

YASKAWA

YASKAWA ELECTRIC CORPORATION
www.yaskawa.co.jp/en/

YASKAWA

YASKAWA ELECTRIC CORPORATION
CORPORATE PROFILE



The Last 100 Years. And Toward the Future.

Our passion for manufacturing is timeless and will never change.

1915



1917
Commercialized three-phase
induction motor

2022



2017
Collaborative robot
MOTOMAN-HC10DT



2021
AC-Servo Drive Σ-X Series



2021
YRM-X Controller

Since being founded in 1915, Yaskawa Electric has set “electric motors and their applications” as its business domain and supported the leading-edge industries of the age. In order to engage in business with its own technology, the company established a creed of “becoming a technology-centered company,” proposed the concept of “mechatronics*,” ahead of the rest of the world, and has maintained quality-first management with the determination to develop the world’s first-in-class and revolutionary technologies and products. Yaskawa’s core technologies are “motion control,” “robotics,” and “power conversion.” These technologies and products born and created out of our search for elaborate control of mechanical movements contribute on a daily basis to improvements in the quality and efficiency of manufacturing around the world. We will continue to evolve technology and contribute to development of the world through our new solutions.

* In the late 1960s, Yaskawa Electric led the world in putting forward this concept fusing “mechanism” and “electronics.” This concept evolved when we combined our customers’ machinery with Yaskawa’s electric products to create superior quality and function.



AC servo drives &
controllers



AC drives



Robotics



System
engineering



Environmental and
energy equipment

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Cities move forward and never rest.

What kind of future would you like to see?

Our Vision

We will provide new value to society by integrating the evolution of core technologies and open innovation.

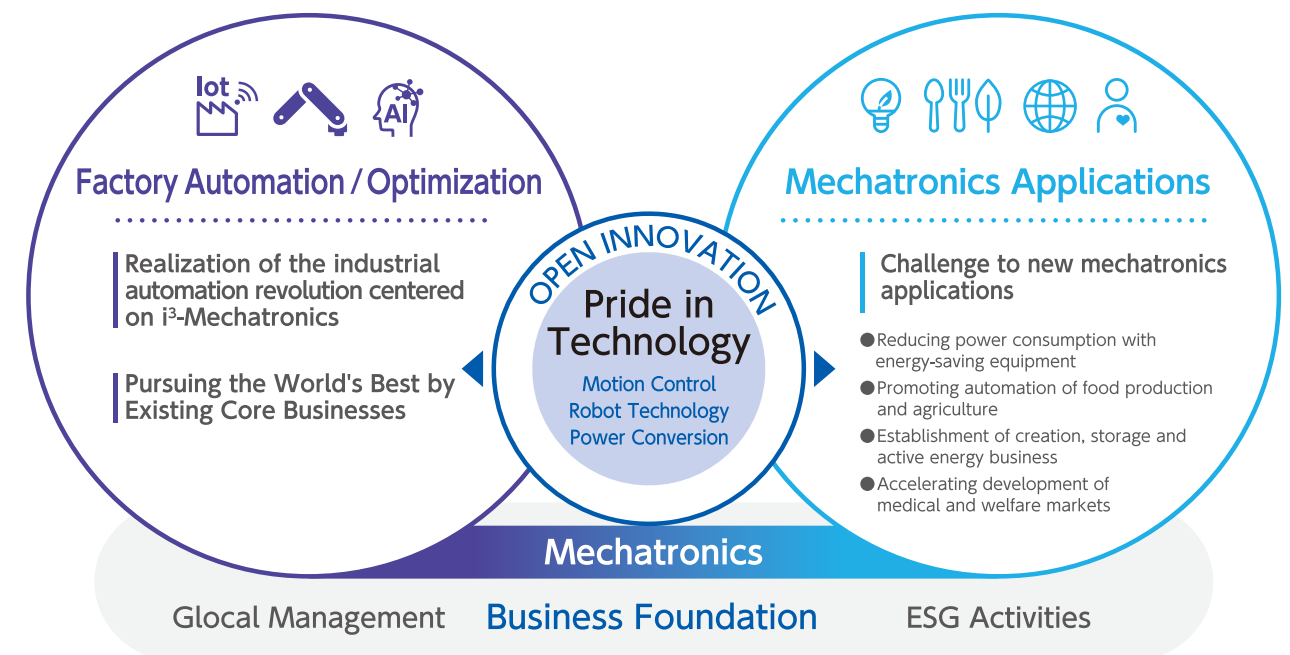
In 2015, the 100-year anniversary of our company's founding, the Company saw a dramatic change in the business environment as an opportunity and adopted the "Vision 2025" as a blueprint for its future management. In 2019, we reviewed the "Vision 2025" to clarify our company's vision. In this review, we reconfirmed our company's vision and established "factory automation and optimization" and "application area of mechatronics" centered on mechatronics as business domains. Furthermore, in order to accelerate the sustainable growth of society and the improvement of corporate value, while promoting quality-oriented management and real-time digital management, we are actively working to clarify themes to be addressed from the perspective of "ESG" with a focus on social contribution through our business activities of providing unique products.

