Management Strategies

Business Overview and Outlook

Automatic Machinery Business Division



Yoshiaki Kitahora

Executive Officer General Manager of Automatic Machinery Business Division

Strategy

We in the Automatic Machinery Business Division welcome change and endeavor to evolve automation technology along a multitude of avenues as an organization that continually offers automatic machinery that satisfies customers around the world. We have made this our 10-Year Vision through which we will differentiate ourselves from competitors. We incorporate the requirements and requests of each individual customer into our automatic machinery, whether it be equipment that packages pharmaceutical or food products with heat-processed film, 3D solder paste inspection systems that feature image inspection technology, or lithium-ion battery manufacturing machines that perform high-speed wrapping of multiple materials. We strive to satisfy customers by providing quality products that meet their needs for delivery and cost.

Fiscal 2019 Report

In Fiscal 2019, sales of winding machines for lithium-ion batteries increased, but sales of 3D solder paste printing inspection systems to China decreased. Sales of pharmaceutical products packaging machines declined due to the impact of a contraction in capital investments made by pharmaceutical manufacturers in Japan. Although overall net sales in the segment fell year on year, improved earnings lifted segment income above that of the previous fiscal year.

In the pharmaceutical product packaging field, we have been working to expand sales in the Chinese market by advancing Chinese-Japanese joint development of equipment models tailor-made for the Chinese market and carrying out activities to strengthen production at the China Plant and to build a framework in which to offer services. In the Japanese market, we have been strengthening our ability to manufacture molds in-house, which are necessary for launching new generic pharmaceuticals. We have also been using IoT to strengthen proposals for enhancing customers' productivity and saving labor.

In the food packaging field, we are working to grow sales of V-pack packaging equipment and collaborating with package material manufacturers to develop new types of packaging, as well as launching marketing efforts for these.

In the industrial machinery field, we strengthened efforts to capture a greater share of the market for 3D solder paste printing inspection systems in Europe and the United States by introducing new products with renewed exterior design that offers improved visibility and operability. With regard to winding machines for lithium-ion batteries, we are working to capture domestic demand and focusing our efforts on next-generation batteries. In China, our largest market, we are working on ongoing collaborations with Chinese companies.

Main Products that Create Value	
Automatic packaging systems	These systems contribute to providing safe and secure products with equipment that packages pharmaceutical products (tablets, capsules) and food items.
Inline medical product inspection systems	These systems facilitate safe and secure pharmaceutical products with high-speed and highly accurate inspections for pill flaws, foreign particle contamination, torn sheets and other problems.
3D solder paste inspection machines	These machines contribute to raising productivity and quality guarantees for the printed circuit board mounting process with printed circuit board solder paste inspection machines.
Lithium-ion battery manufacturing machines	These are systems that contribute to environmental efforts and the spread of eco-friendly vehicles with machines to manufacture lithium-ion batteries for electric vehicles (EVs) and other automotive uses.

Value Provided through Business



Upcoming Topics

We see global market development as a priority topic. Therefore, in the pharmaceutical products packaging field we need to strengthen production at the China Plant, which has become a product manufacturing hub, and to build a framework in which to offer services so that we can expand sales to markets in ASEAN countries and East Asia, particularly China. In the industrial machinery field, we are focusing on responding to price competition in the market, so we need to introduce price adjusted 3D solder paste printing inspection systems into the East Asia and ASEAN markets. Additionally, eliminating the use of plastic has become a social issue which poses great risks in the packaging fields, so we will strengthen our response to this issue together with pharmaceutical, food product, and package material manufacturers.

