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YASKAWA

COMPASS

Let's Take i<sup>3</sup>-Mechatronics One Step further  
and Heighten Our Purpose and Values!

Steering the Future

Interview with Michael Knappek, president of (YAI)  
Promoting MOTOMAN NEXT, an Adaptive Robot  
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# Let's Take i<sup>3</sup>-Mechatronics One Step further and Heighten Our Purpose and Values!

Dear employees of the Yaskawa Group, FY 2024 has begun.

In the last fiscal year, our business environment, which is not easy at all, continued amid weak demand for the semiconductor industry and a sluggish Chinese market. Nevertheless, we are expected to realize record earnings through a steady reduction in the order backlogs that had been piling up since the last fiscal year, to achieve the high targets we set at the beginning of the fiscal year. Thank you for your cooperation and efforts.

The semiconductor industry is unpredictable in some respects, however from a medium- to long-term perspective, the current situation is not so negative, and I expect a huge surge in business once the growth movement gets underway.

I also feel that we are gaining the capability to achieve our goals, regardless of market recovery. To ensure the achievement of the

Masahiro Ogawa  
Representative Director  
President,  
Yaskawa Electric Corporation

*M. Ogawa.*

medium-term business plan, "Realize 25," and the long-term business plan, "Vision 2025," we will further advance the solution concept of i<sup>3</sup>-Mechatronics and develop strategies based on Digital Transformation (DX), which captures global market changes, to further improve profitability.

Under these circumstances, the President's policy for FY 2024 is as follows.

**Policy 1: Advancing i<sup>3</sup>-Mechatronics to realize customers' needs and wants**

We will expand our solution proposals, based on a deep understanding of customer needs and products. Also, we will further promote the use of i<sup>3</sup>-Mechatronics in our factories to increase the automation area and advance manufacturing.

In order to advance i<sup>3</sup>-Mechatronics through global alignment, we will implement horizontal installation, proven by the i<sup>3</sup>-Mechatronics project, as well as global deployment, based on the YRM / iC9000 series.

**Policy 2: Business expansion through a strategic approach, capturing trends in global growth markets**

We will work closely with key global customers to capture the recovery of investment in the semiconductor market. We also aim to provide automation solutions that follow the changes in manufacturing and supply chains in the rechargeable battery electric vehicle (BEV) sector, which is expected to expand.

This will enable us to enhance our presence in the automotive market by collaborating with the sales team and our sales expansion partners. In terms of products, we will further promote the installation cases of MOTOMAN NEXT, launched in December 2023, as well as refresh product strategies in the AC Drive market, based on the understanding of customer needs.

**Policy 3: Promoting partnerships to expand business in the mechatronics application area**

Understanding the growing demand for energy creation and conservation to achieve carbon neutrality, we will focus on expanding sales of the new PV inverter Enewell-SOL P3A, and explore the potential of energy-related solutions through our collaborations. In the areas of mechatronics applications, we will collaborate in growth fields, including food and agriculture, and biomedical automation.

**Policy 4: Practicing sustainability management by the promotion of YDX-II project**

We will pursue the YDX-II project, as a whole, by restructuring PLM through data linkage among manufacturing, sales, technology, and services, as well as building the Yaskawa Data Lake, which will serve as the data infrastructure. Also, we will deepen the understanding of Yaskawa Principles for "One Yaskawa" and aim to improve corporate value by sustainability management, based on integrated data at Yaskawa Global locations.

This fiscal year marks the second year of "Realize 25," as well as the year toward the conclusion of "Vision 2025." Let us advance i<sup>3</sup>-Mechatronics and further heighten our purpose and values in the Yaskawa Principles.

Let us all work together to enhance the presence of the Yaskawa Group in new frontiers, based on the successes we achieved together!





Interview with Michael Knappek, president of (YAI)

## Let's leverage YASKAWA's strengths in the market and build successful relationships with the customers!

Under the medium-term business plan "Realize 25," the Group intends to invest aggressively in global growth markets as well as to build productivity in demand regions such as the U.S. . We interviewed Mike Knappek the president of (YAI) about his deeply insightful and multifaceted view of the company's strategic initiatives and market position, particularly within the challenging and dynamic U.S. business landscape.



President, YASKAWA AMERICA, INC.  
Michael Knappek

### What is the current economic situation in the U.S.?

We acknowledge that Yaskawa does business in typically exhibit a natural resilience. However, the current macroeconomic environment in America is experiencing a downturn. This is particularly pertinent to the post-COVID phase, where businesses initially saw a substantial recovery, which was unfortunately hampered by extensive supply chain disruption. These in turn led to notable inventory shortages. This situation resulted in a high volume of orders but a limited number of shipments, creating an imbalance in the supply-demand equation.

Further addressing the global supply chain weaknesses, we clarify that this challenge is not isolated to the U.S. but is a worldwide issue. We face on other economic factors such as inflation and the significant wage differences between the U.S. and Japan. While wages are a factor in decision-making processes, the overarching and long-term business benefits of automation are a more significant consideration. The current scenario of high inflation rates leading to increased interest rates has a dampening effect on investment enthusiasm, thus affecting the market's potential for growth.

### Please tell us the current business situation of Yaskawa in America.

The significant backlog in orders and the inventory adjustments since FY 2022 are returning to normalcy in relation to the AC Drives market. Despite these, the current state of the AC Drive business is generally performing well.

This is in contrast to the robotics market, which is notably impacted by downturns in the automotive sector and the effects of industrial strikes within the U.S.. This sector is anticipated to recover gradually from the second half of FY 2024, resulting in robust business performance.

### How do you see demand potential in the U.S.?

Despite a stagnation in actual demand, we observe the recent improvements in the supply chain and see a sense of optimism for the future. This outlook comes from Yaskawa's remarkable strength in its diversified market presence and its ability to cater to a wide array of customer types. This diversity enables the company

to effectively balance out focusing market such as semiconductors as well as strong areas like machine tools and general motion. The latter includes a range of sectors, from advanced manufacturing to 3D printing and laser cutting, showcasing Yaskawa's extensive reach and capability.