Vision 2025

By advancing our core businesses, we will contribute to solving our customers' management issues. We will also create new added value for society by expanding new fields that apply mechatronics technology.

Factory automation and optimization
business centered on i³-Mechatronics

New Mechatronics Applications for
Sustainable Development of Society



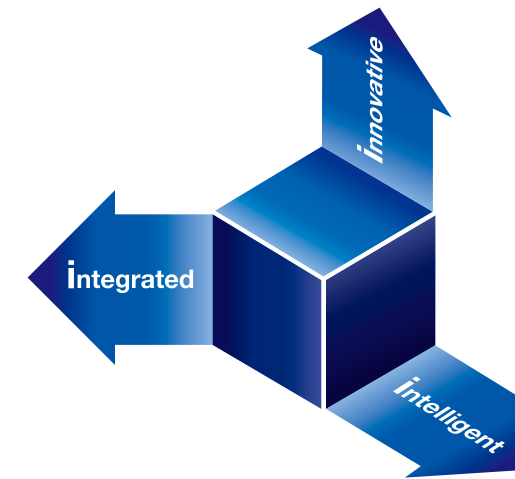
※ i³-Mechatronics : Solution Concept for Realizing a New Industrial Automation Revolution

A new industrial automation revolution is starting
with digital data management

i³-Mechatronics

We provide unprecedented solutions with three “i”.

New value with “i cube”,
digital data solution



By putting digital data management on top of the automated solutions based on mechatronics technologies and products that YASKAWA has provided to customers, YASKAWA realizes the solution concept “i³-Mechatronics (i-cube Mechatronics)” and contributes to resolving customer’s business challenges from the production sites.

THREE steps to realize i³-Mechatronics

Step 1 integrated

- A production site is visualized with data by motors which act as a sensor.
- Further automation is promoted by linking components such as robots, servo drives and AC drives etc. and their processes.
- FA layer is wired with IT layer.