Future Initiatives

We plan to grow our business by restructuring into a market-oriented organization that brings together sales and technology to respond swiftly to market demand. In the pharmaceutical product packaging field, one of our focus areas, we will increase sales of medium-speed (3,000 pills/minute) equipment models that are tailor-made for the growing Chinese market and accelerate development of high-speed (6,000 pills/minute) models. We will then use these China-specific models as a base for development into other East Asia and ASEAN markets. Furthermore,

in the mature Japanese market, we will strengthen our service businesses through CKD Field Engineering Corporation and work to improve customer satisfaction. In the food packaging field, we aim to work with partners to enhance our ability to propose new types of packaging and raise the cost competitiveness of our existing equipment models. We will develop this as a new business, using the image inspection technology we have cultivated in the pharmaceutical product packaging field.

Ever Further Evolution!



The pharmaceutical industry in China is demonstrating dramatic growth. Additionally, in 11 major cities including Shanghai and Beijing, the Chinese government is advancing centralized pharmaceutical procurement measures which are creating demand for pharmaceutical production equipment that can realize high quality, stable production at low costs.

Development and sale of the FBP-300W, an automatic pharmaceutical packaging machine for the Chinese pharmaceutical market

In order to increase pharmaceutical product packaging machine sales in the Chinese market, we are leveraging the full advantages offered by our China Plant, (Wuxi, Jiangsu Province) and reviewing the design of all components used in order to lower costs by increasing local procurement, and we have realized Japanese levels of quality through local production. To realize the foreign material contamination prevention required of pharmaceutical product packaging machines, we have enhanced visibility and cleanability by adopting a flat design that includes a fully transparent front cover and by removing cover frames to realize a smoother surface. We have also incorporated a touch panel similar to those on smartphones, making various settings and operations easier for users.

Business Overview and Outlook

Component Products

Components Business Division



Katsunori Hayashida Director and Executive Officer General Manager of Components Business Division

Strategy

In the component products segment, we have set "Total FA Worldwide Supplier" as a goal for ourselves in the 10-Year Vision. We are working to build a broad lineup of FA systems to meet diversifying customer demands that include high speed/high precision, small size/high definition, safety/high quality, and digitalization, and to provide new value and creativity. Toward that end, we will tackle technological innovation, develop differentiated products, provide services, strengthen our global production foundation, and offer products to build a business structure that can meet the needs of customers worldwide.

Fiscal 2019 Report

In the Japanese market, orders for fine system components and related components were slow due to a temporary adjustment phase in investment of semiconductor manufacturing equipment. In overseas markets, sales declined as capital investment slowed in the Chinese and South Korean markets amid US-China trade friction and Japan-Korea trade conflict.

During the COVID-19 pandemic, we made use of the fluid control technology that is the cornerstone of our component products business to strengthen our manufacturing and engage in sales of components that go into ventilators, oxygen concentrators, and other medical equipment, as we worked to supply products that are demanded worldwide.

We are strengthening our domestic and overseas production systems to adapt to ever-accelerating changes in the external environment. Looking at our domestic plants, we increased the number of items produced at the Tohoku Plant, which began operation in fiscal 2018 as a BCP measure. At our China Plant, we installed a clean room and increased the number of fine system components produced to meet the increasing demand for semiconductor manufacturing equipment in China ahead of the nation's "Made in China 2025" plan. At our South Korea Plant, we increased the number of items produced to meet demand for locally produced products, and promoted local procurement and local processing of materials and parts.

To meet an ever-increasing need for automation amid a declining working population, we enhanced our product lineup with the Facilea visual programming tool for image processing, the HP Series of high durability components that prolong the maintenance cycle of equipment, and PowerArm, which reduces manual labor at production sites. Doing so, we have built a lineup of new products that can meet the needs of customers.