### How will you challenge the semiconductor market?

(YAI) has been focusing on the major OEMs of the semiconductor market for a long term. We keep a comprehensive approach that involves engaging with various departments within these OEMs. We always face the long design cycles in this sector as a continuous challenge, persisting efforts to secure a strong position with these key players, and We keep working on it from a long perspective.

### How will the sales activity of i<sup>3</sup>-Mechatronics go forward in (YAI)?

Regarding the integration of (M) (R) (V) products and the promotion of i<sup>3</sup>-Mechatronics, we value a generalist sales approach. It is significantly important to effective teamwork and communication within the sales structure to achieve synergistic outcomes. The iCube control\*, a central component of Yaskawa's ongoing efforts to enhance controller solution, is a key initiative. We acknowledge the need for more extensive solutions to demonstrate Yaskawa's competitive edge over our rivals.

We also address the challenges of competing with larger companies with interconnected product lines. We need for better connectivity and integration of Yaskawa's many products. Sharing a practical example, we see how Yaskawa drives can seamlessly connect for example to Rockwell's PLC networks, demonstrating

the ease of integration and the potential for expanding market opportunities.

\* Concept of global controller portfolio to realize i<sup>3</sup>-Mechatronics (IC 9000 series is deployed in Europe and America)

### Please tell us how you are working to build a global production system.

In terms of production expansion, we strategically plan for building dedicated facilities for semiconductor and robotics manipulator production. Yaskawa's semiconductor production in the U.S. necessitates specific strategies due to its unique characteristics compared to other global operations. In the robotics business, we are working to enhance our engineering capabilities.

### What is important to keep customers satisfied for a long term?

We place significant emphasis on the importance of cultivating and maintaining strong customer relationships, providing high-quality products, timely delivery, and robust support. We are engaged in rebuilding Yaskawa's reputation in delivery post-COVID and meeting customers' delivery and support needs. Despite having a strong brand image, the drop in timely deliveries is something that Yaskawa will need to overcome to regain trust in America.

### Finally, please leave a message for the global Yaskawa Group employees.

I sincerely want you to urge maintaining a positive attitude and a focus on customer care. Taking pride in the Group and our products, it is important to continue growth and success. Let's leverage YASKAWA's strengths in the market and lead to growth by overcoming difficulties with a positive attitude.



Head office of (YAI)



# Promoting MOTOMAN NEXT, an Adaptive Robot that Challenges the Unautomated Area

The MOTOMAN NEXT series, equipped with autonomous adaptivity to environmental changes, began sales in December 2023 and is gaining widespread attention. Mr. Okahisa, General Manager of Robotics Div, and Mr. Murai, Department Manager of Robot Technology Dept, provided a background on the development and future market prospects.



The shortage of labor force and successors brings expectations for robots.

## Please tell us the background and features of MOTOMAN NEXT.

**Okahisa:** MOTOMAN has grown mainly in the manufacturing industry. While the lack of a labor force and succession are social issues, many fields and work areas rely on human judgment. I think that automating these processes will lead to new expectations for robots.

MOTOMAN NEXT was developed to make decisions and complete tasks in the same manner as humans. For example, just as a human may pick up an object when it falls, a robot may move in the same

manner. The robots, which until now only worked as they were taught, have the ability to make judgments that make them behave optimally depending on the situation. This is called an adaptive robot.

## What is the difference with the existing model and its market penetration?

**Okahisa:** As there are many manufacturing sites, mainly industrial products that produce predetermined items, MOTOMAN will continue to play an active role in such sites. The shape of objects is determined, and picking them individually can be performed using MOTOMAN. We continue to recommend MOTOMAN in areas where it is suitable for application. MOTOMAN NEXT, however, is not a successor to MOTOMAN but addresses areas that are not automated because



General Manager, Robotics Div.,  
Yaskawa Electric Corporation  
**Manabu Okahisa**

### ● What is the MOTOMAN NEXT series?

Launched in December 2023. For the first time in the industrial robotics industry\*, the robot has autonomous adaptivity to make judgments about its surroundings. The lineup of five models with payload capacities of 4, 7, 10, 20, and 35 kg shall be expanded. It targets work areas that are difficult to automate by using only the "teaching-playback approach," which is based on repeating predetermined movements.

\* Based on the company's survey of major robot manufacturers.



Department Manager, Robot Technology Dept. Robotics Div.,  
Yaskawa Electric Corporation  
**Shinji Murai**

human judgment is required. The major difference is to complete the work, including retries. We do not mention the target sales volume in order to avoid becoming a mere product seller. Therefore, we will continue to promote activities that focus on customer adoption.

## Challenging to new area only human used to do

### We need to penetrate our understanding of the product.

**Okahisa:** If you look at the pyramid in Figure 1, the upper part of the "conventional automation area" represents industrial products. The emerging needs are the unautomated areas in the lower part, where humans are currently making judgments. My intention is to start from the bottom of the pyramid with MOTOMAN NEXT and challenge areas where automation has not been realized, such as wiring, sorting, serving, logistics, and so on.

In the case of apple harvesting, the human task involves a judgment to see (size and color) and adjust the force, which is a negative factor for automation. The digital twin structure digitizes human work using various senses and reproduces in real space what is planned in virtual space. The features are not only teaching-less but also "never stop," "make judgments," "gain experience and move faster," and so on. MOTOMAN NEXT becomes smarter and evolves as information about changes and quality is added. We will take full advantage of these features to challenge areas that only humans could access.