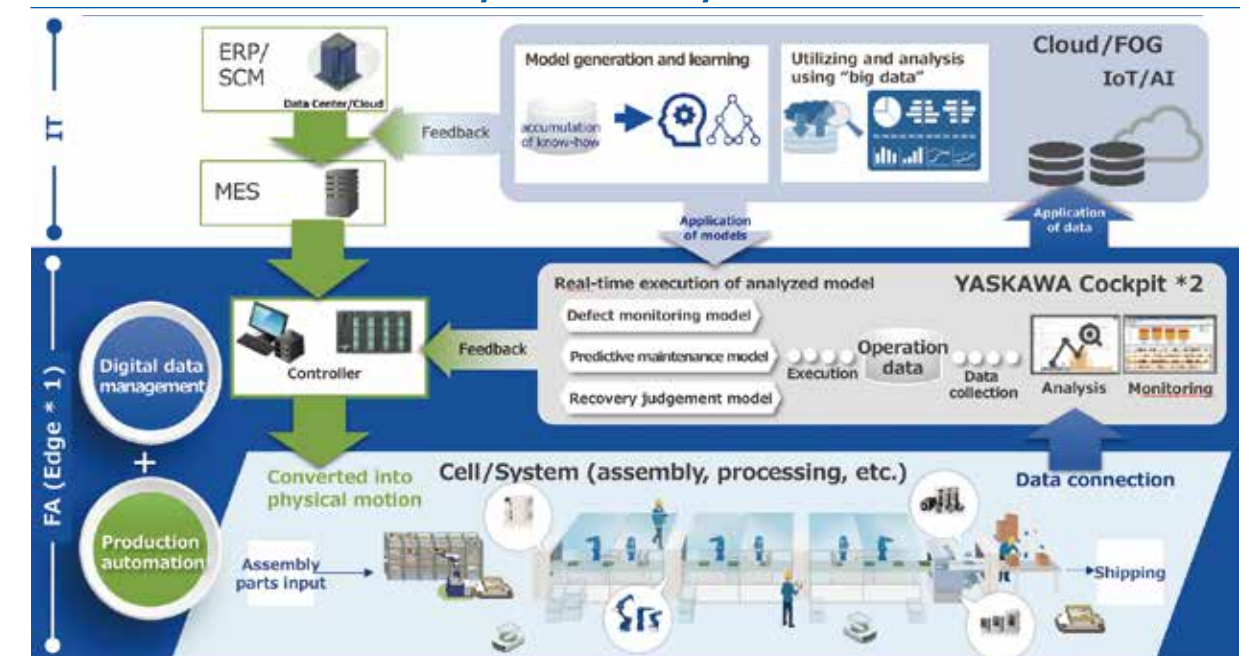
Step 2 intelligent

- Data driven analysis and learning (big data analysis and AI)

Step 3 innovative

- Data is fed back and turned into a movement for the improved productivity.

Smart factory realized by i³-Mechatronics



* 1 : Edge is an information processing field for data analysis and feedback that require real-time performance at production sites or factories.

* 2 : Cockpit is a software that able to collect, store, and analyze real-time data on equipment and devices at production sites.

Driving Society

With 100 years of experience with motors and their control, we contribute to industrial and social developments with technologies we have cultivated.

AC servo drives and AC drives that command a world No. 1 share

The motion control business broadly consists of two product lineups: AC servo drives and AC drives. AC servo drives, which excel at high-speed and high-precision position control, are applied to various high-speed and high-performance equipment and automatic machines. AC drives control the rotation speeds of motors by flexibly changing the power-supply frequencies of motors. The emergence of AC drives drastically upgraded the productivity of factories, and contributed to advancements in industrial and social development and energy savings. We, as a leading company of motor controls, have gained trust from our customers with a solid record of performance.

Major applications of AC servo drives

- Semiconductor and liquid crystal manufacturing equipment
- Chip mounters
- Machine tools
- Food and packaging machinery
- Textile machines
- Robots



AC-Servo Drive Σ-X series
Motion controller "MP3000 series"

Major applications of AC drives

- Conveyors
- Fans and pumps
- Air-conditioning equipment
- Elevators and escalators
- Cranes



Yaskawa Inverter series

Application of AC drive technology to utilization of renewable energy

For the prevention of global warming, there is an increasing need to utilize renewable energy. Through the application of AC drive technology, we have commercialized power conditioners for solar power generation and drive systems for electric vehicles toward energy creation/application/storage.



Enewell-SOL P2H
(Three-phase insulated
PV inverter)



Motor drive system
for electric vehicles

Stepping onto a motionless escalator.
It then begins to move gently
as if a car was being driven by an experienced driver.

Smart Factory

Realization of ideal automation for humans and robots to coexist and cooperate

One car comes off the production line every three seconds in Japan.

How do robots in this country do this work?

Industrial robot “MOTOMAN” operating globally

Since the debut of the all-electric industrial robot “MOTOMAN” in Japan in 1977, we have taken a leading role in the world's industrial robot market. Starting with arc welding for automobile production, for which we remain a market leader, our robots have assumed an active role in every industrial field including spot welding, handling, assembly and coating, as well as handling and transport in clean rooms for liquid crystal, organic EL displays and semiconductor manufacturing.

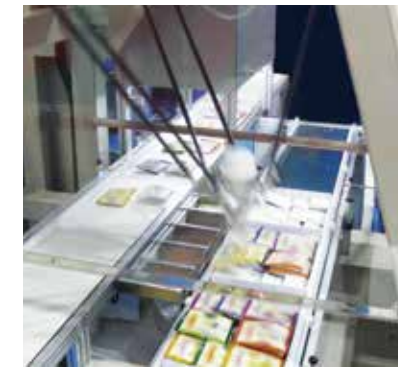
As one solution to the labor shortage in recent years, the scope of robot applications is extending to the food industry and other markets where there has been little practice in robotic automation.