Main Products that Create value	
Pneumatic control components	These devices control the refinement of airflow, pressure adjustments, the driving of a cylinder, and so on. We develop automatic systems responding to a broad range of industrial needs and propose pneumatic technologies in consideration of environmental preservation and energy conservation.
Drive components Electric motion components	As pneumatic cylinders are easily automatic, they are used in a wide range of industrial fields. Proposals are made using high precision and user-friendly electric actuators, and automation in line with customer needs is realized with control technologies that utilize air and electric motion.
Fluid control components	Under the concept of high quality and wide variation, we are utilizing fluid control technologies to launch a broad range of products, from various types of valves, product series that meet the needs of medical and pharmaceutical processing, as well as food processing and environmental products such as water treatment systems.
Fine system components	With a broad range of products covering supply systems to exhaust systems of semiconductor and flat panel displays, we are able to provide state-of-the-art process control. We support the electronic device industry with our fine system components which can be used in clean environments.

Value Provided through Business





Tohoku Plant

Kasugai Plant Collaborative robot assembly line

Upcoming Topics

Looking at the external environment, we view adaptation to ever-changing market needs, to working style reforms after the COVID-19 pandemic, and to the decrease in the working population as issues to address. There are needs for faster development, global design, unit products aimed at factory automation and unmanned operation, supply chain management (SCM) construction for the speedy provision of products, and diversification of working styles. Looking at our internal environment, the themes faced by the Components Business Division are stable production and supply of products, development of human resources that can play active roles globally, and the challenge of forward-looking research and development.

Future Initiatives

We will strengthen our efforts to address the SDGs and will make progress toward the goals of the SDGs through our development, production, and sales processes.

To meet the growing need for FA systems and automation, we will strengthen our production foundations globally by promoting production in optimal locations, production cooperation in Japan and overseas, and streamlining of logistics with the aim of timely supply of products. We will also promote flexible production systems and automation to enhance our ability to keep up with rapidly changing market conditions. In the area of products, we will develop and provide high-performance products and FA systems that enable predictive detection in response to the globally-expanding trend toward smart factories. We will also tackle the solutions business to expand new business domains. Elsewhere, we will promote CSR activities with roots in local communities, emphasizing diversification of working styles, BCP measures, development of low environmental load products, and the safety and health of working employees in order to build a sustainable supply structure.

Ever Further Evolution! HP Series High Durability Components

There are growing needs for automation and the IoT at manufacturing sites, as well as heightened demand for FA systems that enable stable operation and production facilities that do not stop.

As a manufacturer, we have developed the HP (High Productivity) Series based on three concepts of products 1) No breakdowns, 2) notification of service life and 3) can be quickly replaced during maintenance. In addition to improved durability in a variety of usage environments, the series offers a sensor-based predictive maintenance function and sophisticated positioning accuracy and reproducibility that eliminate the need for fine adjustment after replacement.

By achieving stable operation through high durability, the series can prevent production losses caused by equipment



failure or maintenance while also reducing the frequency of defective product disposal, contributing to the reduction of environmental impacts.

As an "FA Total Supplier" that supports automation, we will contribute to the realization of a richer society and the creation of a new era.

Management Strategies

Business Overview and Outlook

Component Products

Sales and Marketing Division



Shinji Yuhara

Director & Executive Officer General Manager of Sales and Marketing Division

Strategy

Our division will incorporate Digital Transformation (DX) into our sales activities and flexibly adapt to the New Normal to address the FA industry in which digitalization is accelerating. Through proposals for the FA market that combine pneumatic components, fluid control components, fine system components, and electric motion components, we will advance the comprehensive construction of automation and labor-reducing technologies that will give rise to a sustainable society. Moreover, we will work to become a truly global company and to become an "FA Total Consultant," a goal set forth in the 10-Year Vision for the Sales and Marketing Division.

Fiscal 2019 Report

Although fiscal 2019 saw a strengthening of concerns over slowing world economic growth and political risks such as US-China trade friction, we foresaw an acceleration of investment in automation as labor shortages emerge. Amid these circumstances, however, many companies approached investment cautiously in the first half of the fiscal year while the market environment stagnated. The environment began to gradually pick up from the beginning of the second half, as a result of semiconductor and electronic component companies beginning to make positive moves toward investments to support new technologies such as 5G communications and Al. In 2020, just as market conditions took on an upward trend, the COVID-19 emerged in China and infection cases surged worldwide.

