

Open innovation hub MILAB



MILAB

Create a new food business

With Company's aim to expand and we proud to launch the open innovation hub MILAB at the new head office.

The new 8-storey head office has MILAB on the 1st, 2nd and 8th floor, and

office floors on the 3rd to 7th floor.

MILAB will be a network platform that connects people to lifestyle, lifestyle to technology, and technology to environment.





MILAB KITCHEN

Develop new invention and menus equip with innovation and latest kitchen equipment

In MILAB Kitchen, we present to you our latest equipment and advance systems. Beyond on that, MILAB Kitchen can be your ideal place for menu development.



MILAB BAKERY

Taking on the challenge in developing new invention and technologies with equipment for confectionery and bakery

MILAB Bakery brings you the experience of baking from fermentation of bread dough to the perfection. Seminars can also be held at the well-equipped seminar rooms.



MILAB STORE

Creating next-generation stores with cutting-edge technology

Technique and system on next-generation stores can be conducted, such as stores without cash registers and implement purchase analysis by using images and codes.



MILAB FOOD FACTORY LABORATORY

Pursuing deliciousness in a consistent environment from cooking to cooling / freezing and taste

Well-equipped with 6-tunnel freezer with different features. Demonstration with freezing test by using ingredients is open for experience.



MILAB FOOD LABORATORY

Qualitative and quantitative analysis for food safety and new technology development

A place that scientifically analyse and evaluate the ideal taste. A place to further develop and explore the evolution of menus and equipment.



MILAB SALON/MILAB OFFICE

Provide equipment and product support for the launch of new business

A foundation that provides various support to start-up companies related to food industry and those who are considering new businesses.



MILAB OFFICE/Environmental test room

Experience the machine and installation, to improve accuracy, precise methodology with contact on actual machine

Spacious workshop for actual experience by assembling and prototyping products under and on-going development process.



MILAB DINING

Promote employee health and create food services

Offers nutritious diet and meals by professional advice. Research and develop next-generation food services. A place for employees to interact and engage in a free and relax zone.



WORLDFOLIO

Japan's coolest leader in commercial refrigeration



Yutaka Fukushima, President of FUKUSHIMA GALILEI CO. LTD.

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Galilei is a leading Japanese manufacturer of commercial refrigeration equipment; particularly for the food industry, but also for medical use. Its range of commercial freezers, chillers and refrigerated display cabinets are tried and trusted by clients in Japan and across Asia. In this interview, president, Yutaka Fukushima, gives his insight into the current state of the cold storage industry and discusses some of Galilei's top products, such the CLAIR Send-you Series, and the technologies behind the superior performance and quality of Galilei's equipment.

In the last 25 years, we have seen the rise of cheaper competitors such as China, South Korea, or Taiwan, who were able to replicate the Japanese *monozukuri* process at a cheaper cost and provide the world with cheaper yet lower quality products. Still, Japan has been able to maintain its leadership when it comes to high-quality and highly reliable products. Could you please tell us what for you is the essence of the Japanese *monozukuri* and how do you implement it in your production process?

The performance of our products is what we have cherished all the way from our foundation. Performance refers to the functionality, quality, and design of our products. We always try to incorporate this philosophy into the design of our products. However, the customers' demands have changed a lot over time; and at times, they would demand something cheap from us. We seek to be the matching point between the customers' demands and the technology that we have accumulated. As a result, what we have reached is not mass production but what our customers really need. Those products are of the quality that truly meets their needs and are provided at the perfect timing. Mass production is not our goal, but to utilise the limited resources and produce a product for the customers in the limited market or the niche field. I think it is the origin of our manufacturing philosophy of utilising our technology to meet the needs of our customers.

For example, this is CLAIR Send-you Series - a supermarket showcase manufactured in our Shiga (Minakuchi) factory, it has more than 2000 kinds of models. In that factory, we have five different lines; each produces a standardised part on a tag time of 435

seconds per unit. We have another four factories just like this that produce 500 to 600 units every single day. All different. It is crazy, but we can do it. Nobody is keeping pace with us just yet.