Auto body welding



Our manufacturing plant where robots make robots



Application in food packaging

From robots that replace to humans to robots that work with humans

Robots are now expanding their usage not only for industry but also many other fields through improving their speed and accuracy as well as handling complex movement and enhancing their safety function to collaborate with humans.

Yaskawa developed a robot that can work with humans without the need for a safety fence in 2017. With this robot, we support for the automation in the industries such as the consumer electronics, computers and communication equipment, in which robots have yet to be introduced as much.

Note : Risk assessment is needed at any cases though MOTOMAN-HC10DT doesn't need a safety fence.



Collaborative robot
MOTOMAN-HC10DT

Secure Lifeline

Yaskawa's system engineering technology supports our life 24 hours a day.

The glass of water we drink
every morning when we wake up.
Why is it so refreshing no matter what season?

Ensuring the stable operation of water treatment plants and other public facilities

We support public electric facilities for which stable operation is essential, such as water treatment plants and transportation infrastructures. For water supply/sewage facilities that cannot be stopped even for one moment, we offer not only assured reliability but also solutions that meet social needs, including environmental protection and disaster prevention. For the emerging needs, such as energy savings, advanced water purification, and effective utilization of facilities, we propose and construct new systems making full use of the leading-edge system engineering technology.



Sewage activity monitoring room

Offering optimum control systems with advanced technology

For many years, we have been engaged in the development, design, and production of electric equipment for industrial systems, and have accumulated a wealth of experience. Our control units and drive units have been adopted in every blast furnace operating in Japan, and have also secured top share around the world in large-scale blast furnace* systems, supporting their stable operations on a 24-hour basis. We contribute to a comfortable life and the creation of an affluent society by offering highly reliable industrial systems with advanced technology and high-quality products.

* Volumetric capacity 5,000 m³ or more



Blast furnace facility

Contributing to effective utilization of renewable energy and products for solar power generation

Utilization of renewable energy is being pressed forward worldwide, and we have commercialized generators and converters for large-scale wind power generation. In addition, we have created a lineup of large-capacity drive solutions from low voltage to high voltage, aiming at business expansion by pursuing new customers and entering into new fields, such as the marine vessel market. In addition, by reducing the total cost of photovoltaic power generation using power conditions for photovoltaic power generation, we are contributing to the conversion of renewable energy into a mainstay power source.



Electric equipment for large scale wind power generation



XGI1500

Human instinct will devise
the technology to come.

