also looking for quality-minded subassembly partners and aims to expand its network for product development.

Eiichi Ichikawa, CEO

CHUKOH CHEMICAL INDUSTRIES MOULDS SUPER PLASTIC PTFE TO SUIT CLIENT NEEDS

When Dr Roy Plunkett was trying to invent a new refrigerant in 1938, he accidentally discovered the super plastic polytetrafluoroethylene (PTFE) or fluoropolymer. Surrounded by tightly packed fluorine atoms, PTFE can withstand extreme heat, ultraviolet (UV) light and critical chemicals while possessing superb non-stick and electrical-insulation properties. The same tough features, however, have made fluoropolymer difficult to process – an expertise mastered by Chukoh Chemical Industries to serve the specific needs of clients in architecture, medicine, food packaging, transport and electronics.

"By instilling in every employee the concept of *kaizen* or day-to-day improvement, we are able to develop core technologies that allow us to transform fluoropolymer into unique products for many modern industries," says Chukoh president Naoyuki Shono.

Chukoh allocates about 10 per cent of expenses to research and development while collaborating with partner universities and companies. The company, for instance, has the technology to process PTFE into silicone resins and coat them onto airbags to prevent breaking or burning. Chukoh can also impregnate glass fibre yarn cloth with fluoropolymer to produce Skytop, a breakthrough architectural roofing membrane.

Stronger than steel, Skytop does not sag over time as it can withstand temperatures up to 800 degrees Celsius. UV light bleaches the roofing membrane pure white throughout its estimated 50-year life cycle without cleaning. As such, Skytop delivers significant energy savings by reflecting up to 85 per cent of the sun's heat while letting in as much light as possible. Chukoh has installed the innovation at the Bangkok Airport, the Beijing National Stadium also known as the Bird's Nest and several other stadiums worldwide.

"We are always looking for a chance to work with industry, academia and distributors, especially in the field of semiconductors, medicine and food packaging in China and Southeast Asia," says Jinichi Komiya, operating officer and general manager. "Together, we can provide customer-centric solutions the Japanese way."

Naoyuki Shono, president

CONSTANT INNOVATION PUSHES OHM'S GROWTH IN AND OUT OF JAPAN

Better futures through creation and development – this vision has always fuelled OHM Electric's drive to give life to unprecedented products and technologies that will transform and improve societies. As continued industrialisation sweeps the globe, OHM positions itself as the ideal partner of manufacturing companies across many sectors with its revolutionary and environmental solutions.

"Our company is built on the principles of uniqueness and originality. We focus on making one-of-a-kind inimitable products. We have been doing this for 60 years, and we plan to continue doing so in the future," says OHM president Yoshiro Tozuka.

OHM is a renowned wiring solutions expert, as it is among the pioneers of the first cable gland CAPCON. It is also one of the go-to companies for climate control equipment that helps maintain optimal temperature and humidity conditions in an enclosure, and environmental equipment that eliminate oil mist and dust from production sites.

Making great strides in its environmental advocacy, OHM specialises in panel coolers and oil mist collectors. The non-fluorocarbon coolers launched in 2016 employ the refrigerant R1234yf, which has an extremely low Global Warming Potential of less than 1. In the field of oil mist treatment, OHM has been focusing on non-filter type for waste reduction. OHM helps its clients protect human health and maintain a clean work environment.

Working closely with clients to understand their needs, OHM is expanding its business scope to include system integration. Backed by a robust research and development team, OHM aims to widen its scope to more industries, including medical, food and robotics, and more markets outside Japan.

OHM supports this geographical expansion by opening an oil mist collector and cooling system factory in Thailand that will serve as a distribution hub for the Asian region. Aside from serving important growth markets such as Southeast Asia and China, OHM seeks to reach new markets such as North America and Europe.

Yoshiro Tozuka, president

NSC SHARES SEWAGE AND WATER TECHNOLOGIES WITH REST OF ASIA

Leveraging nearly 60 years of expertise in water-related environmental projects, Nihon Suido Consultants (NSC) is giving central and local governments in Japan and elsewhere around the world a glimpse of the future. The company, for instance, wants to collaborate with appropriate experts in creating new technology such as a robot with artificial intelligence to investigate sewer pipes while developing special antennas that will allow sewer manholes to transmit water data using internet-of-things technology.

"We concentrate on our hi-tech expertise and excellent service to help local governments faced with shrinking budgets," says NSC president Yoshikazu Nomura. "We place emphasis on excellent design work at the very onset to ensure reliable operation and management throughout the project's life cycle. We always strive for the best total solution for our clients."

Adept across the whole value chain in any project from water supply systems, waste water treatment and river engineering to flood control, NSC enjoys the top market share in Japan. The company maintains technological leadership, with eight of every 10 employees comprising seasoned engineers, while pursuing extensive collaboration with universities and industries across the region.