## Outcome of the Group's integrated strength

### What did you struggle with during development?

**Murai:** The main feature of MOTOMAN NEXT is that the robot perceives and judges the situation and completes the work by itself. Therefore, we added an adaptivity unit, which is key to development, and performed various functions starting from the OS and GPU performance of the unit. It uses path planning, wherein the robot plans its own trajectory instead of teaching, and determines the state of the robot. We have built a mechanism that can make judgments, move by itself in various situations, and also utilize the functions of AI.

The controller is based on a new common architecture called the YRM controller. It is of great significance to the entire Yaskawa Group that the controllers are not exclusive to robots but are common to control, including (M) products. Moreover, the robot arm has improved its ability to follow the commands from the controller.

We focused on executing the simulation program in virtual space with high accuracy in real space and aimed for simple movement in response to instructions. For motor development, we worked on not only the inertia ratio and reduction gear but also grease to improve command followability.

During this development process, (R), (M), and the YTC had to share the common goals of the project and work together to achieve them, but this was a difficult task. It was a new challenge; therefore, we worked on the problems and tried to solve them repeatedly.

**Okahisa:** MOTOMAN NEXT is a collaborative product of (R), (M), (AI3), and so on, using an optimal motor, architecture, and AI. It has the name of a robot, but I think it is the outcome of the Group's integrated strength.

## Cooperation with Partners / Global in Parallel

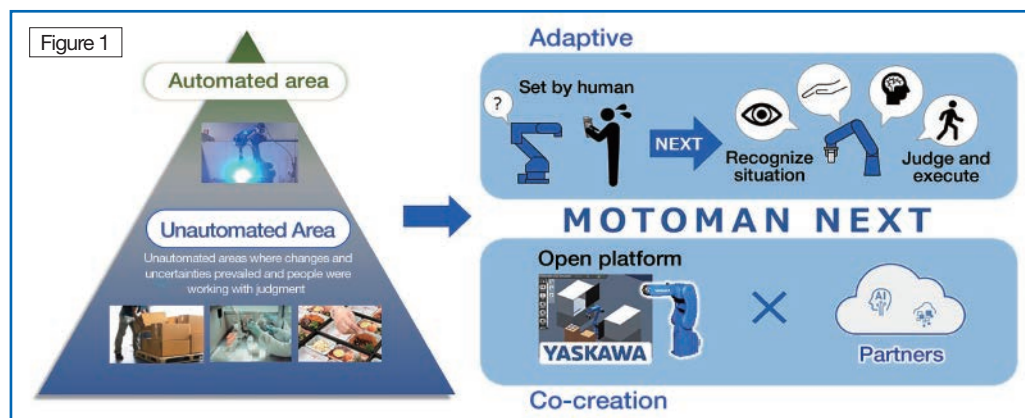
### What are the areas of use and future prospects?

**Murai:** We will work in completely new areas, but we will also try again in areas in which we have worked. For example, we have attempted automation with dual-arm robots, and we have left some areas that we could not achieve success in. This time, we will rechallenge tasks such as wiring, sorting, serving, and logistics with MOTOMAN NEXT.

**Okahisa:** We have advanced our technology to move robots from six to seven axes to increase their working ability; however, their judgment and teaching have not caught up. Now that AI has advanced to this point, adaptivity can be realized by combining judgment with working ability. The timing was not right in the past, but the environment is now ready. We will build an ecosystem by collaborating with partners, SIers and venture companies; increasing the number of players involved; and ensuring market penetration.

### Please tell us about your anticipation of global expansion.

**Okahisa:** We have been cultivating markets in the U.S. and Europe, even before the product launch. Startup companies can also grow in other countries. Korea and China also want to expand application based on the open platform architecture. We aim to respond to customers' needs rather than just offering products, focusing on installation to solve these challenges, and work in parallel on a global basis.



### Abbreviation of Organization and Facility Names:

(M) : Motion Control Div.  
(R) : Robotics Div.

#### Notes:

- 1 The positions and posts indicated are based on personnel organization information of FY 2024 first half.
- 2 See the back cover for company name abbreviations.



(BT) Company introduction

# Contributing to a Safe and Secure Society with the Highly Reliable Bestact Switch

When most people think of the Yaskawa Group's business, "Motion Control," "Robotics," and "System Engineering" come to mind, but there are other world-leading products. One of them is "Bestact," which supports safe and secure infrastructure in various fields, including railways. "Bestact" has its roots in 1931, when Yaskawa developed the first electromagnetic contactor in Japan to use silver pieces for contact points. We introduce Bestact Solutions Inc., which is currently engaged in the Bestact business, to you.



Representative Director  
President,  
Bestact Solutions Inc.  
**Yoshiharu  
Hayashi**

### What kind of product is Bestact?

Bestact, as its name derives from "Best Contact", is a power lead switch with excellent capability in harsh environments, long life, and extremely high contact reliability. Yaskawa's unique contact structure is enclosed in a glass tube, and no other company has the same product. In addition to Bestact itself, Yaskawa sells control relays and proximity switches that incorporate Bestact. Since the launch of Bestact in 1978, the company has produced a total of 45 million units by 2022.

### In what fields are they used?

Bestact has high performance compared to other products and is so reliable and durable that it can be opened and closed hundreds

of millions of times. In addition, Bestact can withstand harsh environments such as high temperatures, dust, vibration, and water. For this reason, Bestact is used in places such as railways, steel mills, electric power facilities, and lifts (cranes and elevators), where it is required to never stop, and helps ensure stable operation. In the railway sector in particular, Bestact is ranked first in Japan, with a 50% market share, and boasts a high market share in China.

### What is your global business development?

Currently, applications are limited to the railway sector in China and oil and shale gas drilling in the Americas. In Europe, Bestact has been used in some railways in the past, but it has not yet entered the market in earnest. In fact, it has not yet been used in many other regions and applications. In addition to the railway field, Bestact can be applied to a wide range of applications, and there is significant growth potential in the global market; therefore, we will focus on further sales expansion.