Passion for Innovation

Challenges and passion for innovation

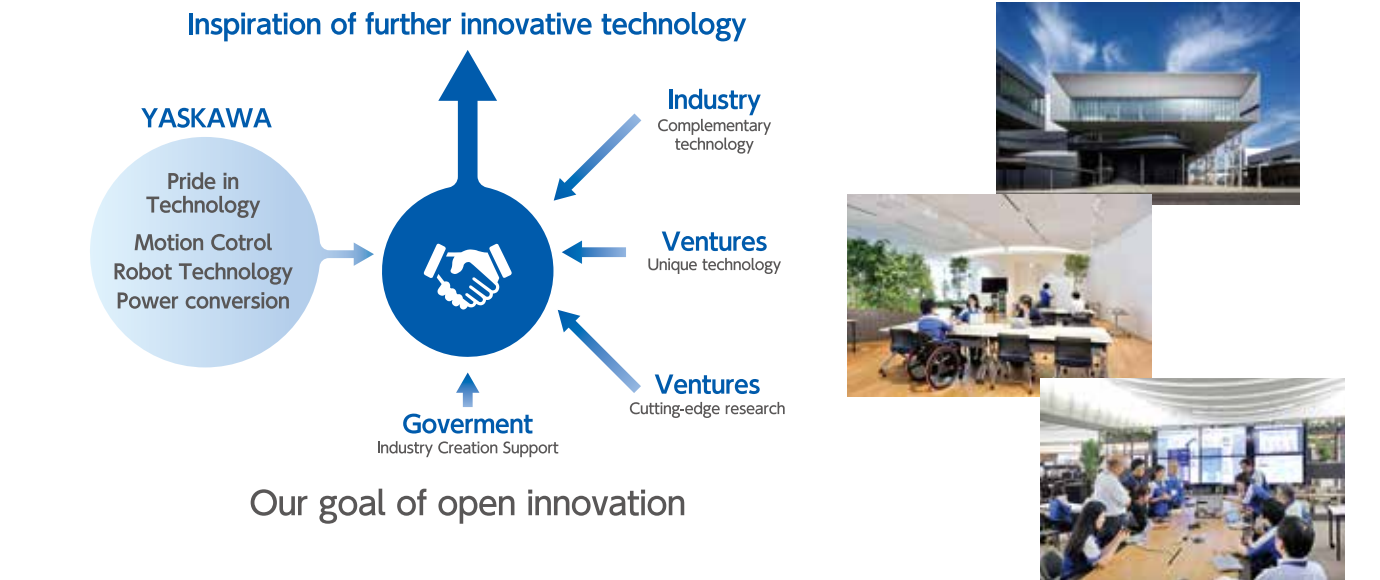
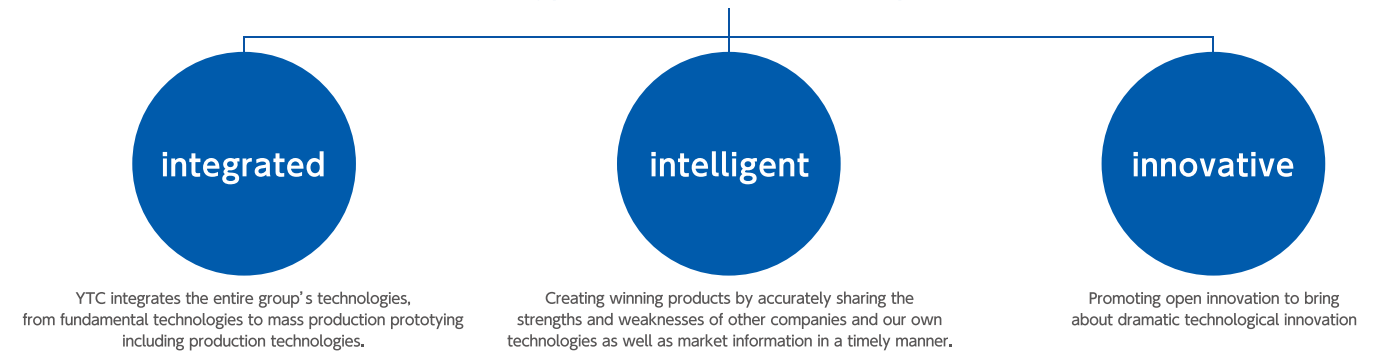
Continuously taking on challenges for high-value added technological innovation to change the world

Yaskawa Electric Corporation put into the "Yaskawa Technology Center (YTC)", an innovation base that integrates basic technology development, production technology development, product development, product and facility design, quality control, and mass production prototyping, with the aim of building a development system that can quickly respond to customer demands.

At YTC as our hub location, we will work to create an innovative and efficient development environment and promote the development of the world's first and best products.

YTC Concept

With open innovation in cooperation with the Yaskawa Group, YTC will become a base that integrates technologies to develop winning products for customers in a timely manner



Like animals and plants,
a company might also be a companion living on this planet.

Action for Society

For building a sustainable society

Sustainability

The Yaskawa Group will respond to the trust and expectations of all stakeholders, including customers and business partners, people in countries and regions where we conduct business, shareholders and investors, and employees. In addition, we will contribute to the sustainable development of the economy and society by implementing our management principle of “contributing to the development of society and the welfare of humankind through the conduct of business” and strive to continuously increase corporate value.

Sustainability Policy







We will strive to realize a sustainable society and increase corporate value through the implementation of the Yaskawa Group Principle of Management which is to leverage the pursuit of our business to contribute to the advancement of society and the well-being of humankind.

1. We will contribute to the value creation for customers and society through creating innovation by cutting-edge mechatronics technologies.
2. We will realize fair and transparent corporate management through communication and collaboration with stakeholders around the world.
3. We will work to resolve social issues globally with the aim of achieving SDGs as a universal goal.

Sustainability Challenges and Targets

In addition, in line with the formulation of the Sustainability Policy, we have prepared challenges and targets related to sustainability.