Focused on raising the share of overseas business from 10 to 30 per cent, the company is working with various types of companies in countries such as Vietnam, Cambodia, Laos, Myanmar and Indonesia. Moreover, NSC has opened branches in Singapore and in the Philippines as it pursues a leading role in public-private partnerships across Asia. Projects overseas include the Buaran Water Treatment Plant in Indonesia, the Chinaimo Water Treatment Plant in Laos and the South Binh Duong Sewage Treatment Plant in Vietnam.

"Our clients' financial situation will not be an issue as we can customise our solutions to suit their budget while using local people and resources," Nomura says. "As such, the project benefits both the host country and NSC. This is our policy."

Yoshikazu Nomura, president

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JOHOKU CHEMICAL SUSTAINS GROWTH WITH HIGHLY DIVERSIFIED SPECIALITY CHEMICALS PORTFOLIO

A global leader in manufacturing organic phosphorus compounds and corrosion inhibitors, Johoku Chemical celebrates 60 years of providing high-performance solutions to its ever-expanding base of industrial customers. With its brand a recognised guarantee of quality, Johoku Chemical enjoys the trust of some of the biggest Japanese multinationals and mid-sized corporations in the plastics, pharmaceutical, semiconductor, agricultural, paints and coatings industries.

"Key to our sustainable growth in the last six decades is continuous expansion into new domains," says Tomoaki Ota, president. "We do not rely on two or three key additives, and we're not limited to a few customers. Our speciality chemicals portfolio is diversified as well as our client base. That way, we circumvent the effects of economic downturns and periodic industry ups and downs."

Ota, who has been president of Johoku Chemical over the past 17 years, has led the company through the global financial crisis in 2007 to 2008 and the Great East Japan Earthquake and Tsunami of 2011. With a long-term view, he seeks to grow the company at a modest and consistent rate to deliver sustainable benefits to loyal customers and its team of dedicated employees.

Tomoaki Ota, president

Key to our growth in the last six decades is continuous expansion

Tomoaki Ota, president

"Business is like a marathon, not a 100-metre sprint," Ota says. "We remain steady over time and focus on nurturing long-term relationships. My vision is to sustain this business for generations."

Under Ota's dynamic leadership, Johoku Chemical's products have found applications in many fields and markets, notably in the semiconductor sector where its solutions are increasingly being integrated into smartphones and other consumer electronics. LAN RAM, the company's new type of volatile corrosion inhibitor, is noted for being water- and oil-resistant yet highly gas-permeable.

Johoku Chemical's organic phosphorus compounds are used as heat stabilisers and quality modifiers for plastics, fibres and rubber, as extreme-pressure modifiers and antioxidants for lubricating oils, and as intermediates for pharmaceuticals and agricultural chemicals. Additional key offerings from Johoku Chemical include multifunctional polymer molecule stabilisers, blister catalysts for urethane, city gas desulphurisation catalysts and ultraviolet absorbers.

Broadening its business outlook beyond Japan, Johoku Chemical looks forward to the opportunity to grow its business in Asia. "We are open to more quality-minded raw material partners from mainland China, Taiwan, India and South Korea who can offer stable supply and competitive prices," Ota says.

"We also welcome joint research and development efforts with other industry players who complement our expertise and have a long-term perspective as we do."

KANOMAX' HIGH-PRECISION MEASUREMENT TECHNOLOGIES AID INDUSTRIES AND SAVE LIVES

Air pollution is a serious global issue, causing 7 million deaths annually. With two-thirds of air pollution-related casualties coming from Asia – a multibillion-dollar market for air purification and monitoring systems – Japanese innovator Kanomax offers more than eight decades of expertise in adaptable precision measurement solutions for airflow, fluids and particles to help ease the region's air quality problems.

Founded as Kano Laboratory in 1934 by Goro Kano, a teaching assistant at Kyoto University, Kanomax today covers critical air environment focusing on indoor air quality, health and safety; industrial probe testing for automotive and aerospace manufacturing processes; and advanced measurement services for research and development (R&D) collaborations with universities and large corporations.

"The Kanomax DNA lies in our founder's technological knowledge and pioneering focus to create unique technologies – a legacy that we are entrusted to carry on," says Minoru Kano, chairman and CEO. "Our precise measurement systems have a margin of error of plus or minus two percentage points of readings, which is within the highest range of their class in the world."

From airflow instruments and sensors, air velocity meters, air quality and dust monitors to particle counters and sound and vibration meters, Kanomax' products cater to nearly every industry. Applications range from heating, ventilation and air conditioning equipment testing, public and industrial hygiene and environmental monitoring to energy development and clean room contamination control.