### Please leave your message.

Bestact supports the safety and security of infrastructure owing to its high performance. We would like to proudly tell that to everyone in the global members and let you know that we have such a unique product. If you have any idea of application, for which Bestact product can be used, please let us know. We would like to work together with you to contribute to a safe and secure society.

## Features of Bestact

### High Contact Reliability

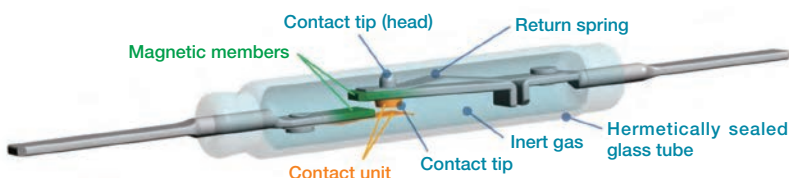
- The inert gas, inside the hermetically sealed glass tube, prevents oxidation of the contact.

### Resistant to Severe Environments

- Because the contact is in a hermetically sealed glass tube, it is mostly unaffected by gas, humidity, water, oil, and dust.

### Vibration and Shock Resistance

- The return spring holds the contact tip (head) against the hermetically sealed glass tube, making the structure strong against vibration and impact.



### Product Incorporation Bestact



Relay (Control the device)



Magnetic Proximity Switches (Detect the position)



## Application Examples

### Contributes to creating high-performance, safe and secure systems

#### Long life and excellent contact reliability

Railway Cars

Used as railway relays to control devices and as door switches. It's track record in Japan has been extended to China, where Bestact is also widely used.



Relays mounted on PCB



Door control switches

#### Can be used in harsh environments

Iron and Steel

Used as position detection switches in conveyor lines, coke ovens, blast furnaces, and rolling mills in steel plants operating in hot, humid and harsh environments.



Magnetic Proximity Switches



Limit Switches

#### Quick operating time and large input capacity

Electric Utilities

Used in power transmission equipment as control relays for circuit breakers that operate reliably in case of abnormality. Also used as proximity switches for condition monitoring of circuit breakers during inspection of high voltage facilities.



Relays mounted on PCB



Magnetic Proximity Switches

## Case study

### Bestact to support the safe operation of Shinkansen

Bestact is used to control various devices on Shinkansen trains and contribute to the safe operation of trains every day. It was first adopted in 1985, during the era of the former JNR, and is now used on all Shinkansen trains in Japan. The latest N700S uses a staggering 1,000 pieces per train.



Team Manager,  
Vehicle Control Team  
Technology Research and  
Development Dept.  
General Technology Div.  
CENTRAL JAPAN  
RAILWAY COMPANY

**Hidemitsu  
Tanaka**

Before adopting Bestacts, the size of the Automatic Train Control (ATC) device was as large as a wardrobe, and downsizing was a challenge, as the large size of the relay itself was a barrier. Adopting Bestact relays, smaller than those conventional relays, enabled us to mount them on a circuit board. As a result, the ATC device has been miniaturized, and vehicle space can be effectively utilized.

Also, the most important factor in the components of Shinkansen trains is reliability. Bestact delivers excellent performance in hazardous environments, can be shut off even at high voltages, and has a long service life. This makes

#### Reasons for adopting Bestact



- High Reliability
- ATC device\* can be miniaturized
- High voltage cutoff capacity

\* A device that automatically controls the speed of a train below the speed limit.

it possible for trains to operate safely.

In particular, we expect consistent high quality from Bestact, which is used in the ATC device responsible for train safety; therefore, we visit Bestact Solutions Inc. every year for quality confirmation and discussions. We will continue to work together in the pursuit of quality.



Shinkansen N700S  
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## — Building the future of semiconductors —

# Innovation through Product Development in Global Alignment

The mid-term business plan, "Realize 25," arises from Policy 2, "Capturing Growth Market with World's Best/First Automation Components." According to the policy, Japan and the U.S. cooperate in product development to capture the semiconductor market, which anticipates demand recovery. We spoke with Osamu Komiyaji, General Manager of Semiconductor Sales Department, and John Payne, Senior Vice President of Motion Control Division (YAI), about the global alignment.



General Manager  
SEMI Sales Dept.  
Corporate Sales & Marketing  
Div.,  
Yaskawa Electric  
Corporation

**Osamu Komiyaji**

### What is the background story for global alignment?

Earlier, Japan and the U.S. developed products for their own countries. When the IMM initiative\*1 was launched in 2017, we began to promote sales globally and collaborated in product development as well. We integrated (YAI)'s DD motor\*2 and semiconductor controllers, which had been dispatched to U.S. customers, while Japan's motion control and robot technologies expanded over the years. We manufactured the global product, adding functions that other regional partners could build locally.

\*1 Industry Marketing Management (IMM) System:

Initiatives to enhance marketing and sales capabilities globally, across divisions in specific markets.

\*2 DD motor: Short for Direct Drive motor. It is driven directly by a motor while rotating, without a belt or a gear.