Create Social Value and Solve Social Issues through Business Activities

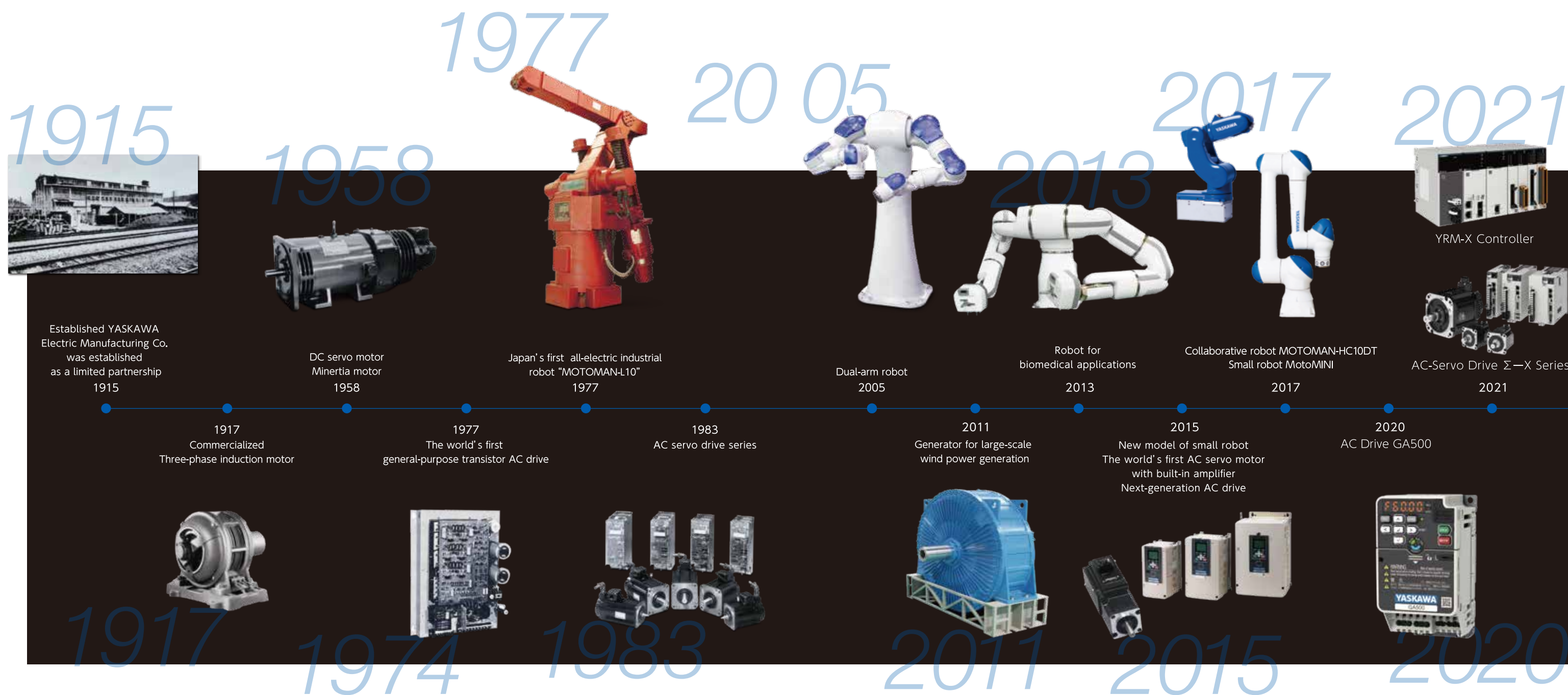
- ① Realize revolutionary industrial automation with our partners through “i3-Mechatronics” 
- ② Build clean social infrastructure and foundation for safe and comfortable living    
- ③ Develop new technologies and business domains through open innovations 

Strengthen Management Foundation that Contributes to Sustainable Society/Businesses

- ④ Sustainable and productive manufacturing   
 - Introduction of cutting-edge manufacturing
 - Improvement of product safety and quality
 - Reduction of greenhouse gas emission through the Green Process
 - Construction of a sustainable supply chain
- ⑤ Create a rewarding workplace and human resource development    
 - Diversity and inclusion
 - Occupational safety
 - Contribution to local communities
 - Human resource development
 - Human rights and work practices
- ⑥ Fair and transparent governance system 
 - “Aggressive” governance system utilizing the Corporate Governance Code
 - Enhancement of compliance
 - Strengthening of information security

DNA of YASKAWA

Taking over the spirit of foundation, always developing cutting-edge technologies and products centering on “electric motors and their applications”



Global Network

Worldwide Yaskawa

Yaskawa's worldwide network includes business bases in 30 countries and production bases in 13 countries.