Minoru Kano, chairman and CEO

"One of our strengths is pursuing a standardised process while offering highly customised solutions," Kano says. "We listen closely to each customer's needs."

As it celebrates its China factory's 30th anniversary, Kanomax aspires to continue expanding its presence on the mainland – with the possibility of a Singaporean office to serve Southeast Asian markets.

The company is also developing an original sensor measurement technology using micro-electro-mechanical systems. It welcomes collaborations with universities and research institutions for R&D and commercialisation support, and partnerships with local players in Asia.

KOMYO RIKAGAKU KOGYO DETECTS NEEDS OF GAS SENSOR, MEASUREMENT INSTRUMENT MARKETS

The market for gas sensors, detectors and other related measurement instruments is poised for growth. The growth is propelled by stringent legal and environmental regulations, increasing awareness about environmental protection, health and safety issues, and continued use of fossil fuels and petrochemicals.

Aligned with this, Komyo Rikagaku Kogyo K.K. affirms its commitment to bringing excellent gas detection and monitoring products from Japan to the world. "Our efforts are always centred on listening to the needs of our customers and creating products for them that also care for the world," says Fujio Kitagawa, president. "Such a vision was inspired by my father, who had just come back from the war, and my grandfather, who supported the cause, when they built Komyo in 1947."

Fujio Kitagawa, president

True to its mission, Komyo has grown to serve its customers, mostly government and municipal agencies, and organisations in energy, engineering, transportation, shipbuilding and electricity sectors, with high-quality monitors and sensors that have gone through intensive research and development. The Japanese manufacturer's core products include gas detection tubes perfect for monitoring levels of the likes of carbon monoxide; alcohol detection equipment whose precision helps police forces in their operations; and fuel emission gas detection products that benefit automotive customers.

"In recent years, we have also focused on adding sensory products and gas leak detection systems that are used by the shipbuilding sector," Kitagawa says. "The latter actually prompted our presence in Singapore as we'd like to be closer to our customers and provide them fast and reliable service."

In addition to turning its temporary office in Singapore into a permanent one, Komyo has grown its business through distributors in mainland China, Taiwan, India, Pakistan, Dubai, Vietnam, Thailand, Malaysia and Indonesia. It has also established Kitagawa America, which caters to its growing clientele in the United States. "We are expanding internationally, most specifically in Southeast Asia, so we're open to potential local partnerships," Kitagawa says.

JAPANESE ENTERTAINMENT INDUSTRY LEADER NIRAKU SHARES HAPPINESS WITH ASIAN MARKETS

Happiness may be an abstract concept, but at Niraku GC Holdings, its creation has been the cornerstone of a business that has withstood the test of time.

When founder Tetsuyoshi Taniguchi opened a pachinko hall in 1950 during Japan's prosperous post-war era, he laid the foundations of an amusement-related enterprise banking on customer experience and goodwill. Today, Niraku GC Holdings is a leading name in Japan's entertainment industry – operating 55 pachinko halls across eastern Japan, an 11-storey hotel in Koriyama city and a Spanish restaurant called Lizarran in Tokyo.

The company was listed on the Hong Kong stock exchange in 2015; and in 2017, it acquired Singaporean company Dream Games, which operates amusement facilities for arcade games, bowling and karaoke in Vietnam and Cambodia. These paved the way towards an Asian expansion. "Our company has grown firmly and steadily," says Hisanori Taniguchi, CEO and the founder's son. "Our philosophy is to make the world happy, enjoyable and fun. We aim to expand globally by providing the best experiences in amusement and entertainment. We welcome international collaborations to continue growing throughout Asia."

Niraku GC Holdings was incorporated in 2013. Its principal operating subsidiary, Niraku Corp, is primarily engaged in the operation and management of pachinko halls and is responsible for the company's hotel and restaurant franchising business.

Niraku GC Holdings also maintains a property ownership and investment arm called Nexia, and is engaged in the employment of handicapped persons through its subsidiary Niraku Merrist.

Despite Japan's declining pachinko market, Niraku GC Holdings confidently aims to expand its market share by opening new halls and undertaking mergers and acquisitions. It also plans to open a 3,000-square-metre food court in Shenzhen Upper Hills called *Yokocho* – the Japanese term for alleyway – featuring 16 popular Japanese restaurant brands, by March.

Hisanori Taniguchi, CEO

"We will continue expanding our business portfolio and moving towards greater diversification of revenues," Taniguchi says.

ULTRA-FLEXIBLE BIOPLASTIC REVOLUTIONISES 3D PRINTING

Hotty Polymer, Japan's leading extrusions manufacturer, is fast gaining a foothold in Europe and Asia with breakthrough technology that enables rapid prototyping using ultra-flexible bioplastic. The company's HP filament, or soft resin combining polylactide and other elastomers, allows anyone to create a wide range of new products and designs using the fused deposition modelling (FDM) technology in 3D printing. The resulting 3D models are soft like rubber, dramatically improved from the rigidity of existing prototypes.

