

Chapter 2

# Value Creation Strategy

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# Financial Strategy

Ramp up efforts to improve cash flow to help expand business

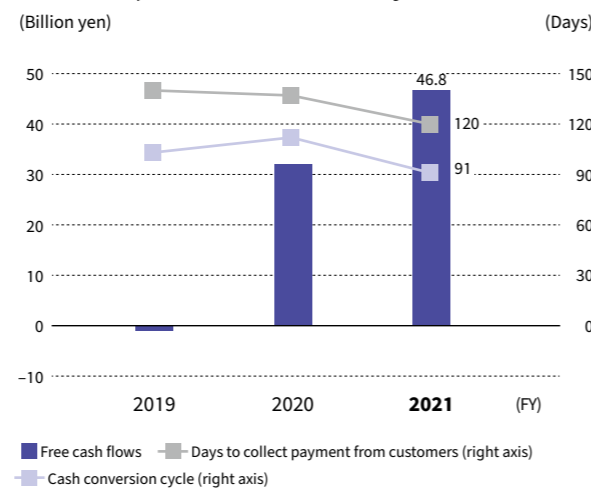
**Tetsuya Hibi**  
Corporate Officer  
Corporate Functions  
Finance and Accounting



## Free cash flows improve 14.8 billion yen

Free cash flows for fiscal 2021 amounted to 46.8 billion yen, up 14.8 billion yen from 32.0 billion yen in fiscal 2020. This was thanks to efforts to increase profits and collect notes and accounts receivables at an early stage. We also attained this result by delivering our products closer to full completion as part of cost reduction measures. This made it easier to set up and do test runs of our products, which then made it possible to perform acceptance testing on schedule and reduce the occurrence of defects afterward, all of which helped speed up the collection of payment from customers. As a result, the number of days from sales outstanding dropped from 137 days in fiscal 2020 to 120 in fiscal 2021, and our cash conversion cycle shortened from 112 days to 91.

### Free cash flows, days to collect payment from customers, and cash conversion cycle



## Improving contracts to generate greater free cash flows

The difficulty of speeding up payment collection from customers is a problem common to plant-based businesses. With systems growing in scale over the past few years, the period over which we collect payment increases. What is more, the payments such as material and labor expenses we make on behalf of customers over this time can be quite large, depending on the contract.

When we determine contractual conditions, we are careful to factor in the need to stay competitive. However, customers are looking for systems of a scale and quality that are higher than ever before. As such, only a few companies have the full range of capabilities that make it possible to deliver such a system all at once. We plan to take advantage of this competitive edge and will work with business units to improve contract conditions, which can include increasing the amount of advance payments that will be received under the order contract.

The large scale of projects, combined with the uneven size and timing of deposits and withdrawals, make it difficult to conceive a cash flow plan, but we intend to communicate with customers to improve the structure of these contracts and generate more free cash flows as a result.

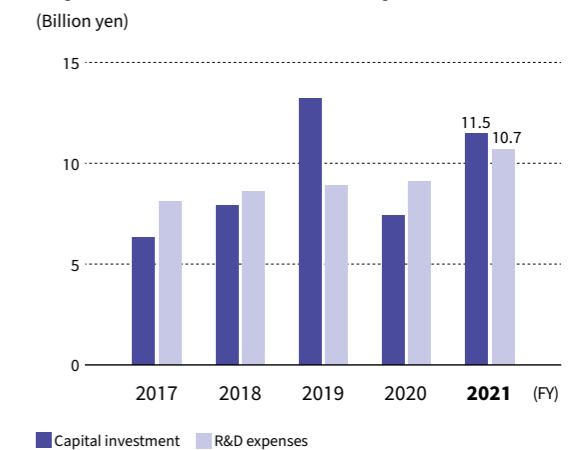
## Growth investment and shareholder returns

We have set a net sales target within our medium-term business plan of 600 billion yen, but we also plan to increase our production capacity in anticipation of future growth, particularly in the United States, China, and India, as these are regions with high potential. In addition, we intend to set aside about 6 billion yen for capital investment in Japan, which includes upgrading equipment and improving efficiency. As it stands, we plan to continue devoting over 10 billion yen a year toward these capital investments.

In addition, we are committed to implementing digital transformation (DX) across the Daifuku Group. Therefore, we have set “innovation investment amount” as a key performance indicator (KPI) within the Sustainability Action Plan, referring to the amount invested in DX initiatives and related R&D expenses. In fiscal 2021, our innovation investment amount was 13.0 billion yen. We plan on raising this amount to 15.0 billion yen for fiscal 2022 and fiscal 2023. Within the Corporate Functions unit, we have revamped our system for calculating travel and other expenses and are currently working to go paperless and stamp-free. We are also taking steps to standardize operations by introducing artificial intelligence (AI) chatbots and robotic process automation (RPA).

Daifuku considers shareholder returns as a matter of the highest importance. Accordingly, we aim for an average consolidated dividend payout ratio of 30% or more for the three-year period of our medium-term business plan. Going forward, we will look for ways to provide even greater shareholder returns that maintain a balance with growth investment and efforts to strengthen our financial underpinnings.

### Capital investment and R&D expenses



## Determining new management indicators

The Group uses a matrix-based management system in which each Group company is plotted along the vertical axis and each business unit on the horizontal axis. Looking at the company segment, we have established a system of institutional accounting that presents past results. Looking at the business unit, however, it is important to clarify our future direction, so we are working to create a new managerial accounting system. To date, each business has focused on sales and profits. Now, we are working to visualize our balance sheets and cash flow statements as part of preparations to gain a fuller understanding of management throughout the Group and use this to formulate and assess new management indicators. Going forward, we will look into what indicators are best suited to the Group.

## Developing human resources with the spirit of Daifuku’s “anchor leg”

Corporate business activities are converted into monetary amounts and reflected in financial statements and tax returns. Conversely, none of these activities can be carried out without sufficient cash flows. At Daifuku, the financial and accounting unit within the Corporate Functions unit is responsible for preparing these financial statements and tax returns and controlling cash flows, making them, in a sense, the “anchor leg,” or the final runner in this relay race. If there is a business-related issue, such as a drop in the profitability of a project, the occurrence of doubtful accounts, or a problem with transfer pricing taxation in transactions outside Japan, these units need to find a way to resolve it, regardless of whether they are directly or indirectly involved. We are no different than the other business units in that we never give up and find a way to persevere, but we are also charged with a special kind of spirit that comes with being the “anchor.” Work is about getting the people around you involved and having the organization work the way you want it to. When this happens, there is a joy to it. When I was younger, I took part in setting up a factory in Thailand. Actually, I was solely responsible for designing its accounting system and getting this system running. The experience certainly included tough moments, but also quite a few good ones, and these came from being able to build the system I had conceived.

With that same spirit, we will create a work environment that allows employees to take on difficult challenges with gusto, while cultivating human resources who will carry Daifuku into the future.

# Strategies by Business

## Intralogistics

### Striving for continuous growth by boosting global competitiveness

#### Introduction

The Intralogistics business offers best solutions to an extensive range of customers—factories of food, pharmaceuticals, machinery and other manufacturers; and delivery centers of distributors, such as retailers, wholesalers, transport operators, and warehouse operators—by combining automated warehouses with storage, transport, sorting, and picking functions. In recent years, large systems for e-commerce have been a driver of our business performance.