### Which product did you develop first?

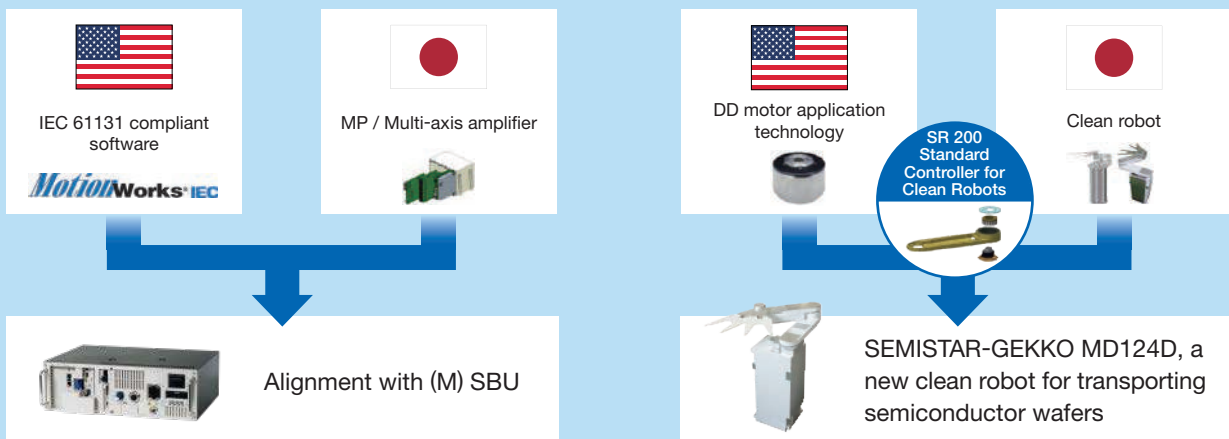
SR 200, a standard controller for clean robots, is the first product in the global alignment. It features MP hardware and multi-axis amplifiers, as well as software, employing robot-specific functions. The hardware is developed by (M) division in Japan, and the software is equipped with MPIEC, based on IEC\*3 61131 by (YAI). This product is truly a fusion of Japanese hardware and U.S. software.

\*3 IEC: Short for International Electrotechnical Commission

### How did you proceed with the development of semiconductor robots?

Originally, (YAI) customized the motors designed by the (M) division, and sold them as DD motors for robots manufactured by customers. In Japan, we worked with (YAI) and (M) to develop the SEMISTAR-GEKKO MD124D clean robot that can be used as a DD motor for wafer transfer robots. This is the first product integrating U.S. DD motor technology with Japanese robot technology. The adoption of a DD motor eliminates the belt and speed reducer, thereby enabling a clean wafer transfer robot that does not emit dust, and exhibits high accuracy and low vibration. Also, the in-house manufacturing rate has increased as there is no requirement to purchase parts externally.

## Image of global product development



### What are the achievements of global alignment?

Earlier, we developed everything, from start to finish, in Japan, however, by adopting global technologies, we could fulfill customer requirements and launch products in the market faster. The cycle got shortened from three years to one, which is a significant achievement. Yaskawa's strength is to fulfill customer requests precisely, and our capability to develop both, software and hardware, enhances our credibility. We are collaborating not only with the U.S., but with other regions as well.

### Do you face any difficulty in global cooperation?

Our customers always require and demand advancement of equipment. We have to meet such needs, but it is difficult for a single country to handle all such demands, so we have to understand each other's requirements and utilize each country's specialization. Semiconductors are essential components of modern society. I am eager to apply maximum efforts to develop them globally and achieve the desired results.



Sr Vice President  
Drives & Motion Division.,  
Yaskawa America, Inc.  
**John Payne**

### What is the current situation in the U.S. semiconductor market?

We recognize that the U.S. semi market is experiencing a significant inflection point. This shift is primarily fueled by the pervasive digitalization of everyday life and the burgeoning rise of technologies like AI. We particularly highlight the automotive sector's remarkable transformation. The industry's shift towards autonomous-driving and EV has exponentially increased semiconductor demand, marking a new era of growth that transcends the previous milestones set by PC and smartphone technology.

### What are the customer needs for our products?

A semiconductor features have now shrunk to minuscule sizes, as small as 3 nanometers so that in semiconductor manufacturing,

we emphasize the absolute necessity for "precision". Thereby accentuating the vital role of Yaskawa's advanced precision in motion control technologies. A piece of silicon can exponentially increase a staggering value, so mishandling at this microscopic scale could lead to significant financial repercussions. The paramount importance of accuracy and reliability in the production process is unmistakably clear.

### Please tell us about the achievements of alignment between Japan and the U.S.

In the domain of product development, we focus on the synergistic collaboration between the U.S. and Japan, particularly in the development of SR200 and GEKKO. The semi-robot controller, a groundbreaking product born from a software platform developed in the U.S., is a testament to Yaskawa's dedication to global collaboration and customer-focused innovation.

And the clean robot "SEMISTAR-GEKKO MD124D", which responds to the needs of wafer transport with low vibration, is truly an innovation by the Group's global collaboration. Bringing together our specialties from Japan and the United States has helped create the products our customers are demanding for.

### What are the strengths of (YAI) in terms of development?

An intricate interplay between software and hardware is crucial for achieving control systems characterized by absolute precision and infallible reliability. This innovative ethos extends to adapting to the advanced manufacturing processes of semiconductor chips and views as the critical importance of developing tools and environments that empower customers to proactively identify and mitigate potential failures, thereby ensuring the seamless and efficient operation of their sophisticated equipment.


(YAI) strategically balances between core hardware technology and software customization to cater to distinct customer requirements. This method involves upholding the integrity of Yaskawa's foundational technology while adeptly modifying it to align with individual customer specifications. This balanced approach has been instrumental in fortifying Yaskawa's competitive edge in the market.

Confronting the competitive landscape, we challenge posed by large rival companies, as well as the looming threats from emerging competitors merging low-cost components with advanced software capabilities. Despite these hurdles, we commit unwaveringly to ensure that Yaskawa's products persistently establish the standard in quality and innovation.



# Once Again, Let's Reaffirm the Concept behind the YASKAWA Logo and Penetrate the Brand Globally!

On the 100th year anniversary of its founding in 2015, Yaskawa revamped the common corporate logo of the Yaskawa Group with the aim of evolving into a truly global company and achieving further growth. The logo is an important branding factor to ensure that the "YASKAWA" name is correctly introduced to customers worldwide and that a presence is formed. Let's reaffirm the concept behind the logo and become "One YASKAWA" to promote the penetration of the brand globally.