"Our original material for the FDM type of 3D printer is the first of its kind. Demand has been high in Europe where 3D printers are designed to make thick models. We believe there will be a huge increase and need for our HP filament in Asia as well, especially in China," says Hidetoshi Hotta, president.

Hotty Polymer has been creating endless possibilities with polymer extrusions since 1951. Continuous innovation and rigorous quality control have made the company Japan's leading provider of rubber and plastic extrusions for the construction, housing and automotive industries. The company customises solutions to provide water- or air-tightness, thermal or sound insulation, and design ability, depending on the clients' needs.

It is No 1 in Japan for high-quality sealing materials such as gaskets for sliding windows or doors, weatherstrips and glass run channels for vehicles. Trademarked as "Sube-up" for their remarkable air-tightness, anti-mould and easy-sliding properties, these sealing materials have found their way to Taiwan, South Korea, mainland China, Thailand and other parts of Southeast Asia. The company opened a branch in Thailand in 2011.

Hotty Polymer invites partnerships with well-entrenched distributors in these markets to broaden the reach of its environmentally friendly products.

Hidetoshi Hotta, president

"We create products with the environment in mind. For instance, our Sube-up products are frictionless and provide effective sealing for extreme weather conditions. This level of durability lessens the environmental impact of industries," Hotta says.

SAWAI PHARMACEUTICAL IMPROVES ACCESS TO HEALTH CARE THROUGH TOP-QUALITY YET AFFORDABLE GENERIC PHARMACEUTICALS

As concerns grow over sharply rising medical costs, the market for generic pharmaceuticals is expected to continue expanding. Rising to the challenge of increased demand for generics is Osaka-based Sawai Pharmaceutical, which taps into its 70 years of expertise and an industry-leading production system of seven factories equipped with state-of-the-art equipment and facilities

"Our mission has always been to deliver top-quality, reasonably priced medications to as many patients as quickly as possible," says Mitsuo Sawai, president. "We continuously work on challenging the four different types of patents covering brand-name drugs, namely, active chemical substance, process, formulation and method-of-use patents, for the timely creation of their generic equivalents."

Founded in 1929, Sawai Pharmaceutical today ranks as the leading Japanese generic pharmaceuticals manufacturer. Its extensive portfolio comprises about 740 high-value generic products with cardiovascular drugs, gastrointestinal drugs and central nervous system drugs as its top-selling offerings.

Stirred by its core value of always putting patients first, Sawai Pharmaceutical continues to expand its portfolio thanks to its strong technological capabilities to research a diverse array of active ingredients and combine these to develop new effective products. In the last three years, Sawai Pharmaceutical spent about 9 to 10 billion yen (HK$634 to 705 million) for research work.

Mitsuo Sawai, president

"Research and development (R&D) is life itself for Sawai Pharmaceutical. It's that important," Sawai says.

As part of the company's vision to become a globally recognised generic drug company, Sawai Pharmaceutical completed the acquisition of the generic pharmaceuticals business of Upsher-Smith Laboratories in mid-2017. With the purchase, Sawai Pharmaceutical established a strong foothold in the United States, which constitutes the world's largest pharmaceutical market.

"Our priority now is to bring the Upsher-Smith integration to success," Sawai says. "But we remain open to further enhance our R&D and sales capabilities. We're also taking a closer look at Asia, seeing the vast growth possibility in the region."

JAPAN BUSINESS REPORT

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KAWAMURA SANGYO'S ORIGINAL TECHNOLOGIES PROPEL MARKET EXPANSION

With rapid infrastructural development in China and Asia-Pacific amplifying demand for advanced industrial technologies and electrical insulation materials – a market projected to reach US$8.95 billion this year – Kawamura Sangyo is well-positioned to benefit from the region's economic growth.

A leading manufacturer and distributor of insulators, micro-machining products and electronic materials in Japan for more than 50 years, Kawamura Sangyo supplies key Asian markets such as mainland China, Taiwan and South Korea. It aims to quadruple its exports over the next five years.

"Our strength is precision processing, so there are many possible future applications for our technologies," says Toshifumi Kondo, president. "We want to explore different fields and ways we can use our expertise in Japan and throughout Asia."

Kawamura Sangyo manufactures high-performance, cost-efficient and world-class insulator processing and electronic processing products. These range from slit products including plastic films and metal foils, coating products such as heat-resistant backup tape and adhesiveless laminate materials to router processed products and insulators for motors and transformers.