As for the Japanese plastic car model like the airplane, we can manufacture all 200 different units of standardised parts that are ready to be assembled. Through our tag timed method, our productivity is very high. I consider it to be our *monozukuri*.

You said that you make 500 units a day, and you have more than 2,000 models of CLAIR Send-you Series. Shopping in the world varies from place to place; a supermarket in China is not the same as the one in Japan. As a company that has operations in Japan, Hong Kong, Shanghai, and Southeast Asia where there are cultural and weather differences, how do you ensure that you understand what the local market wants?

We are not an international company, but only in Asia. Each country has different demands and requests, so we deploy our Japanese or local engineers in these local markets. They communicate on-site such as at the supermarkets, restaurants, or convenience stores to listen to the needs of the market and give us feedback. Our factory clients are very close , almost direct through our engineers.

As you mentioned, every country has its demands and unique needs, nevertheless, they share a common idea which is a trending topic right now – reducing their carbon footprint and improving energy efficiency. In order to cope with those regulations, companies are developing new refrigeration systems with advanced technologies and commercial refrigeration equipment that consume less energy. In your case, you produced The Galilei Series which is able to reduce energy by 60%. Could you tell us about how your company is able to give solutions to your customers given these recent carbon reduction regulations in relation to your new GALILEI products?

Nowadays, all supermarkets are connected via the internet, which allows us to control the machines, the temperature, as well as the abnormal functioning of the machines. We can also understand how much energy and power is consumed. Actually, we included in our contract a guarantee that relates to the consumption limit of energy and tries to achieve a winning relationship with supermarkets. Recently, we had the technology needed to collect data for maintenance in which we can do analysis with new technology and predict any potential problems.

We are not just selling our products, but we think it is more important to provide solutions for maintenance and control after the sale or 'the moment of truth' as we call it. For us, the moment of truth in the case of the supermarkets is the time when the frozen products are sold. We need to make sure that the products are properly frozen as requested by the customer. It is where our value lies because we are not just manufacturing the products.

In the domestic network with about 70 locations, we have around 600 engineers who collect the data necessary for maintenance, provide the maintenance service when needed, and communicate with the customers about their needs. The same process is done in the Asian market.

Food and beverage hold a large market share in refrigeration, and other industries also require commercial refrigeration or freezers. For example, the increased demand for refrigeration is increasing in the medical industry, especially, with the COVID 19 vaccine. Developing countries are facing a major problem because they do not have freezers that can store the vaccines at a lower temperature. We know that your company is present in the medical field with your medical cool box and low-temperature incubator. Could you please talk to us about the role that you play in the medical field? And looking towards the future, is there any specific industry that you would like to introduce your products to?

The commonality in the seven businesses that we have now is the cooling technology. We stand out through the uniformity of our technologies throughout those different businesses and the skill set of our engineers who do the maintenance. Our business is not about mass production, rather, it is producing the products according to the quality and timing that are needed by the customers. After the delivery or replacement of the products, we keep providing after-sales support. This is the sales breakdown for the seven businesses. The biggest one is the supermarket, then restaurants, food processing, factories, respectively. The medical field is still so small, but we see great potential in this area moving forward.

Through our seven different businesses, we are supporting the product flow of the farm-to-table healthy trend. Between the farm and the table, we are trying to provide the best solution for the tastiness, freshness, and safety of food. It is a solution that has a social value. The Japanese, like the French, have a lot of variations, which require a sensitive control in cooking. We are seeing a growing reliance on Japanese food among Asian countries. In those Asian countries, we believe that our mission is to provide guaranteed and safe food, not just producing cheap products.

Throughout the creation of this report, we have interviewed many companies. They all agreed on one subject, which is that R&D plays a major role in their company to be competitive in the domestic and global markets. Not only that, with globalisation, many are shifting overseas to find partners for co-creation and joint development. Your company has a very unique R&D capabilities through your MILAB, which is an open innovation base that connects people. First of all,

could you please talk to us about your MILAB and your R&D capabilities? Are you looking to have any co-creation partners in the overseas market to increase your market share in Asia?