**Hiroshi Nobuta**

Director, Managing Officer  
Intralogistics Global Business Head  
Intralogistics Division Manager

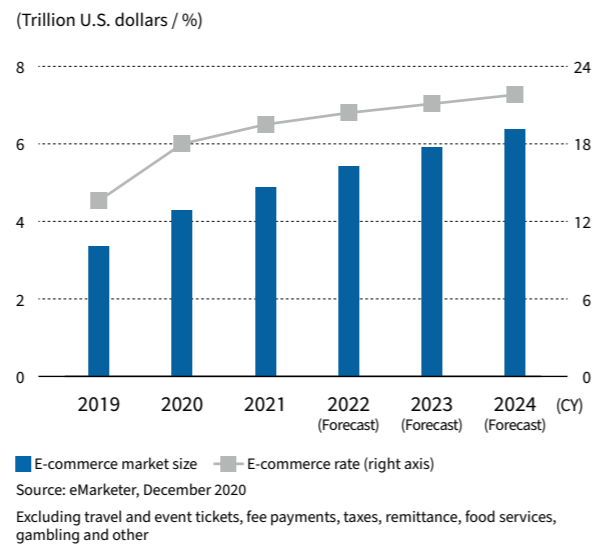
### Business environment

In Japan, manufacturers are facing a growing need to make new capital investment that will help rebuild their business continuity structures after experiencing the supply chain turmoil attributable to the COVID-19 pandemic. Distributors and e-commerce players have driven the growth of this business for several years. They are expected to continue their systematic and strategic investments.

In North America and in China, investments related to e-commerce have now temporarily subsided, while investments by manufacturers remain solid. In the past few years, interest is building in North America in high-value-added automated warehouse systems and other solutions to rising labor costs.

With their continued economic growth, India and ASEAN countries are enjoying a growing presence as international manufacturing centers. Not only local businesses but companies around the world are massively increasing their investments there.

#### Worldwide B2C e-commerce market



### Business strategy

In accordance with the three-year business plan, we strive to transform the logistics value we offer to customers. The logistics value consists of the lead time, the quality of logistics, and logistics costs. Specifically, we take the actions mentioned below.

#### Increasing competitiveness in Japan and worldwide

To support the constant growth of this business, it is essential to increase non-Japan sales ratio. We share solutions for the various industries we have cultivated in Japan to non-Japan subsidiaries to bolster their sales strengths. Given that production systems support globalization, we are extending them in North America and Asia. We are changing the design of high-value-added products that used to be produced in Japan to ensure local procurement and assembly. We thus increase the ratio of local production. We are working to boost cost competitiveness by means of production at optimal locations suited to prevailing demand-supply trends. We will take these steps to solidify a structure that bolsters our earnings strength in parallel with the expansion of our business scale.

#### Increasing the speed of development

With our unique one-stop support system encompassing everything from consulting to after-sales services, allied with an extensive lineup of our products, we have flexibly and swiftly addressed customers' issues. However, perceptions of time are now totally different. The logistics lead time was once viewed in units of days, but is now viewed in units of hours. Customers seek more advanced and larger-scale performance from systems and want quicker deliveries. In addition, the market has expanded dramatically in the past couple of years. Companies in the United States and China, among other markets, are successively introducing new products. To provide product lineups geared to individual markets, we will work on development with the participation of non-Japan subsidiaries to gain and maintain a competitive advantage.

### Vision

Customers' innovation and their subsequent needs for industry reorganization have been among the growth drivers for our business. For example, when capital investment in one industry comes to an end, new needs emerge in another industry. We have delivered a large number of systems in association with B2B transactions. In the rapidly growing e-commerce market, commercial distribution and physical distribution are both on a B2C basis. We are closer to consumers than ever before. If the system delivered comes to a halt, consumers will instantly be affected. That means that the market needs uninterruptible systems comparable with social infrastructure. To make our systems uninterruptible, we will increase service bases for supporting customers and expand the service options with the use of IoT and AI technologies to build up our capabilities.

Today, a contracting working population is aggravating the labor shortage in Japan. It is anticipated that demand will grow for systems with high automation rates or ideally with unmanned operation. To achieve unmanned systems, a major hurdle in the form of system reliability must be overcome. If a large number of personnel are required for dealing with system failure, then the result is far from the unmanned system sought by customers. Confidence in our systems means that a high level of reliability is expected from them. We have long had the spirit of thoroughly searching for the solutions customers seek. Continuing that commitment, we aim to create fully unmanned systems. And by serving our customers, we will work to address social issues such as labor shortages and heavy workloads.

Cleanroom

Seeking continued growth by globalizing the development and deployment of human resources

Introduction

The Cleanroom business offers storage and transport systems designed exclusively for clean rooms to the semiconductor and flat-panel display (FPD) factories. With cutting-edge technologies suitable for miniaturization of semiconductors and production of larger FPDs and OLEDs, we retain a high global market share. Operating chiefly in East Asia, non-Japan sales hold a share of at least 95%.



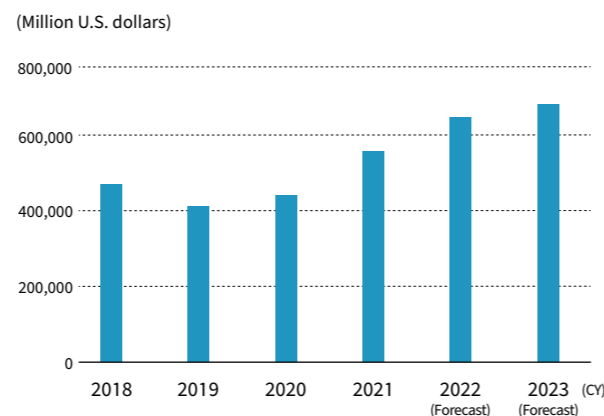
**Seiji Sato**  
 Director, Managing Officer  
 Cleanroom Global Business Head  
 Cleanroom Division Manager

Business environment

With the emergence of IoT, 5G, AI and metaverse and other technologies, demand for semiconductors and FPDs is rising sharply. Meanwhile, the global semiconductor shortage has become an urgent issue to be addressed, as this shortage has significant adverse repercussions for other industries. In the semiconductor market, customers and investing capital are more active than we had forecast. The market is expected to remain brisk for several years to come.

In addition to investments in state-of-the-art miniaturized semiconductors, U.S., Chinese, Japanese and other national governments are encouraging investments in semiconductors. Efforts are underway to achieve higher performance by laminating semiconductors. New investment demand is emerging for packaging that needs to be performed in a clean environment, in contrast to conventional packaging technology. This demand is expected to continue into the medium and long terms.

Global semiconductor market



Source: World Semiconductor Trade Statistics (WSTS)

Business strategy

Capital investment in the semiconductor and FPD sectors is tremendously susceptible to economic conditions. For a long time, we had no choice but to accept this. This led to a sense of crisis, when we questioned if we had neglected customers' perspectives. Returning to the basic principle of offering good products quickly at low prices, we have launched a slogan of Value Transformation by "Excellent Quality, Best Price, Quick Delivery" in a bid to transform the value we offer.