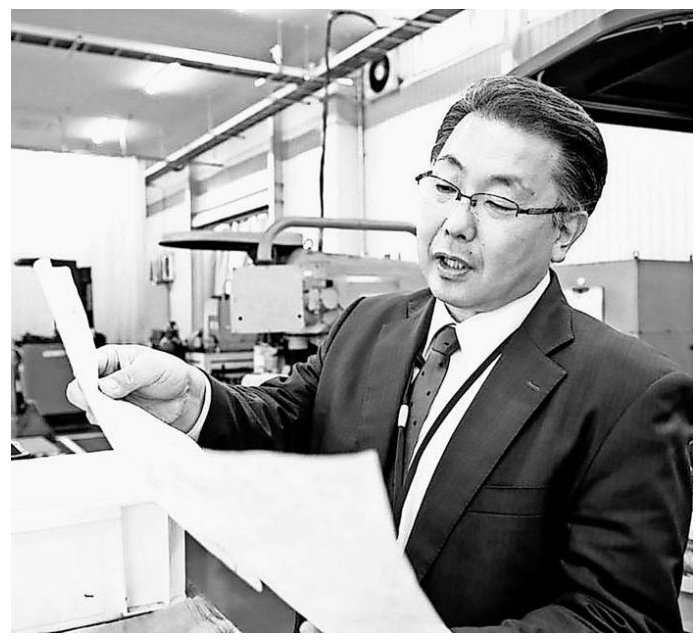
Placing importance on research and development (R&D), the company has developed a number of processing technologies in slitting, film and sheet forming, plasma surface treatment, heat lamination, coating, board forming, pure water cleaning and sputtering. Combined, these technologies continue to generate a growing roster of products.

Toshifumi Kondo, president

Kawamura Sangyo's unique adhesiveless insulating laminate material called Namli, which is manufactured by direct bonding of aramid paper and plastic film, was developed in collaboration with Mie University. The company also provides insulators for electric vehicle and hybrid motors, and materials for liquid crystalline displays and smartphones. It is also exploring new areas of application including the medical industry, and welcomes R&D collaborations with regional partners.

"We listen to the needs of the market and see how these match up with our technologies," Kondo says. "We develop new products to address evolving market demands – allowing us to create distinct solutions."

OHNO SEIKO IS THE IDEAL PARTNER FOR PRECISION PARTS PROCESSING FOR THE AUTOMOTIVE INDUSTRY



Takahisa Ohno, president and founder

Ohno Seiko performs precision processing of prototypes, moulds, jigs and production equipment parts from its main manufacturing facility in Nishio City, Aichi Prefecture. Since its founding, the company has engaged mainly in the work as a first-tier supplier to the automotive industry.

In the automotive industry, which uses various production machines, Ohno Seiko's mission is to ensure the continuous operation of the customers' equipment. The company responds to parts repair quickly and with flexibility. Since it has almost all the processing equipment necessary for manufacturing precision parts, Ohno Seiko pursues high quality standards as its customers' second machine factory.

In addition, Ohno Seiko has established a Vietnam factory located in Ho Chi Minh. Operated by about 80 local people, the Ho Chi Minh factory has successfully adopted the concept of *monozukuri* manufacturing, which is the same standard implemented at the company's Japan facility.

Ohno Seiko also offers procurement agency services through more than 150 excellent cooperative manufacturers that are capable of doing surface treatment and special processing. Currently, Ohno Seiko works with Chinese, South Korean and Thai corporations as cooperating partners.

"For anyone considering to enter Japan's parts processing field, we welcome them to visit our homepage and contact us," says Takahisa Ohno, president and founder. "With the knowledge and technology we have gained in Japan, we believe that it is our responsibility to promptly deliver low-cost products and services all over the world. In the modern era when the speed of development is ever-increasing, we will exert all efforts to support customers in any way, day to day."

TANAKA FOODS SPICES UP PRODUCT LINE WITH NEW SEASONING FLAVOURS

Combining the vibrant fragrance of sesame with the salty burst of laver and the savoury richness of bonito flakes and several other ingredients, *furikake* sprinkled on steaming Japanese rice delivers a stimulating sensory experience in every bite. But more than its delicately balanced flavours, *furikake* provides unbeatable nutrition and adds a one-of-a-kind taste to many types of food including salads, steaks and even potato chips.

Tanaka Foods was among the pioneers that developed the *ryoko no tomo*, the early incarnation of modern-day *furikake*, during the Taisho era.

"My grandfather started our business to make something that contributes to society," says company president Shigeki Tanaka.

Furikake was originally developed as a rice topping and is now widely used as a cooking condiment. Further exploring this path, the company is developing other seasoning materials to provide convenient cooking solutions to busy homemakers.