We are a manufacturer, so we put high importance on R&D functions, and we have a laboratory here. However, we deployed our engineers and staff, who are engaged in the development in each of our factories. If we say that we invest 3/10 of our money in the labour cost, then we invest 2/10 for our R&D. We are trying to jointly come up with new solutions for energy saving and to increase sales performance. Even so, sometimes we cannot achieve those goals on our own by which we have formed alliances with compressor, lighting, or painting manufacturers as needed. One example of an M&A that we did 10 years ago was when we acquired Tunnel Freezer, a company that produces frozen food with the thought that we could strengthen the synergy in the market and technology. During this pandemic, we have a type of refrigerator that allows the customers to pick up sushi that limits human contact. This product was developed two years ago as requested by a customer to reduce labour. It is selling more than expected now.



Last year, you produced two unique products, the CLAIR Send-you and the Galilei products. Looking towards 2021 and 2022, do you have any upcoming products that you would like to showcase to us and of course, to our international readers?

Going forward, we would like to focus on Blast Chiller / Shock Freezer and Thawing box (equipped with stepwise run function). The Blast Chiller technology is the lasting chilling of the food to keep the food tasty and increase productivity. In this pandemic time, what is important is that we can deliver the food. The opposite technology to freezing is thawing. These two functions should be equally of high quality.



company must have been in a very strange position during the COVID 19. On the one hand, your restaurant business must have suffered tremendously, but on the other hand, the sales and deliveries of the supermarket, medical devices and products, and drugstores skyrocketed. How did your company navigate the COVID 19?

Resilience. It is about responding to the changes. Jacques Attali drew a lot of attention when he gave a lecture last year in Japan about how the world will change after COVID 19. He clearly explained that we can expect economic growth in the fields of medical, food, health, and education.

When we interviewed the President of Fujimak, he mentioned that because of the decreasing population of Japan, the market in your industry is suffering. In order to grow as a company, globalisation is very important, especially in developing countries where the population is increasing dramatically like Southeast Asia. As a company that is present in the Asia-Pacific region, could you please tell us your future international expansion strategy?

We would like to increase our business and strengthen our foothold in Asian countries moving forward. Unfortunately, we exited from the market in China after 28 years of factory operations in Beijing. We only have an office for our sales department there now. We entered the Hong Kong market more than 20 years ago showing that we were early in entering the overseas market. We know the overseas market very well. The necessity of our technology greatly depends on the development of the local market. Our technology is not necessary for the African countries, but as their life standards advance, our technology will be needed at some point. The other thing that we would want to pursue is the M&A and technical alliance with the local factories for expansion. As for European countries, we would like to promote the import of European products into Japan and distribute them to the domestic market. One of them is the Italian-made refrigerator for cars that you can find on the battery side. We also import the dishwasher from Germany. We would like to expand European brands in the Japanese market because they have a long history in food processing from which we can learn a lot of things.

In the very distant future when you eventually step down from being the president of FUKUSHIMA GALILEI and hand the company over to a new president or group of executives what philosophy or vision would you like to pass on to your successor and leave for FUKUSHIMA GALILEI?

That is a very good question. I am so happy that you asked. The 'four rules of happiness' is our company's philosophy. For myself, since I was 38 years old until now that I am 54, I have lived by this ideal and philosophy for 16 years. The most important thing is the SDGs, environment, and society. We give importance to the happiness of our employees, customers, shareholders, and consumers. I believe that the employees' happiness means product and spirit. Product refers to money, status, and welfare. However, the spirit that denotes cooperation and mutual respect is more important and rewarding. We highlight healthy management to promote our employees' happiness and well-being at work and in their personal lives. We are responsible for the next generation. This company has more than 2000 employees who treat each other like family.