▶ Boosting cost competitiveness

Fiscal 2021 was the first year of the three-year business plan. We made worldwide efforts to visualize costs with a focus on Best Price. Irrespective of the destination, we procure from the region where production can be implemented at the lowest cost to maintain our cost competitiveness amid soaring material prices. For fiscal 2022, we will focus on Quick Delivery. We will introduce ICT-assisted automatic layout creation systems and other equipment. That will shorten the period of system construction for proposals to customers from the current three to seven days to around one day. It will also standardize the skill level and improve layout accuracy. In busy seasons when we receive a high number of orders, we continue to curtail the lead time and enhance quality.

▶ Community-based human resource development

In the past, non-Japan subsidiaries separately improved their production structures and after-sales services to construct revenue bases in their regions. To bolster their independent management, we will share with them the technologies and know-how we have in Japan, aiming to expand the business foundations for the entire Daifuku Group. We will dispatch trainers to provide on-the-job training for sales staff and system engineers. We will also provide engineers engaging in design, manufacturing and services at their respective locations with opportunities to receive training for at least half a year in Japan in an effort to build up their skills.

Vision

Although its sales account for 95% of non-Japan sales, this business is still in the course of localization in distinct regions. In consideration of the global situation over the past several years, local production for local consumption and one-stop domestic operations covering sales, system deliveries and after-sales services in individual countries will surely be significant. We will build a system under which individual bases will identify new needs, develop systems and create value in each region, including Japan. The created value and assets will not be limited to the local region. Rather, we will create a situation in which they will be shared on the network, so that they each can complement the other beyond regional boundaries.

What is most important for people working is to independently develop a story and accomplish it at their own initiative. We give each company the discretion to take on challenges. We also provide positive support for employees' skill development, construct a borderless workplace environment and thereby create job satisfaction and fulfillment.

The world is shifting to a digital society at an unprecedented pace. Semiconductors and FPDs are now essential to society. The significance of this business lies in maximizing the productivity of customers manufacturing these devices. We will continue to be a company that customers select without concern as a partner that supports them and serves the digital society.

**Automotive**

**Reconstructing a system that integrates operations in Japan with non-Japan subsidiaries to strengthen Group governance**

**Introduction**

The Automotive business offers conveyor systems for all automobile production processes, including press, weld, paint, and assembly. We also provide solutions that include automation of the overall automobile production line. Centered on Japanese companies, we provide automakers with various systems worldwide, including in Japan, North America and Asia. This business also features remodeling, maintenance, and other services accounting for around 40% of segment sales.



**Akihiko Nishimura**

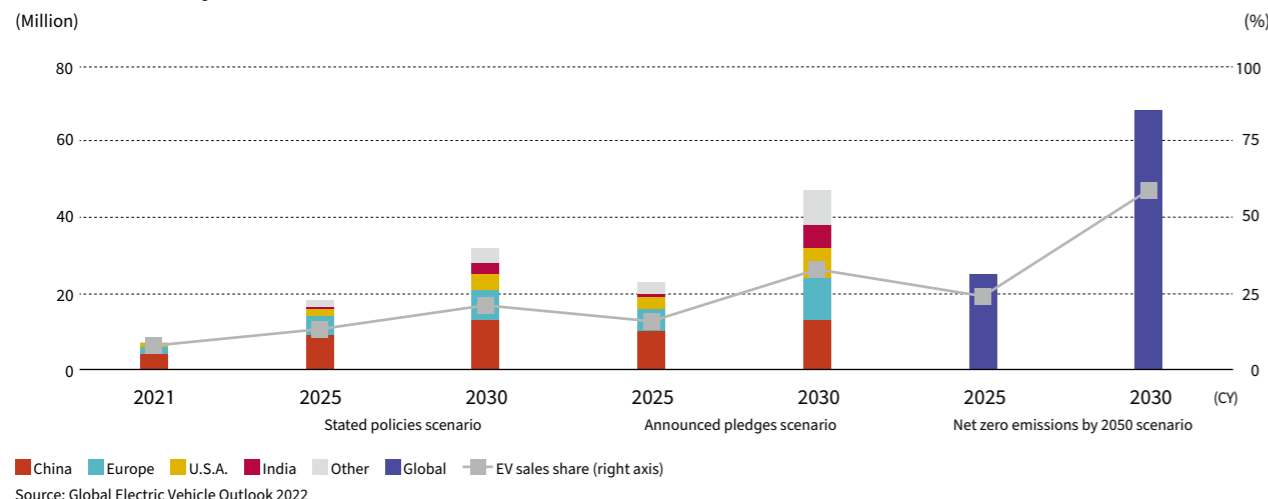
Corporate Officer  
Deputy Automotive and Airport Global Business Head  
Automotive Division Manager

**Business environment**

During fiscal 2021, a number of major capital investments outside Japan were postponed due to the COVID-19 pandemic and the shortage of semiconductors. In fiscal 2022, customers' capital investment will rally. We also anticipate a turnaround in demand and improving vehicle supply. However, there are quite a few factors that raise concern, such as shortages of semiconductors and other components, a possible resurgence of COVID-19 infections and geopolitical risks. We need pay close attention to the impacts these factors might have on the business.

Meanwhile, the automobile industry is currently experiencing a period of major change, for instance with the introduction of advanced technologies for electric drive systems and autonomous driving and successive entries from different sectors into the car industry. According to the net zero emissions by 2050 scenario, the ratio of electric vehicles (EVs) to total passenger car sales will be around 60% higher than it is today by the early 2030s. This electrification will accelerate worldwide. The EV manufacturing process will be simpler, the number of parts will be smaller and the way the car is constructed will all be different. We regard this as a new business opportunity and will strive to expand the business.

**Global EV sales by scenario**



**Business strategy**

We use the term “lifecycle value” (LCV) to represent the business model for this business. LCV refers to the value offered to customers in the form of the service life of production equipment as well as to our own value. Maximizing the LCV is the key to success in this industry. We see it as an important strategy for increasing profitability. Specifically, we have an organization that combines sales and service functions, instead of a form in which the two functions are separate, to ensure the timely sharing of information and quick responses to a problem when it occurs. In pursuing differentiation from the competition and a stronger earnings base, we will take the following measures.

▶ **Maximize the LCV in a business structure that combines Japanese sales and services functions**

We will make intensive efforts to maximize the LCV that we have already established.

▶ **Build closer ties with subsidiaries in the world’s five major markets, i.e., North America, China, South Korea, ASEAN, and India**

We will apply our business model in Japan to other markets in a bid to optimize our LCV. Capitalizing on the strengths of individual subsidiaries, we will strive to enhance Group governance.

▶ **Enlarge business domains**

We will step up our original Grand Engineering Solution (GES) as a solution business that deals with production technologies under a comprehensive agreement. Customers face the issue of shortening the lead time for introducing automobile production equipment. It is highly difficult, requiring sophisticated expertise. For this reason, demand is increasing for turnkey contracts, or comprehensive contracts for equipment from engineering proposals to turning of the operation key. We will unfailingly identify latent needs for turnkey contracts for production technologies and offer comprehensive solutions related to automobile production on the basis of collaboration among all our units. After we evolve into a turnkey contractor, we will be able to avoid excessive competition, given closer relationships between automakers and suppliers. We will support our customers as a partner that works with them across a broader range to win their trust.