<p>YASKAWA Logo</p> 	<p>It is a simple logo expressing a sense of credibility and stability using capital letters that realize both visibility and legibility. Supple curved lines express the flexibility and creativity of Yaskawa employees that provide solutions to various problems. They also present an image of humanity, showing our customer-oriented culture. The lines extending upward express Yaskawa's intention to expand its global business and its potential.</p>
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In the future, we plan to inform our global group of companies about the Corporate Identity Design System Manual, which serves as a guideline for the use of logos in products. We here introduce the most important points in the manual and ask for your cooperation to ensure that each employee uses the logo correctly and sends out a unified image.

## The most important points!


**Point 1 Adhere to the brand color**

YASKAWA BLUE should be reproduced on the basis of PANTONE 2935 C. However, if reproduction by PANTONE 2935 C is difficult due to various restrictions on the media, approximate colors may be used. Please reproduce as closely as possible.


	CMYK	C100% + M60%
	DIC	641
	RGB	R0 G86 B185
	Hex	#0056B9

**Point 2 Pay attention to how you place the logo**


**Isolation**  
Securing fixed spaces around the YASKAWA logo and prescribing the prevention of the entry of other elements in the space to always display the YASKAWA logo in the correct form is referred to as isolation.




**Prohibited Examples**  
Some examples are particularly misleading.



Do not include other elements (images or text) in the isolation.




Do not place on facet lines or on a gradient background.



Do not place on a background color that is difficult to distinguish.

**Point 3 Use regular logo data** \* Please request from Corporate Communications Dept.

YASKAWA Logo	Japanese official Logo	English official Logo
	株式会社 安川電機	YASKAWA ELECTRIC CORPORATION

If you need logo data or have any questions, please contact us. [pr@yaskawa.co.jp](mailto:pr@yaskawa.co.jp)



## Driving Force

Each employee represents a driving force for One YASKAWA.  
This section introduces employees in the Yaskawa Group around the world.

### Q What is the scope and focus of your work?

I am in charge of the mechanical design of new products in the AC drive and currently developing a thin water-cooled AC drive for the vacuum pump market in China. As the leader of (SYD)'s priority development projects, we aim to overcome technological challenges and develop attractive products in collaboration with Team Yaskawa.

### Q What are your future goals?

I want to acquire new knowledge and constantly take on new challenges. By actively introducing new technologies, materials, and trends into the process and by developing high-value-added products that meet customer needs, I want to overcome competition in the rapidly changing Chinese market.

### Q What is Yaskawa proud of?

YASKAWA has high technological capabilities, abundant development resources, and a secure development environment; therefore, we are attracted to the fact that we can reliably achieve product development and create more value. Taking advantage of this environment, we will make efforts to solve the core of our problems by understanding the true needs of our customers, with the goal of putting them first.

### Q How do you spend your time off?

I like new things, so I spend my weekends with friends, going to popular shops and Murder Mystery events, which have been all the rage in China for the past few years. I also enjoy playing video games with my kids.



FILE 11  
China

## Taking on new challenges and developing products that overcome the rapidly changing Chinese market

(SYD) SHANGHAI YASKAWA DRIVE CO., LTD.  
Development center hardware development division

**Zhang Biao**



Playing video games with the kids



Daily challenge for new technologies



FILE 12  
India

## Aiming to Build the Best Compliance and Personnel Management System

(YIND) YASKAWA INDIA PRIVATE LIMITED  
Corporate Secretary and Corporate HR

**Mahesh Kumar B**

### Q What is the scope and focus of your work?

I assume responsibility for (YIND) corporate governance and human resource development. Daily activities include compliance management, internal policy management, contract management, litigation management, human resources, and general affairs. As for human resources, we are currently focusing on the installation of the human resource management system.

We are also proud to be in charge of social contribution activities in

line with Yaskawa's mission.

### Q What are your future goals?

We want to maintain the compliance-oriented culture of (YIND) and develop a compliance framework that provides the best assurance to our stakeholders. We also want to establish the best personnel management system to improve employee satisfaction and make effort to attract and retain talented personnel.

### Q What is Yaskawa proud of?

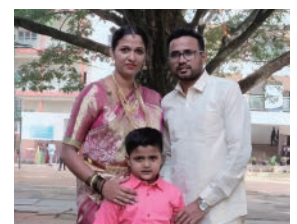
Yaskawa stands out from other companies because of its superior quality, technical products, corporate culture, and employee empathy. I am honored to be part of a corporate culture that respects everyone and provides equal opportunities to learn, collaborate, grow, and make a difference.

### Q How do you spend your time off?

I spend a lot of my weekends with my family and love organizing social gatherings with friends. When I refresh myself with cricket on Sunday, I feel energized for Monday. I'm also learning Japanese, as I'm interested in their culture.



Presentation for promoting compliance



Family holidays



(YER)YASKAWA EUROPE ROBOTICS D.O.O.

# The Road in Slovenia is Named "Urica Daigora Yasukawe"!

Reporter : (YER) Iura Yoshinori



Urica Daigora Yasukawe facing (YER)

The road facing YASKAWA EUROPE ROBOTICS D.O.O in Slovenia was named "Urica Daigora Yasukawe" and the address of (YER) changed to Urica Daigora Yasukawe 1 on September 28, 2023. When (YER) was established in 2017, we submitted an internal idea

to the Committee for Standardization of Geographical Names to name it "Yaskawa s street," but it was not acceptable to use the company name. With the support of Mayor Kochevier, we decided to apply for a proposal in the name of Daigoro Yasukawa, the founder of Yaskawa. We had a long discussion to express our thoughts and enthusiasm. As a result, Urica Daigora Yasukawe was named because his social contribution activities were historically and culturally valuable and could be used in the future. In Slovenian, "Urica" means "street," and in Slovenian grammar, even proper nouns change their ending so that the gender can be understood, so DAIGORO → A YASUKAWA → E. Slovenians can also understand that this is "street of YASUKAWA Daigoro (male)."

