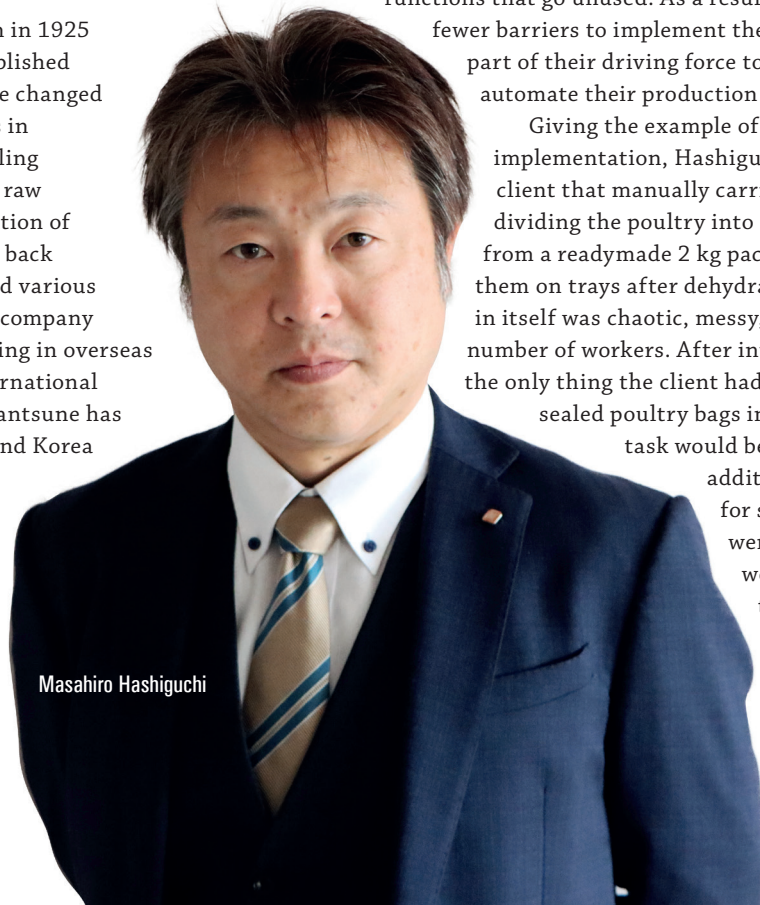


Nantsune

Ushering Automation to Food Processing

When it comes to the food processing and packaging industry, automation and robotics can play a massive role in improving food safety, quality, and long-term profitability as they eliminate human interventions. Currently, in Japan, as food manufacturers produce a wide variety of products in small quantities, it is difficult for them to automate their production lines due to the need for reconfigurations each time the product changes. However, in recent years, line automation has been rapidly progressing due to the evolution of technology, including robots. This is further augmented by the severe shortage of Japanese working labor. Set against this backdrop is Japan-based Nantsune, which offers automation lines to manufacture products that form the core of the lines and develop automation technologies. “As a pioneer of meat slicer in Japan, we are exploring the possibility of automation in all food production processes by leveraging our know-how,” says Tsuneyuki Minami, President and CEO of Nantsune.

Nantsune’s journey began in 1925 when Tsunejiro Minami established Nanjo Cutlery Works. Soon he changed the name to Nantsune Works in 1929, manufacturing and selling the world’s first thinly sliced raw meat slicer. With the penetration of meat-eating culture in Japan back then, Nantsune has developed various machines. Subsequently, the company expanded globally by exhibiting in overseas tradeshows and meeting international standards. Over the years, Nantsune has established plants in China and Korea to meet growing overseas demands. Currently, the company is manufacturing over 35 models to meet various needs around the world, and respond to customer needs related to various automation and labor saving.