**Vision**

We are operating at a time of dynamic change. As new competitors based in China and elsewhere enter the global market, traditional companies are gradually losing market shares. Without being dragged into price wars with emerging companies under these circumstances, we will start by reinforcing our foothold to boost revenue based on the appropriate cost.

Daifuku has hubs all over the world, with a large number of Group members. We will work together with these members to develop and integrate the rich and varied experiences and intellectual property owned by the Group to maximize the value of this business and perfect our organization.

In terms of making a social contribution, this business has long grown in step with automakers and served end users through our system. We will continue offering solutions tailored to the times, including those for meeting customer needs for carbon neutrality. In so doing, we will build closer ties with customers, expand business domains and continue to make a contribution to society.

**Airport**

**Boosting global competitiveness through Group collaboration**

**Introduction**

The Airport business provides airports and airlines around the world with an extensive array of solutions and services, focusing on baggage handling technologies such as sorting systems, self-service baggage check-in systems, bag and passenger security systems, and airport terminal operating systems. The business unit operates with affiliates based in Japan, North America, Asia Pacific and Europe, and we combine as one to operate this business.



**Takaya Uemoto**

Managing Officer  
Deputy Automotive and Airport Global Business Head  
Airport Division Manager

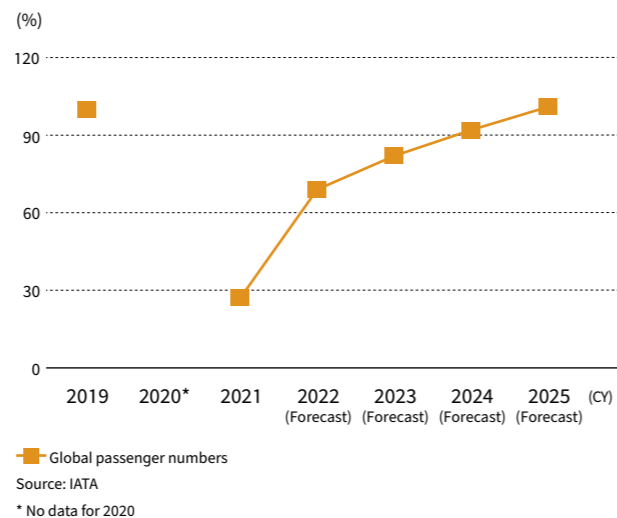
**Business environment**

Amid uncertainties linked to the COVID-19 pandemic and the conflict in Ukraine, this business has achieved solid results, mainly through the delivery of large projects and customer service. Despite these uncertain times, airports remain an essential part of society, and will continue to require ongoing support for reasons such as growth expansion, security upgrades, obsolescence programs, and implementing new technologies to enhance the passenger experience.

The business is buoyant in North America, our largest market. The US Bipartisan Infrastructures Law provides \$20B in funding for airport infrastructure projects from 2022 through 2026. Many local governments are planning to construct new airport terminals as part of their planning initiatives, and demand is expected to remain strong in fiscal 2022 and beyond. Inquiries from Oceania and Europe have begun to rise again, after a period during which investment had been restrained.

The number of air passengers worldwide is expected to reach roughly 80% of the pre-pandemic level in 2022, according to a June 2022 announcement by the International Air Transport Association (IATA). In many regions, entry restrictions have been eased. Overseas travel needs are showing signs of recovering from the slowdown caused by the pandemic. In view of that, we expect airport demand in the form of transformation into smart airports, and business conditions will remain positive for several years to come.

**Global travel recovery (compared with 2019)**



**Business strategy**

We will institute the measures mentioned below to differentiate ourselves from our competitors and to strengthen our earnings base.

**Seek intra-Group collaboration effect and building proposing capabilities**

In addition to upgrading traditional hardware solutions for baggage handling systems, operations and maintenance, and self-service baggage check-in systems, we will work to bolster our ability to provide solutions in the software domain. Through M&A, we acquired two Oceania-based affiliates that are particularly strong in this domain. We will gather their expertise to centralize development, increasing development efficiency and diversifying the business. Meanwhile, the Smart Security Lane security screening system from our Netherlands-based affiliate is helping improve airport security. Our strength lies in our capacity to propose both hardware and software solutions. We will continue to strengthen operations of our airport business with this integrated approach.

**Further enhance project management**

Close sharing of information at monthly meetings of leaders in businesses and overseas subsidiaries' management members as well as at quarterly meetings of chief financial officers (CFOs) has improved project management globally and led to a steady rise in profitability. In view of long delivery lead times as part of the peculiarities of this business, we have emphasized cash flow and have taken steps to strengthen fund management. We will deploy many engineers experienced in project management from the Automotive business, which was integrated in fiscal 2021, to each project for boosting accuracy in cost and progress management.

**Build a global production structure**

In North America, a new factory of Jervis B. Webb Company is scheduled to begin operation in September 2022. We will integrate three separate factories to increase production capacity and to streamline operations for cost savings. The new factory will also be capable of producing additional product lines within the Airport business group. We will also carry out production reform at our plant in Malaysia, which serves as a manufacturing site in Asia. We will make efficient use of our assets to increase profitability of the overall business.

**Vision**

We aspire to be capable of proposing comprehensive solutions to customers in the airport industry. This business is supported by our specialist subsidiaries in North America, Asia Pacific, and Europe, enabling us to offer both hardware and software solutions. We expect that airports themselves will turn into amusement destinations, with more spaces where people will spend more time for leisure, like the major airports in the West and Asia. Temporary baggage storage will be of increasing importance, and a business opportunity beneficial to our strong automated warehouse technologies may emerge. We will constantly look ahead to swiftly develop and propose products that respond to emerging needs.

In terms of our contribution to society, we play a role in smoothly conveying travelers' baggage using airports to their final destinations. For instance, our systems detect inappropriate baggage in advance to support safe aircraft operations, while automated guided vehicles improve the work environment. Power-saving equipment and smart controls help reduce power consumption. We will provide solutions that will help people feel more fulfilled.

**Auto Wash**

Identifying new markets while maintaining earning strength

**Introduction**

The Auto Wash business provides filling stations, car dealers, garages, and self-service car washes with car wash machines and related products, mainly in Japan and South Korea.



**Yoshiyuki Horiba**

Managing Officer  
Auto Wash Global Business Head  
Auto Wash Division Manager  
President of Daifuku Plusmore Co., Ltd.

**Business environment**

As automobiles shift to electric vehicles and hybrid vehicles, the number of filling stations, which are our main customers, is projected to decline. However, we believe that until the number of automobiles owned falls, solid demand will persist for car wash machines, to replace existing machines and to install them at new locations.

In South Korea, we foresee rapid demand growth for self-service car wash machines, which will emerge as a new trend. Traditionally, full-service car wash performed by staff was the mainstay. However, self-service car wash machines are increasingly being introduced amid rising labor costs. We will actively develop new models to respond to this new trend.

**Business strategy**

We will accelerate the business with a focus on boosting earnings strength and opening new markets. To boost our earnings strength, we have over the past three years been taking steps to reduce costs and reform our sales strategy. For fiscal 2021, it will be vital to bring these efforts to fruition and to maintain their achievements. To build a structure that enables us to retain our earnings strength, we carried out operational reforms, such as reducing assembly and logistics man-hours, to eliminate waste entirely. We will also actively seek to adopt cost cutting approaches taken by other business units.