## Streets related to Yaskawa can be found all over the world!

### ■ (YEC)YASKAWA ELECTRIC CORPORATION

#### • Yukuhashi Plant

The street in front of the Yukuhashi plant is about 700 meters



#### • Iruma Plant

The street in front of the Iruma plant



### ■ (YAI) YASKAWA AMERICA, INC.

The street in front of the main office of the robotics division is called "Automation Way." It comes with the automation related to Yaskawa's businesses.



### ■ (YEU) YASKAWA EUROPE GmbH

The street in front of the main office of the robotics division is "YASKAWA strasse."



(YCR)YASKAWA (China) Robotics CO., LTD.

# Celebration of 10 years of mass production of industrial robots and 100,000 units shipment

Reporter : (YCR) Zhou Yue



The 100,000th Anniversary Robot Shipment Ceremony

(YCR) held a commemorative ceremony to mark the 10th anniversary of the mass production of industrial robots and the 100,000-unit shipment milestone on October 10, 2023. Eighty people, including Changzhou City officials and representatives of Yaskawa Group companies, participated in the ceremony. Following a congratulatory speech from Mr. Sai of the Changzhou City Commission and greetings from Mr. Okahisa, the General Manager of the Robotics Div, of (YEC) and Mr. Okura, the Chairman

of (YCR), the guests pressed a switch, and the partition in the center of the stage opened and the robot appeared! With soaring confetti and loud applause, the 100,000th commemorative robot was loaded onto a shipping truck.

(YCR) has been through a lot. Even during the COVID-19 pandemic, our employees worked together to respond to deliver by increasing production and developing new products in line with customer demands.

The demand for industrial robots in China is expected to increase.

(YCR) will continue to work hard to achieve its next cumulative shipment of 200,000 units as soon as possible to further increase its presence in the Chinese market.



Mr.Okahisa presents a souvenir to Mr.Ishimaru, Director, President of (YCR)

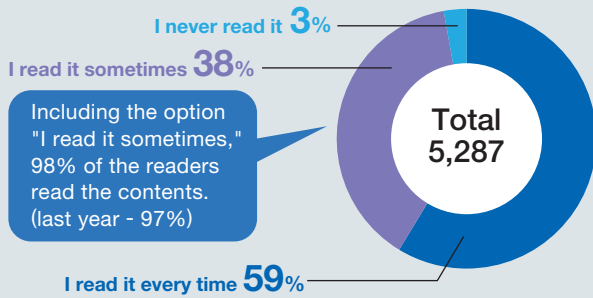


# The Yaskawa Group Newsletter "World Wide YASKAWA (W.W.Y.)" Readers' Survey Results

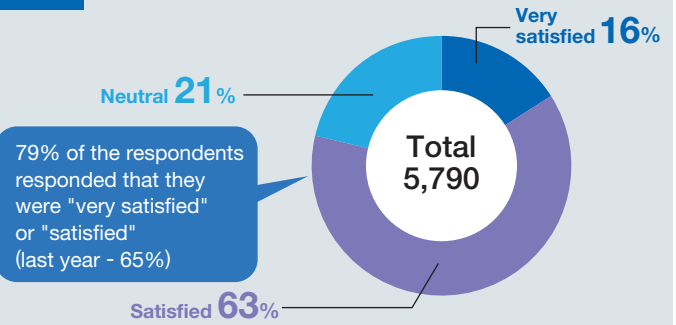
Number of respondents: 5,790; Response rate: 65%

This section presents the results of a W.W.Y. readers' survey conducted on delivery status and content with respect to Yaskawa Group employees during November–December, 2023. The purpose of this survey was to improve the content of the newsletter. Thank you for your cooperation in answering the questionnaire.

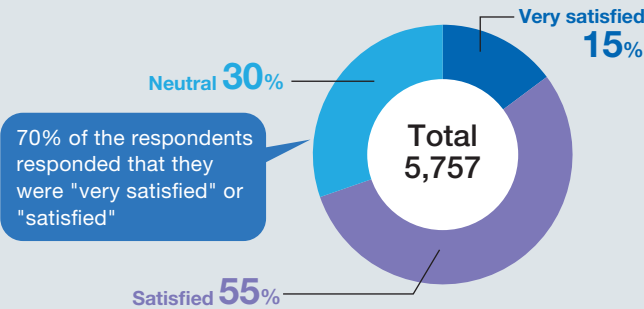
## Q1 Do you read the contents?



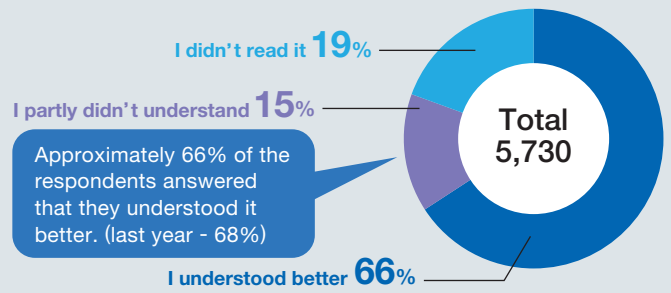
## Q2 Are you satisfied with the contents?



## Q3 In the September 2023 issue, we started a new series of "X (Cross) Stories" as a content to introduce what is happening in the world and Yaskawa's initiative to it by connecting group companies, job categories, and industries. Let us know what you think of it.



## Q4 Did you understand the contents of the feature articles?



## Q5 Have you noticed any change in your attitude or behavior after reading the feature?



### Readers' voice for W.W.Y.

- I want to see internal and external examples of i3-Mechatronics or YDX.
- I want to know the latest development and product information of the Yaskawa Group.
- I want to know global employees and local information.
- I want to see more examples of product utilization.

The Yaskawa Group Magazine is published to "Contribute to the realization of the management vision, by providing information that the Yaskawa Group employees should share, and to foster a sense of ONE Yaskawa." We will use your valuable opinions to create a more readable and satisfying edition of the magazine.