Masahiro Hashiguchi

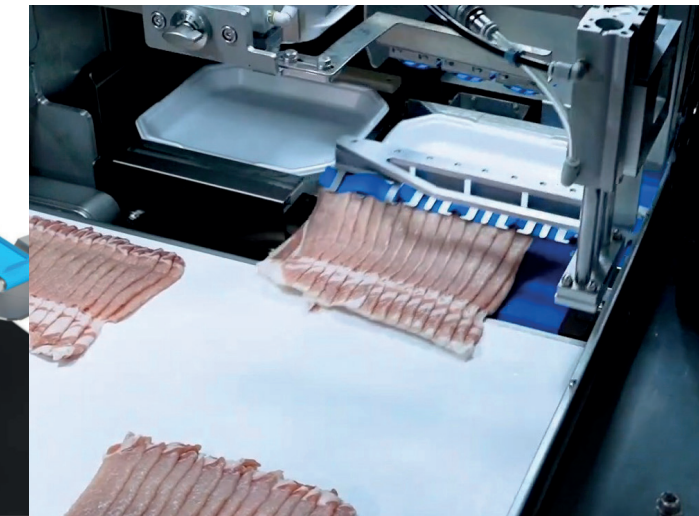
Cutters and Slicers for Every Food Packaging Need

Nantsune has introduced numerous tools for efficient and automated food processing and packaging. The company’s SCORPION CM-230 allows the user to specify the position of the thinly sliced product to be dished precisely on the food tray. Similarly, Nantsune’s AIR-2K can reliably unseal the poultry bag based on its proprietary methodology without the use of costly 3D cameras and other sensors. “With SCORPION CM-230 and AIR-2K, we have succeeded in mechanizing the simple tasks of unpacking and serving food, which require proper handling by human eyes and senses,” says Masahiro Hashiguchi, R&D General Manager and Executive Officer of Nantsune. On the other hand, the LIBRA series can cut irregularly shaped meat logs in fixed weight with a maximum error of ±5 percent, which is generally considered difficult even for skilled labor. All of the machines offered by Nantsune boast of excellent cost performance based on standard functions that perform the required tasks, rather than equipping with fancy functions that go unused. As a result, customers have fewer barriers to implement these machines as part of their driving force to mechanize and automate their production lines.

Giving the example of a recent implementation, Hashiguchi talks about a client that manually carried out the task of dividing the poultry into 250-gram portions from a readymade 2 kg pack and then placing them on trays after dehydration. This task in itself was chaotic, messy, and involved a number of workers. After introducing AIR-2K, the only thing the client had to do was set the sealed poultry bags into AIR-2K, and the task would be carried out. In addition, only containers for sealed poultry bags were required in the work area, eliminating the need to clean containers for poultry products during or before dehydrating,



AIR-2K showcasing in Nantsune's virtual showroom



SCORPION CM-230 dishing the meat to the food tray

“Nantsune is working toward the ideal of one day realizing a completely unmanned food factory, and the basic technology and total solution supporting that factory will be steadily incorporated into products and services one after another”

sorting, and serving. Most importantly, workplace congestion is solved due to the elimination of workers and containers in part of the process. “In terms of automation result, we have reduced 4 workers out of the original 10 under the same production level where now only two workers for carrying and loading sealed poultry bags, and four for sorting and serving the dehydrated poultry came out of the machine,” adds Hashiguchi.

Innovation at the Fore

Noting such exemplary results, Nantsune has also figured out a way to navigate the current pandemic-related challenges. Due to the pandemic, the means of communicating and promoting to domestic and global customers changed drastically. Instead of investing in virtual events where customization is limited, Nantsune has developed its virtual showroom platform where visitors can have that exhibition-like exciting experience while getting to know its products and solutions more interactively and comprehensively by utilizing technologies like AR. Minami believes that in the future, it will be important to strategically combine and promote the existing real and virtual exhibitions. “We thoroughly

listen to the voice of our customers and understand the level of personalization they want. We believe that it is important to deliver products that can exceed customer expectations without excessive functions and quality.” In fact, the company’s competitive advantage lies not only in the creation of machines but also in the engineering of its customers’ processing plants as a whole. The company also provides consulting to its customers on how to create more profitable food products and new tasty products. “By combining all of our offerings as a total solution, we can create products and services that exceed the imagination of our customers,” says Minami.

Holding on to customer service as key, Nantsune is looking at expanding its business in Asia as a total engineering solution company that contributes to the whole food production processes and not limited to just the sale of individual machines and quality improvement. “Nantsune is working toward the ideal of one day realizing a completely unmanned food factory, and the basic technology and total solution supporting that factory will be steadily incorporated into products and services one after another,” adds Hashiguchi. 