To identify new markets, we need to respond to emerging needs identified by the sales team. We will seek to identify these new needs, such as for introduction to locations where people gather and where no car wash machines have been installed, including commercial facilities and laundromats, as well as demand for car wash machines for tank trucks and other special vehicles. Developing tangible products tailored to these needs will require strong collaboration between the sales team and the development team. Given that sales activities are conducted by a Group company in this business, we have a unit for coordinating customers' wishes and needs between these two functions, to facilitate information sharing. Going forward, we will turn our attention to a broad range of areas, without being confined to car washes. We will use our technologies to reduce workloads and environmental impacts and thereby help address social issues.

**Electronics**

Evolving our competitiveness globally as we seek to enter new fields

**Introduction**

The Electronics business, mainly operated by Contec Co., Ltd., develops, manufactures, and sells electronic devices, such as industrial computers, IoT devices, solution products, and electronic control panels/modules. Contec also provides Daifuku Co., Ltd. with its control components essential to material handling systems.



**Akira Ikari**

President and CEO  
Contec Co., Ltd.

**Business environment**

Corporate demand for capital investment, which rapidly contracted during the COVID-19 pandemic, has been showing signs of recovery across the globe since fiscal 2021, amid an acceleration of DX.

In Japan, the recovery of corporate capital investment brings active demand for industrial computers and data acquisition cards used in factory production lines.

In North America, our major customers in the healthcare and airport security industries are actively increasing their investments.

While a shortage of parts including semiconductors still has significant impact on our business, a close collaboration among the sales, production, and research and development (R&D) teams contributes to overcome with swift changes in design and newly identified supply chains. These are a source of strength for us.

**Business strategy**

In May 2022, Contec became a wholly owned subsidiary of Daifuku Co., Ltd. Since then, we have enjoyed more active human resource exchange and upgraded information sharing framework within the Daifuku Group. I believe that future joint R&Ds will increase the presence of our products and grow ourselves mutually.

As a product essential to various systems and services in society, our industrial computers, IoT devices, and other products are used in a broad array of industries, including Daifuku's customers. We will contribute to realizing a sustainable society by providing these products and aim to maximize comprehensive collaboration effects as a member of the Group.

Our medium-term strategy focuses on strengthening our global structure. We will strive to expand our development capability and product lineup, mainly with industrial computers, by increasing our investment in human resources in Taiwan, where our R&D center is located. In addition, we will enhance our procurement structure to ensure consistently stable supply of products and boost our cost competitiveness. Through these initiatives, we will build our product development capability and market competitiveness in the global market.

# Global Reach

The Daifuku Group offers solutions tailored to the needs of customers in different sectors in numerous countries and regions. We have constructed a supply chain from procurement to sales, in addition to a system for procurement and production at optimal locations.

In comparison with our competitors, we have high sales in fast-growing Asia and have delivered to a wide range of customers in North America and elsewhere (see [Chart 1](#)). Currently, we have sites in 26 countries and regions. We have holding companies in major markets, namely North America and China (see [Figure 1](#)).

We began to enter non-Japan markets in earnest around 40 years ago. At that time, we delivered our products mainly to Japanese automobile factories (Automotive business). Today, we have broader sales channels and deliver products to semiconductor and flat-panel display factories (Cleanroom business) and to general manufacturers and distributors (Intralogistics business). In 2007, we made U.S.-based Jervis B. Webb Company a subsidiary and launched the Airport business. After positively working on M&As, non-Japan sales jumped three folds from 101.4 billion yen in fiscal 2007, to 332.0 billion yen in fiscal 2021. The ratio of overseas net sales surged from 45% to 65% (see [Chart 2](#)).



**Group companies/branches**  
**70** companies  
 (including the parent company)  
**6** branches  
 We have sites in 26 countries and regions (see [Page 120](#)).