Our customers' global businesses are reliably supported by connecting our group companies and service bases throughout the world. We provide regionally-based finely-tuned support.

Europe



YASKAWA EUROPE GmbH

Germany

- YASKAWA EUROPE GmbH

Sweden

- YASKAWA NORDIC AB

U.K.

- YASKAWA ELECTRIC UK LTD.
- YASKAWA UK LTD.

Italy

- YASKAWA ITALIA S.R.L.

France

- YASKAWA FRANCE SAS

Spain

- YASKAWA IBERICA S.L.

Finland

- YASKAWA FINLAND OY
- THE SWITCH ENGINEERING OY

Norway

- THE SWITCH MARINE DRIVE NORWAY AS

Netherlands

- YASKAWA BENELUX BV

Slovenia

- YASKAWA SLOVENIJA D.O.O.
- YASKAWA RISTRO D.O.O.

Czech Republic

- YASKAWA CZECH S.R.O.

Poland

- YASKAWA POLSKA SP. ZO. O.

North America



YASKAWA AMERICA, Inc.

U.S.A.

- YASKAWA AMERICA, INC.
- SOLECTRIA RENEWABLES, LLC

Canada

- YASKAWA CANADA INC.

Mexico

- YASKAWA MEXICO S.A. DE C.V.

Middle East•Africa

Israel

- YASKAWA EUROPE TECHNOLOGY LTD.

Turkey

- YASKAWA TURKEY ELEKTRİK TICARET LTD. STI.

South Africa

- YASKAWA SOUTHERN AFRICA (PTY) LTD.

Asia Pacific



YASKAWA ELECTRIC (CHINA) CO., LTD.

China

- YASKAWA ELECTRIC (CHINA) CO., LTD.
- SHANGHAI YASKAWA DRIVE CO., LTD.
- YASKAWA TSUSHO(SHANGHAI) CO., LTD.
- YASKAWA ELECTRIC (SHENYANG) CO., LTD.
- YASKAWA SHOUGANG ROBOT CO., LTD.
- YASKAWA (CHINA) ROBOTICS CO., LTD.

Korea

- YASKAWA ELECTRIC KOREA CORPORATION

Taiwan

- YASKAWA ELECTRIC TAIWAN CORPORATION

Singapore

- YASKAWA ASIA PACIFIC PTE. LTD.

Thailand

- YASKAWA ELECTRIC (THAILAND) CO., LTD.

Indonesia

- PT. YASKAWA ELECTRIC INDONESIA

Vietnam

- YASKAWA ELECTRIC VIETNAM CO., LTD.

Malaysia

- YASKAWA MALAYSIA SDN. BHD.

India

- YASKAWA INDIA PRIVATE LIMITED

South America

Brazil

- YASKAWA ELETRICO DO BRASIL LTDA.
- MOTOMAN ROBOTICA DO BRASIL LTDA.

Network in Japan

Our group force responds with technical skills and trust.

We flexibly meet customer needs with two R&D centers and five production bases in Japan.

We provide robust business support with complete nationwide coverage through a network of 16 branch and sales offices, and group companies and service bases across Japan.

Kyushu



Head office

- **Head office (Robot Village)**
- Yahata-nishi plant (Robot Plant / Yaskawa Robot Center / YASKAWA Technology Center)
- Yahata-higashi plant (Motion Control Plant)
- Yukuhashi plant (Drive Center, System Engineering Center)
- Nakama plant (Robot plant)
- Kyushu office
- Kumamoto sales office
- Kyushu Service Center
- Nakama Service Office
- Miyata Service Office
- Kanda Service Office
- Kumamoto Service Office

Chubu

- Chubu office / Chubu Robot Center
- Nagano sales office
- Hamamatsu sales office
- Nagoya sales office
- Hokuriku sales office
- Chubu Service Center
- Suzuka Service Office
- Hamamatsu Service Office

Hokkaido

- Hokkaido Service Office

Tohoku

- Tohoku sales office
- Iwate Service Office
- Sendai Service Office
- Tsuruoka Service Office
- Fukushima Service Office