It even aims to launch a colourful blend of *furikake* for rolling that includes salmon flakes, spinach, cabbage and other Japanese herbs. For the *furikake* expert, providing nourishing products to society is a continuing commitment. It is this dedication that fuels its research and development department to constantly create new offerings and food supplements such as a breakfast rice milk drink designed for those who lack the time for breakfasts.

Shigeki Tanaka, president

Tanaka Foods' overseas sales constitute about 5 per cent of total revenues. With its strong product line helping add a touch of Japanese flavours to many dishes, the company is hopeful that more consumers outside Japan will patronise the brand.

Aiming to raise exports to 50 per cent of overall sales, the company has established a factory in Vietnam to serve the Southeast Asian market and beyond. It is open to joint-venture partnerships with companies and distributors that can help adapt Tanaka Foods' products to different market preferences.

"To keep up with the changing needs of society, we welcome partners willing to exchange wisdom and technology," Tanaka says.

OITA UNIVERSITY EXCHANGE PROGRAMMES COMBINE MEDICAL SCIENCES WITH SOCIAL SERVICES

Globalisation has spawned dynamic changes in the way business and society move. To keep up, people need to have a wide perspective and an international outlook. This is according to Oita University's president Dr Seigo Kitano. Integrated with Oita Medical University in 2003, Japan's first national university to combine social services and medical sciences counts imparting value to society as its utmost priority. Through its agreements with 83 universities worldwide, Oita University offers many study exchange programmes abroad to support modern education and research in the humanities, social sciences and natural sciences fields.

"Merging together as one university provides a lot of merit," Kitano says. "Multidisciplinary research and work can now be done easily and efficiently."

Oita was once the centre of Japan's intercultural exchange, and the 69-year-old Oita University builds on this tradition as it reinforces its system with continuing teaching and management reforms. With three campuses in Japan, a Bangkok office and memoranda of understanding brewing with institutions in Vietnam, Thailand and Indonesia, Oita University is advancing its research in many areas, bolstering its three core domains: welfare, human environment and life sciences.

"Partnering with other universities and research institutions, our collaborations turn into specialisations, and as teachers and students work together, industries develop," Kitano says.

Among the university's many hands-on courses and specialised research projects, two programme areas are gaining wide acclaim: endoscopic research to treat gastric cancers in Asia and rabies research to fully eliminate infectious diseases from canines in the Philippines. The programmes involve student exchanges, but the main work is controlled by public-private cooperation, and research and development.

"Our mission is to eradicate gastric cancer and infectious diseases in Asian countries," Kitano says. "Many doctorate students from developing countries train with us and use high-quality and sophisticated equipment, then they go back and apply these learnings in their communities. We welcome more international students."

Dr Seigo Kitano, president

SAGA AIRPORT: ASIA'S GATEWAY TO KYUSHU

Strategically located in southwestern Japan, Saga prefecture is Asia's gateway to the rich culture, nature and food specialities of Kyushu and Japan as a whole. Only about 90 minutes from Shanghai or Seoul, Kyushu-Saga International Airport (Saga Airport) is a convenient entry point to many Japanese attractions ranging from the world-famous Wagyu beef and *onsens*, or hot springs, to Olympic camps and state-of-the-art cancer treatment facilities.

"Saga Airport has a great potential as a gateway to Kyushu, and the number of its users is on the rise," says Yoshinori Yamaguchi, governor of Saga prefecture and overall head of Saga Airport. "Kyushu is the closest entrance to Japan from the rest of Asia, and people can easily visit and enjoy Japan on a day or overnight trip. With our ability to accommodate private jets on a day's notice for urgent business, it is an easy-to-use airport for customers of all types."

In the fiscal year 2017 alone, Saga Airport welcomed a record high of 776,614 visitors, consecutively topping its own usage records for the past five years.

Yoshinori Yamaguchi, governor, Saga prefecture, and overall head, Saga Airport

Such growth has prompted the Saga Prefectural Government to expand Saga Airport. The facility is increasing airport aprons to six while upgrading the terminal building. The government will also extend the runway by 500 metres to 2,500 metres to accommodate larger aircraft, and hopes to collaborate with foreign airlines in Asian markets such as Hong Kong and Thailand to increase international routes.

Projects are also moving forward to interconnect the airport with the surrounding regions, including the construction of a highway connected to the facility. However, Saga faces the challenge of having a limited number of hotels and room capacity, making it difficult to keep up with the influx of tourists.

"Saga Airport has numerous repeat users, including private jet operators. With Asia on the rise, we eagerly welcome investors interested in creating real value with us," Yamaguchi says. "Saga has a lot of potential."