**Employees**  
**12,436**  
 (Non-Japan: 8,646)  
 Up 739 yoy  
 (Non-Japan: Up 601 yoy)



**Installation record**  
**54** countries

Chart 1 Top 5 materials handling systems suppliers 2021

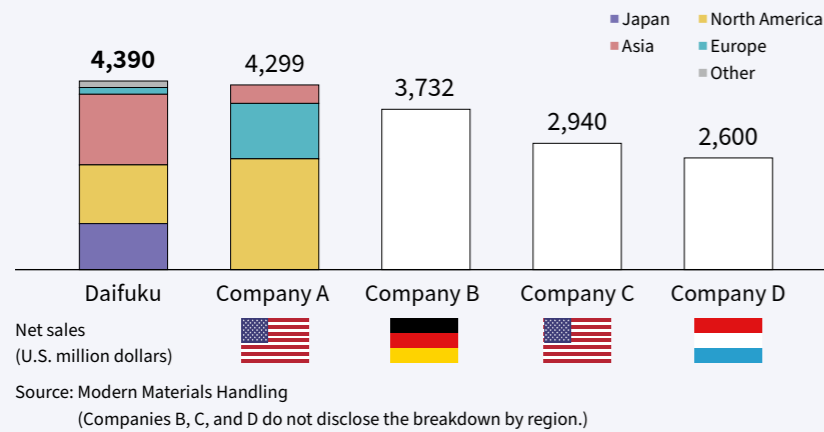
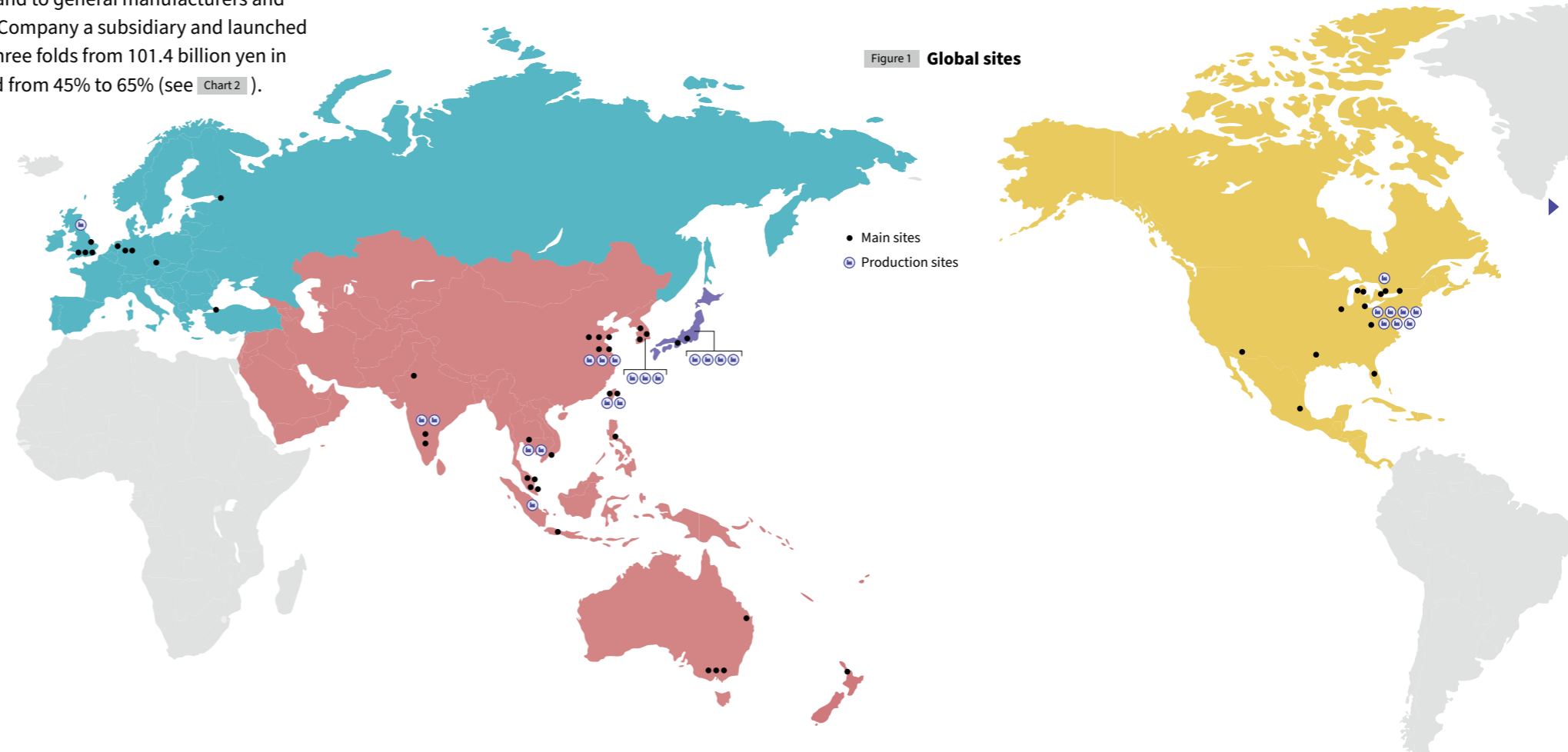
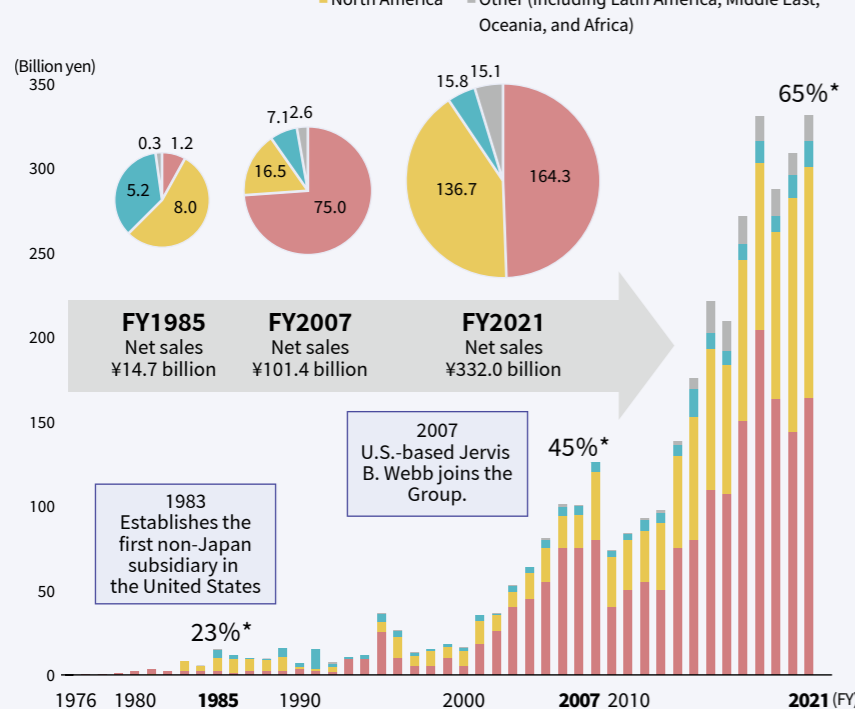


Chart 2 Non-Japan sales



Japan	Europe	Asia Pacific	Americas
<p>Daifuku has seven Group companies, including Contec Co., Ltd. At the core factory in Shiga Prefecture, we are involved in technological development with a view to the Group's global strategy. In addition, Japan is the most stable market, where we earn high revenues from services and other factors.</p>	<p>We have 11 Group companies in six countries, including the United Kingdom and Germany. Their operations encompass production, sales, and services.</p>	<p>We have 25 Group companies in 11 countries and regions in Asia, including production sites in China, Taiwan, South Korea, Thailand, India, and Malaysia. A large portion of our sales comes from the electronics sector, including semiconductor and flat-panel display manufacturers in China, South Korea and Taiwan.</p> <p>In China, we have five Group companies with 34 offices in operation (see <a href="#">Page 46</a>). We also have sites in Vietnam, Indonesia, and Singapore. Vietnam attracts attention for its future growth potential.</p> <p>Our five Group companies in Oceania, specifically in New Zealand and Australia, engage chiefly in the Airport business.</p>	<p>We have 12 Group companies in the United States, Canada, and Mexico.</p> <p>In North America, companies affiliated with Daifuku North America Holding Company operate a wide variety of businesses (see <a href="#">Page 44</a>).</p> <p>Wynright Corporation operates the Intralogistics business, mainly serving e-commerce operators. It has been posting higher sales with increased profitability. These positive results are attributable to the inauguration of a new plant. In the Airport business operated by Jervis B. Webb, production capacity will be increased by consolidating factories.</p>



# Strategies for the North America Market

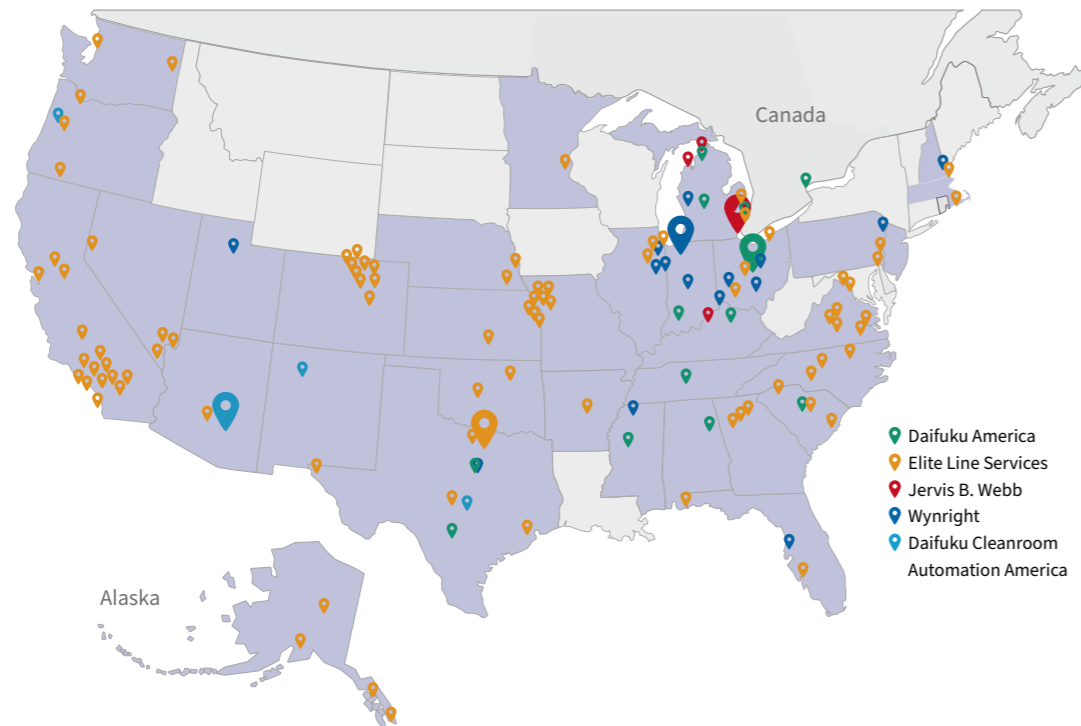
**Focus on expanding business scale,  
increasing productivity and profitability  
and developing human resources**