In Japan, we entered the second half of the fiscal year under unprecedented conditions of self-restraint from going out or attending outside business meetings, implementing telework, prohibitions against travelling abroad and during lockdowns or other prohibitions against social interactions. Despite this, in our business performance through the end of fiscal 2019, we received orders related to projects in which we had been active for months, and arrived at fiscal 2020 without any significant decrease.

To summarize our activities in fiscal 2019, we considered how to efficiently carry out sales activities

in an environment of never-before-experienced severity, and engaged in sowing the 'seeds' of sales worldwide in growth markets where capital investment is active. The automobile industry is facing what is being called a once-in-a-century turning point. Full-scale planning of CASE-related investments for the shift to electric automobiles is underway, and medium- to long-term growth is foreseen in the semiconductor and electronic component industries amid the introduction of new technologies for DX.

By engaging in product planning through the strengthening of marketing functions to meet diverse automation needs and by globally carrying out human resource education to enhance the capabilities of our sales staff, CKD will continue to exert its unique strengths and will continue to aggressively enter growth markets.

The Sales and Marketing Division has set "FA Total Consultant" as its ideal form in the 10-Year Vision. By proposing automation and labor reduction that draw on our diverse product lineup and by engaging in product planning and sales expansion that lead to the reduction of environmental impacts, we will actively incorporate the concepts of the SDGs and develop sales activities that let us contribute to the creation of a sustainable society.



Online observation tour of the Yokkaichi Plant



SEMICON TAIWAN

Upcoming Topics

The COVID-19 pandemic brought significant changes in people's lives in fiscal 2020. The pandemic continues without signs of abating, creating major impacts on corporate operations and economic activities. This has forced a shift from face-to-face sales to remote sales, and a need to establish a new sales style that asks how we can provide added value to customers.

Future Initiatives

The pandemic has also brought sudden changes to production sites. Securing social distance has become a necessity, automation and labor reductions are accelerating on the production floor. Taking this shift as an opportunity, we plan to promote the upgrading of products such as electric motion components, Human Assist Products (PAW), image inspection software, and nitrogen gas extraction units as an "FA Total Supplier" that fuses the core technologies of automatic machinery, pneumatic, control, and labor-saving components. We aim to be a company that offers solutions for a carbon-free society, people-friendly workplaces, quality improvement, and stable manufacturing.

The evolution of robots will continue to accelerate,

Ever Further Evolution!



Varied Options for Increasingly Versatile Robots Electric Motion & Pneumatic Grippers for Robots

Activities performed by robots have expanded at production sites. To tackle the issue of improving productivity, we have applied the technologies we have built up in pneumatics and electric motion to robotic handling components. Our FFLD Series electric actuator grippers, LSH-HP Series pneumatic linear slide hands, and RLSH, RHLF, and RCKL (recipient of the Good Design Award 2020) pneumatic grippers for collaborative robots are expected to solve issues at sites where robots have been adopted. and the need for robots to reduce labor will increase at production sites. By selecting and proposing the best combinations of pneumatic hands for compactness and speed and electric motion grippers for precision grasping at robot extremities, we contribute to our customers' production efficiency.

We also view the reduction of maintenance man-hours as a key issue under labor shortages, and will contribute to the realization of production facilities that constantly operate by offering the high durability HP Series of products and others that resist harsh environments. We will also plan products that actively incorporate the concepts of the SDGs as we aim to become an "FA Total Consultant" that coordinates next-generation smart factories.



Easy image processing even for beginners Visual programming tool for image processing

Amid a growing need for factory automation to improve productivity, we released the Facilea visual programming tool for image processing. Applying over 20 years of image processing technology built up through automatic machinery, Facilea can be easily used by anyone to automate inspection processes that rely on human labor.