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NEW FACTORY AND PRODUCT TO SPUR PRECISION PRODUCTS EXPERT TECNISCO'S GROWTH OVERSEAS

When it comes to high-quality precision components, Japanese pioneer TECNISCO is at the forefront of providing cutting-edge products for the world's optoelectronics, electronics and life science industries.

With 70 per cent of its business coming from sales of medical glass and heat sink laser products across the United States, Europe and China, the company looks forward to growing its business further overseas.

Armed with a new product, a new factory in Singapore and freshly tapped Asian markets such as South Korea and Taiwan, TECNISCO aims to achieve an annual revenue target of 1 billion yen (HK$72.35 million) over the next few years.

Established in 1970 as a cutting service for its then-parent company DISCO, TECNISCO has since honed its "cross-edge" microprocessing technology that combines five processing technologies as a one-stop solution for precision components. This expertise allows TECNISCO to maintain product quality stability and cost efficiency, shorten lead times and address client needs with original solutions.

Keizo Sekiya, chairman of the board and CEO

Our goal is to make things that seem impossible possible

Keizo Sekiya, chairman of the board and CEO

"Our goal is to make things that seem impossible possible," says Keizo Sekiya, chairman of the board and CEO. "Product quality is our strong point. We have the advantage of offering five main technologies – cutting, grinding, polishing, metallising and bonding – in one factory, whereas other companies specialise in only one or two techniques."

From microchannel coolers with improved corrosion resistance to insulation-type three-layer submounts, TECNISCO offers heat sinks for optical communication, industrial laser and power semiconductor devices.

It also provides various glass products for the life science industries such as microfluidic glass and cavity glass; and silicon products with excellent thermal conductivity and outstanding heat and corrosion resistance to improve process productivity and yield. Other applications cover automotive and semiconductor manufacturing.

TECNISCO has also created a durable, long-lasting and reliable material called Metal Diamond Composites. With excellent thermal conductivity and relatively low thermal expansion unknown in past materials, the company's latest offering is beneficial for high-power applications – a new chapter in product development combining TECNISCO's inventive technologies and decades-honed expertise.

SEIWA KASEI HELPS COSMETICS BRANDS RIDE MARKET TREND WITH BREAKTHROUGH INGREDIENTS

When Dr Masato Yoshioka says research and development (R&D) is the cornerstone of Seiwa Kasei, the president of the biotech company means every word. With more than half of its 70 employees dedicated to R&D, Seiwa Kasei is behind more than 100 original breakthrough cosmetics ingredients.

"Our strength dwells in our technology which allows us to create one-of-a-kind products with excellent properties and effects," Yoshioka says. "We are notably capable of manufacturing products that our competitors do not or cannot manufacture."

With special effort in protecting its intellectual property, the company is able to give clients the confidence and peace of mind that they are using only original chemical inputs. In Japan, Seiwa Kasei has 82 approved patents, and has applied for 297 more. The company has a similar R&D dominance globally with 41 approved patents and pending applications for 72 more in North America and Europe, and in other countries including China, South Korea, India and Brazil.

Dr Masato Yoshioka, president

Such inquisitiveness has served global cosmetics brands well. For instance, vitamin C is unstable and degrades easily, but Seiwa Kasei found in Amitose VC a way to bond the vitamin with glycerine and lend cosmetic products exceptional colour stability and moisture. The company is further adding an alkyl group into the novel chemical concoction to bring out properties never seen before in vitamin C derivatives. Another proprietary product is the Silasoma, which wraps ultraviolet absorbers inside special microcapsules to prevent skin irritation from cosmetics products such as foundations and sunscreens.

We are notably capable of manufacturing products that our competitors do not or cannot manufacture

Dr Masato Yoshioka, president

Looking to attract more clients overseas, Seiwa Kasei is taking part in international exhibits while welcoming distributors in markets such as China and the United States. "We expect partners to fully comprehend the subtleties of our products so they can promote them properly," Yoshioka says. "The Asian economy is growing fast and we want to be in."

HORIBA STEC BEHIND MANY KEY ADVANCES IN SEMICONDUCTOR MANUFACTURING

The ability to understand and act on technology trends is like riding waves in the ocean. It is easier to move through trends and respond appropriately if you can see them coming. In the world of semiconductor manufacturing, one measurement and control device developer stands out. Not only can it quickly anticipate the various turns and troughs in the information and communications technology (ICT) field, but HORIBA STEC also creates its own waves by innovating solutions making it the world's leader in mass flow controllers. Many advancements in the evolution of ICT – from personal computers, digital cameras and smartphones to today's data centres – swell from HORIBA STEC's fluid measurement and control expertise.

Through proprietary engineering ventures, HORIBA STEC produces evaluative solutions for manufacturers of leading-edge semiconductor devices, wafer fabrication and assembly equipment makers, and other dynamic industries in Japan and worldwide.