**Shuichi Honda**  
Director  
Senior Managing Officer  
President and CEO of Daifuku North America Holding Company



Daifuku North America Holding Company operates the Intralogistics, Cleanroom Automotive and Airport businesses together with five principal affiliates. Sales in North America reached 136.7 billion yen for fiscal 2021, accounting for nearly 30% of consolidated net sales. In the Daifuku Group, the ratio of non-Japan sales stands at 65%. Around 40% of non-Japan sales come from North America. Its overall market is large and has high growth potential. We therefore see North America as the top priority region.

## Sites of Daifuku North America



## Market environment

The COVID-19 pandemic has begun to show signs of easing. Companies have started to show more willingness to invest in the e-commerce, semiconductor, automotive and airport sectors. We received an increasing number of inquiries.

Meanwhile, prices are rising at a tremendous pace caused by hikes in resources prices and wages and global supply chain disorders. That raises concern about profitability. We will look ahead to changes in circumstances and endeavor to maintain and increase profitability.

## Trend by business

Since the Group companies were reorganized into separate businesses in 2019, their business efficiency has been rising every year. We will remain committed to offering solutions that meet customers' needs. We will strive to improve the production and procurement systems, including their standardization and streamlining with a view to higher profitability. We will develop a sense of unity and collaboration in the North America group to increase our presence in the market and serve the Daifuku Group's performance.

### ● Intralogistics (Wynright Corporation)

As retailers and distributors increase their investments in e-commerce, orders and sales are buoyant in North America. Competition is expected to intensify in the future, but a high level of demand is anticipated. We will work to gain orders to boost the business scale.

A new factory in Hobart, Indiana commenced operation in 2020. Its production efficiency and internal production ratio have since gradually increased. A surge in orders had the effect of increasing production. These factors redressed the profitability issue. In light of the current volumes ordered, we are considering increasing production capacity for 2024 and beyond.

### ● Cleanroom (Daifuku Cleanroom Automation America Corporation)

Amid the worldwide shortage of semiconductors and the U.S. government policy of stimulating domestic investment, customers are positive about making investments. We expect new capital investments to continue in the future. We will adopt more stringent profitability management and build closer ties with customers on the basis of our delivery track record to create business opportunities.

### ● Automotive (Daifuku America Corporation)

North America is a market featuring fierce competition among American, European and Japanese automakers. For fiscal 2021, these companies tended to postpone their plans due to the pandemic. In 2022, investments resumed, mainly in the transition to electric vehicles, and we are now receiving many inquiries. Regarding this as a major business opportunity, we will work to secure orders.

### ● Airport (Jervis B. Webb Company and Elite Line Services, Inc.)

Since airport operators continue to pursue their long-term strategies, we have continued to receive a high level of orders without a significant negative impact from the pandemic. In North America, the largest market, the number of passengers is recovering. Investments have continued mainly to deal with aged facilities. In addition, contactless systems and those for reducing staff are drawing attention amid the pandemic and the labor shortage. We will correctly identify customers' needs like these to maintain the level of orders we receive.

## Staff development

It continues to be difficult to secure labor in the United States. The labor shortage is worsening and measures to deal with the rise in those quitting jobs, the decline in labor productivity and the rise in wages for people are urgently required. At the moment, we are taking many different actions. These include the introduction of working from home and new staff training and an increase in opportunities for communicating with staff.

In November 2021, we launched the Daifuku North America Leadership Academy. This is our first original staff training program. It is open to all personnel in the Daifuku North America group. Twenty-four staff members selected from 97 applicants receive training under a year-long special program. It is aimed at building their practical and technical skills and at developing the perspective of management based on leadership theory. In quarterly camps, trainees meet one another face to face and improve their capacity by learning from others and freely communicating with presidents of individual companies in remote sessions. We will give all staff opportunities like this irrespective of their length of service in the hope of boosting their motivation.



## Strategies for the China Market

Speed up development and commercialization of products targeting cutting-edge markets

### Akihiko Kishida

Managing Officer  
Chairman of Daifuku (China) Co., Ltd.



In China, we have operated several subsidiaries in different businesses and in different regions in step with growth of the Chinese market since 2002. Today, we have three subsidiaries in China, specializing in the Intralogistics, the Cleanroom and Automotive businesses. Each is responsible for comprehensive operations, from sales to after-sales services. Production facilities for these businesses are located in China. We have an advantage in being close to customers through local production to meet local needs.



## Market environment

In March 2022, Shanghai entered lockdown following a surge in COVID-19 cases. It came to an end in June. Restrictions on business activities and outdoor movements were gradually eased. Accordingly, consumer spending is now expected to rally. However, there is a widespread wait-and-see atmosphere among businesses and consumers in light of concern about a resurgence of infectious diseases and the National Congress of the Chinese Communist Party, which is held once every five years and is scheduled for this coming fall.

China has the world's largest population and market. Its relatively rapid economic growth will continue, even if it does slow temporarily. The country is shifting from its conventional policy of mass producing commodities and expanding consumption to stepping up development of advanced technologies, such as environmental initiatives, 5G, AI, semiconductors and space technologies. Automobile production is a significant industry for China, which is one of the world's largest markets, mainly for new energy vehicles (NEVs).

Targeting cutting-edge markets like this, we will accelerate the development and commercialization of products. Rather than simply working on successful cases in the past, we will seek innovative strategies to further stimulate our China business.

## Trend by business

### ◉ Intralogistics (Daifuku (China) Manufacturing Co., Ltd.)

China has tremendous potential for growth over the medium and long terms. We will boost local production to advertise high quality, low cost and short delivery lead times, enhancing our track record as a system integrator as well as our service structure to differentiate ourselves from the competition.

Production at the Songjiang Plant in Shanghai was suspended for about two months under the lockdown. Installations were also partly interrupted. Under difficult conditions such as the semiconductor shortage, rising material prices and supply chain stagnation, we will strive to make up for the lost time caused by delays in processing following the relaxation of activity restrictions.

### ◉ Cleanroom (Daifuku (Suzhou) Cleanroom Automation Co., Ltd.)

New large investments for flat-panel display production lines decreased while orders are expected to grow for semiconductors amid strong investment by customers and numerous requests for bringing orders forward. The market is expected to continue growing, backed by the spread of 5G, IoT and data centers and the global semiconductor shortage, as well as Chinese government support for the expansion of the semiconductor industry.

At the plant in Suzhou, production was partly affected by the COVID-19 quarantine measures. It is working to deliver orders as initially planned. To increase production capacity in China, we commenced construction of a new factory in the city of Suzhou in Jiangsu Province in March 2022. It is scheduled to begin operation in September 2023.