Please contact the corporate communication division to share your opinions and comments on World Wide YASKAWA.

You can e-mail them to [pr@yaskawa.co.jp](mailto:pr@yaskawa.co.jp).

### Notice of section title and design change

Starting with the March 2024 issue, we changed the title of the section to convey the content at a glance and increase motivation. The design of the section title was also redesigned to reflect the Yaskawa principles as a big vessel exploring across time and space.

Contents	Previous titles	New titles (from March 2024)
Top Message	YASKAWA NEXT	COMPASS
Special Feature	YASKAWA NOW	Steering the Future
Cross Regional Initiatives	"X (CROSS) " Stories	"X (CROSS) " Stories
Brands, History, etc.	YASKAWA BRND	YASKAWA BRND

Contents	Previous titles	New titles (from March 2024)
Employee Introduction	OUR PEOPLE	Driving Force
News Events	NEWS & TOPICS	Global News
Customer Case Studies	YASKAWA in ACTION	Our Pride, Happy Customers

## YASKAWA GROUP

### | Japan

(YEC)	YASKAWA ELECTRIC CORPORATION
(YAD)	YASKAWA AUTOMATION & DRIVES CORP.
(YMS)	YASKAWA MECHATREC SUEMATSU KYUKI CORP.
(FAMS)	FOOD & AGRI MECHATRO SOLUTION INC.
(AI3)	AI CUBE INC.
(RBI)	ROBOTIC BIOLOGY INSTITUTE INC.
(BT)	BESTACT SOLUTIONS INC.
(i3D)	i3 DIGITAL CORPORATION
(C)	YASKAWA CONTROLS CO., LTD.
(YL)	YASKAWA LOGISTEC CORPORATION
(YEM)	YASKAWA MANUFACTURING CORPORATION
(Ei)	DOEI CORPORATION
(YOC)	YASKAWA OBVIOUS COMMUNICATIONS INC.
(YLP)	YASKAWA PACKAGING CORP.
(Fukka)	FUKUOKA KASEI INDUSTRIES CO., LTD.
(HKS)	HK SHEET METAL TECH CO., LTD.
(Kyoan)	KYOAN KOGYO CO., LTD.
(SMX)	SYMEX Co., Ltd

### | EMEA

(YEU)	YASKAWA EUROPE GmbH
(YNR)	YASKAWA NORDIC AB
(YGB)	YASKAWA ELECTRIC UK LTD.
(YET)	YASKAWA EUROPE TECHNOLOGY, LTD.
(YER)	YASKAWA EUROPE ROBOTICS D.O.O.
(YEUK)	YASKAWA UK LTD.
(YIT)	YASKAWA ITALIA S.R.L.
(YFR)	YASKAWA FRANCE SAS
(YIB)	YASKAWA IBERICA S.L.
(YBE)	YASKAWA BENELUX B.V.
(YSL)	YASKAWA SLOVENIJA D.O.O.
(YRS)	YASKAWA RISTRO D.O.O.
(YCZ)	YASKAWA CZECH S.R.O.
(YSA)	YASKAWA SOUTHERN AFRICA (PTY) LTD.
(YTR)	YASKAWA TURKEY ELEKTRIK TICARET LTD. STI.
(YFI)	YASKAWA FINLAND OY
(YPL)	YASKAWA POLSKA SP. Z O.O.

### | The Americas

(YAI)	YASKAWA AMERICA, INC.
(SOL)	SOLECTRIA RENEWABLES, LLC
(YEB)	YASKAWA ELETRICO DO BRASIL LTDA.
(YCA)	YASKAWA CANADA INC.
(YMX)	YASKAWA MEXICO S.A. DE C.V.
(MIB)	MOTOMAN ROBOTICA DO BRASIL, LTDA

### | Asia

(China)	YASKAWA ELECTRIC (CHINA) CO., LTD.
(YEK)	YASKAWA ELECTRIC KOREA CORPORATION
(YAP)	YASKAWA ASIA PACIFIC PTE. LTD.
(SYD)	SHANGHAI YASKAWA DRIVE CO., LTD.
(YTW)	YASKAWA ELECTRIC TAIWAN CORPORATION
(Shenyang)	YASKAWA ELECTRIC (SHENYANG) CO., LTD.
(YSR)	YASKAWA SHOUGANG ROBOT CO., LTD.
(YCR)	YASKAWA (CHINA) ROBOTICS CO., LTD
(YCM)	YASKAWA (CHANGZHOU) MECHATRONICS SYSTEM CO., LTD.
(YIND)	YASKAWA INDIA PRIVATE LIMITED
(Tsusho)	YASKAWA TSUSHO (SHANGHAI) CO., LTD.
(YAPT)	YASKAWA ELECTRIC (THAILAND) CO., LTD.
(YAPI)	PT. YASKAWA ELECTRIC INDONESIA
(YAPV)	YASKAWA ELECTRIC VIETNAM CO., LTD.
(YAPM)	YASKAWA MALAYSIA SDN. BHD.
(Toei)	DONGYING YASKAWA CONTROLS CO., LTD.

Note: Abbreviations of company names are shown in parentheses.

#### Cover photo: (YEC) PV inverter Enewell-SOL P3A Production Line



At the inverter factory of the Yukuhashi Plant, the mass production of the new PV inverter Enewell-SOL P3A began in May 2023, and the production capacity is now 750 units per month, as of December 2023. In recent years, in the midst of the decarbonization trend, there has been growing interest in solar power generation for home consumption. The Enewell-SOL P3A has built-in self-consumption functions and delivers 25kW, which is one of the largest outputs in the 200V class. In particular, it is possible to maximize the use of the generated electricity by demonstrating its superiority in medium-scale self-consumption PV systems.



Enewell-SOL P3A Shipping Ceremony on May 9, 2023

**Note** The Yaskawa group newsletter "W.W.Y." is for internal use only. Please refrain from distributing the copies to third parties.