"Our line-up of analytical instruments maintains high efficiency in every stage of the manufacturing process," says Hideyuki Koishi, president. "With decades of experience in the semiconductor business, we have a better understanding of what the customer wants, the technical collaboration, support and timescale they look for."

Hideyuki Koishi, president

HORIBA STEC's all-encompassing quality control and assurance systems are anchored in the dedication of skilled engineers based in various locations including Singapore, Taiwan, South Korea, Europe and the United States. Apart from closely supporting clients, field staff members also collaborate with government agencies and universities, particularly in China, to work on research innovations.

"We seek collaborations externally and within the HORIBA Group network," Koishi says. "By promoting open innovation, we look for crossovers to develop semiconductor and biotechnology, food and pharmaceutical businesses. Teamwork is key to maintaining production and supply systems that swiftly and reliably respond to changes in market environments."

TAKIGAWA KOGYO INTENSIFIES FOCUS ON FOOD MANUFACTURING EQUIPMENT

Manufacturing machineries and adapting them for a multitude of industries showcase a company's capabilities. Aside from understanding the products of each industry, the manufacturer has to comply with varying quality and regulatory requirements. Takigawa Kogyo is a prime example of one such company with its portfolio of industrial machines that promote high levels of operational efficiency.

From designing, manufacturing to installing, Takigawa Kogyo works hand in hand with clients to identify solutions that fit their needs.

"We always take the initiative to explore new environments, facing challenges head-on and coming up with new ideas. We are confident we can provide tailor-made services and products," says executive vice-president Shohei Takigawa.

Takigawa Kogyo became a renowned name in Japan with products that support steel manufacturing such as counting equipment for bars and wires, tagging equipment and rolling-related facilities. It eventually broadened its scope to include depositors, heating, cooling and packing machinery for food manufacturing. The company further expanded its horizons with automated production-line solutions such as conveyor, transfer and transport machines.

Shohei Takigawa, executive vice-president

While the steel industry makes up the majority of Takigawa Kogyo's business, it is working on intensifying its focus on food manufacturing, especially given the rising demand for solutions in Asia. Among the company's gems in this area are its steamers, which are crucial in the preparation of Chinese buns and dumplings. This solution is particularly important for Takigawa Kogyo as it aims to strengthen its presence in China.

As its machineries are durable and long-lasting, Takigawa Kogyo constantly seeks ways to increase its customer base. Starting with its steamers, which are used by big-volume manufacturers, Takigawa Kogyo is adapting the technology so small to medium-sized companies can also benefit from the Takigawa Kogyo expertise.

"We are seeking partnership opportunities with sales agents that can strengthen our foothold in markets including South Korea, Taiwan, Indonesia, Vietnam, Thailand, Malaysia, Singapore and the Philippines," Takigawa says.

TAIYO CUSTOMISES INDUSTRIAL SYSTEMS TO GIVE CLIENTS DISTINCT COMPETITIVE EDGE

Between Japanese firm Taiyo and its American mother company, Parker Hannifin, lies nearly two centuries of combined expertise in hydraulics, pneumatics and motion control. Such deep know-how has allowed Taiyo to provide clients with some of the finest production automation technologies – from bespoke hydraulic and pneumatic equipment to automated assembly and transport solutions comprising carts and lifters.

"We have accumulated high technical capability by responding to customer requests for many years," says Takashi Ishikawa, Taiyo's president and general manager. "We maintain technical leadership by keeping up with the evolving demands of industries and providing clients with a one-of-a-kind quality experience."

A comprehensive manufacturer of hydraulic and pneumatic cylinders with innovative technology, engineering services and proposal capabilities, Taiyo has earned the trust of railway car manufacturers such as Hitachi Rail and Nabtesco, car producers including Toyota and Honda Motor, and semiconductor fabricators such as Tokyo Electron and Murata Manufacturing.

Based on customers' requests, the company offers equipment design concept, prototype production and evaluation, and mass production. All these processes are focused on ensuring clients low cost and fast delivery of efficient production equipment, while offering steady improvement and reliable maintenance, repair and overhaul service.

Taiyo has a pending patent for its revolutionary air saver unit. By using a pulsating technique instead of a continuous air-blowing one, the innovation is far more effective in many factory applications such as dusting, drying and cooling. The unit also enables clients to save about 50 per cent on compressed air usage, thereby cutting CO_2 emissions by half.

Up ahead, the company expects sales to increase by 42 per cent from US$240 million last year to US$340 million in 2022.

Takashi Ishikawa, president and general manager

"We will enter the railway equipment business in Asia," Ishikawa says. "In China, we welcome collaboration with suppliers and distributors of semiconductor manufacturing equipment as we offer high-speed pneumatic valves to semiconductor fabricators."