### ◉ Automotive (Daifuku (China) Automation Co., Ltd.)

In June 2022, the number of new cars sold in China was up 23.8% year on year, according to an announcement by the China Association of Automobile Manufacturers. The figure was higher than the year-ago level for the first time in four months, and is trending upward. However, with restraints on production due to the semiconductor shortage, the recovery of capital investment by automakers is slow. However, plans to construct NEVs will soon be executed in earnest. These factories are aimed at meeting the NEV mandate policy, which obliges entities manufacturing at least 30,000 vehicles in China to ensure that NEVs make up a predetermined rate or higher of the vehicles they manufacture. In 2023 and beyond, existing major manufacturers are expected to invest in boosting NEV production.

While competition with Chinese peers is fierce, demand for reliability in terms of track record, quality and services is rallying. We will work to reduce costs, to offer new system proposals and to upgrade services.

## Capital investment

### ◉ Investment in DX investment

In everyday life, the digital shift with smartphone apps is advancing. We also use versatile business apps for smartphones in offices. With regard to design and production, we are building product data management and product lifecycle management systems. We will continue investing in future expansion and improvements.

### ◉ Environmental investment

In the Automotive business, the factory in Changshu, Jiangsu Province, was renovated, with the work completed in January 2022. In recent years, the Chinese government has been stressing the environment. The renovation has turned the factory into an environmentally friendly facility equipped with a photovoltaic system and the latest coating system. In the Cleanroom business, a new factory currently under construction will also be equipped with a photovoltaic system.

## Staff development

In China, staff are basically employed under job-based contracts. At the same time, they are under indefinite-term employment as in Japan. Therefore, we need to build a job-based personnel system suitable for China. Loyalty to the company alone does not motivate future generations. To secure a competent workforce, we are working to improve our brand appeal and to increase opportunities for education, training and personal development. We are studying revisions to the personnel system so that employees have their efforts and capacity rewarded.

The Daifuku China Training Center was launched on the premises of the Songjiang Plant in September 2020. We will operate it to increase safety awareness and to quickly develop and build up the skills of service personnel capable of performing equipment maintenance.

## Message from the Chief Officer of Shiga Works

### Harmony between manufacturing and the natural environment

#### Toshiaki Hayashi

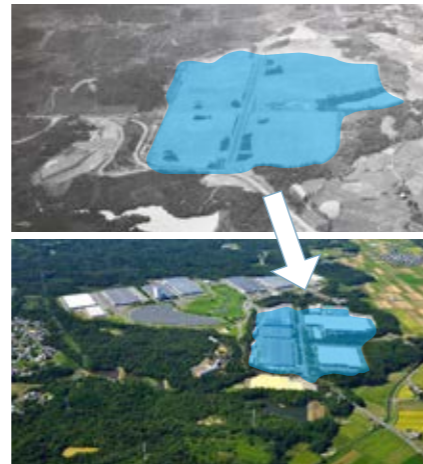
Director  
Managing Officer  
Chief Officer of Shiga Works



### Aspiring to create a factory that is popular with the community and where it is a joy to work

In 1970, Daifuku acquired a site of around 1.2 million square meters, which is the current site of the Shiga Works. At the time, we had factories in Osaka and Aichi Prefectures, respectively the home of its current Headquarters and the Komaki Works. Shiga Prefecture lies between them. In addition, we had an Industrial Park plan aimed at establishing a highly productive factory, where rich humanity is nurtured in a natural environment. That led to the decision on the location.

Integrating and expanding all factories in Osaka and Aichi, the Shiga Works now consists of 12 factories with a total floor area of 214,451 square meters, the Hini Arata Kan demo center, three administrative offices with the canteen, and a mega solar farm with annual power generation of 4.3 million kWh, equivalent to annual power consumption of 1,000 ordinary households. It is now one of the world's largest production bases for material handling systems, with around 1,600 proper employees and around 1,400 employees of partner companies. The Shiga Works serves as the Daifuku Group's core factory for the world. Popular with the community, it continues to evolve.



Top: The first phase of construction  
Bottom: As of 2022

### Cross-business manufacturing reform and R&D

The integration of all of our factories in Japan into the Shiga Works helps strengthen intra-business collaboration, which is one of the management policies under the current three-year business plan. Products in individual businesses vary depending on the industry in which customers operate. Separate businesses actively share technologies. In particular, production technologies in the Intralogistics business are an advanced mechanism of the Group for heightening the ratio of internal production, productivity and earnings strength. In businesses mainly receiving orders from specific customers, the concept of standardization in the Intralogistics business is used for a transition from custom-made production to module design with a view to reducing costs.

Intra-business collaboration is carried out in research and development (R&D) by following the example in manufacturing. We organize exchange meetings of development engineers on the subject of new business development. These are opportunities to discover something through sharing information on extensive topics, ranging from developed products to ideas in the course of development.

### Safety should be above all—never to be compromised, no matter what

Safety and efficiency may clash at times. However, safety is the top priority issue that is essential to protect ourselves, our colleagues and our family members, and must be guaranteed even if it compromises efficiency.

It would be quicker and easier to perform final adjustments in installation without stopping the machinery, rather than after stopping it. However, even if safety gear is used, we could never eliminate the risk of accidents in this case. We employ coercive measures such as lockout of the power source in combination with other approaches to create a safe work environment.

In addition, a large number of automobiles run inside the Shiga Works. In the past, we instructed employees to perform pointing and calling at the time of passing a crosswalk. However, this practice did not become entrenched. We then changed the rule and asked them to do pointing without calling. This was widely accepted by employees. It is important to seek a high level of safety, but it is necessary to make small changes to entrench a practice as part of the culture. The Shiga Works will strive to establish a safe and secure workplace from different perspectives to serve as a model of the Group in terms of safety as well as in other areas.

### Rebuilding supply chain management

The whole world is facing supply chain disorders attributable to soaring raw material and fuel prices and difficulties in procuring materials. We have to date escaped severe impacts by increasing inventories and placing early orders to secure materials. However, the turmoil has impacted supply chains that are associated with us.

In light of that, we will check again the overall picture of our supply chain and accelerate visualization of supply chain management. We will present the overall status relating to carbon neutrality, human rights due diligence, cybersecurity and other areas to share views across the supply chain, transcending boundaries between business units. In doing so, we will rebuild our supply chain management.

### Harmonious coexistence with nature

The Shiga Works has found more than 700 native species and at least 50 endangered and rare species on its premises through ecosystem surveys.

Preserving biological diversity not only protects our assets but also protects assets of the region. The Works is located in a nature-rich woodland. With an awareness that the existing environment must not be destroyed, we have been conducting preservation activities with specialists and local associations. To preserve this great natural environment for future generations and stimulate internal and external communication, we have been running a specific activity called the Yui Project since 2014. We conserve endemic red pine trees, a rare species of Yamato salamander, *Hynobius vandenburghi*, and other natural elements, and maintain the Yui no Mori forest (see photo) as a place for learning about the natural environment.

In addition, we form a network with the community to carry out regular monitoring of the corporate premises, create biotopes, remove foreign species, organize nature observation events, exhibit and present our activities and understand the state of nature in surrounding areas.

We will continue to upgrade the Industrial Park where manufacturing and preservation of the natural environment can both be ensured and will seek to build a sustainable society through our business activities.