Kanto

- **Tsukuba**
- Iruma plant (Motion Control Plant / YASKAWA Solution Factory)
- Tokyo branch
- Kanto Robot Center / Saitama sales office
- Chiba sales office
- Yokohama sales office
- Hachioji sales office
- Kanto Service Center
- Ota Service Office
- Yokohama Service Office

Kinki

- Osaka office
- Keiji sales office
- Kansai Service Center
- Shiga Service Office

Chugoku

- Chugoku sales office
- Okayama Service Office
- Hiroshima Service Office
- YASKAWA Technology Center

Shikoku

- Shikoku sales office

Group companies in Japan

- YASKAWA AUTOMATION & DRIVES CORP.
- YASKAWA MECHATREC CORPORATION.
- SUEMATSU KYUKI CO., LTD.
- FOOD & AGRI MECHATRO SOLUTION. INC.
- AI CUBE INC.
- ROBOTIC BIOLOGY INSTITUTE INC.
- BESTACT SOLUTIONS INC.
- YASKAWA CONTROLS CO., LTD.
- YASKAWA LOGISTEC CORPORATION.
- YASKAWA MANUFACTURING CORPORATION.
- DOEI CORPORATION.
- YASKAWA OBVIOUS COMMUNICATIONS INC.

Factory Tour

Factory Tour

Factory Tour

Yaskawa Electric accepts visitors to the Robot Village and the factory where you can see the product process.

The Robot Village

Yaskawa Electric developed Japan's first all-electric industrial robot "MOTOMAN" in 1977. Since then, we have been leading the domestic and overseas industrial robot market by developing a succession of robots that automate operations such as welding, assembly, painting and handling. In the Robot Village tour, in addition to the "a factory where robots make robots" you can also visit the "Yaskawa Innovation Center" which conveys "robot technology" and "Attractiveness of Manufacturing" and the "Yaskawa Electric History Museum" which introduces the products that our company has developed so far and the history of the Yaskawa family, including the founder, who supported the initial stage.



Yaskawa Innovation Center

Robot Plant

Nakama Plant

—medium- and large-sized general industrial robots are produced

At the Nakama Factory, YASKAWA Electric's medium- and large-sized general industrial robots are produced from processing parts to assembly.



Nakama Plant

Drive Center

During the tour of the inverter plant, visitors can see the automated inverter manufacturing line using robots.



Drive Center

The Chubu Robot Center

You can see various demonstrations using robots at the Chubu Robot Center.



The Chubu Robot Center

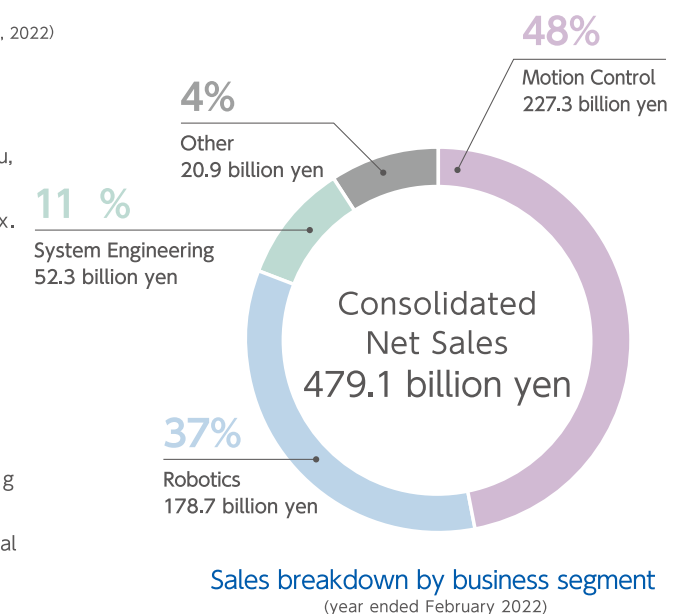
Company's Outline

Company Outline

Corporate Outline

(As of March 1, 2022)

Corporate Name	YASKAWA Electric Corporation
Founded	July 16, 1915
Head Office	2-1 Kurosakishiroishi, Yahatanishi-ku, Kitakyushu 806-0004, Japan Phone +81-93-645-8801 / Fax. +81-93-645-8831
Representative	Hiroshi Ogasawara, Representative Director, Chairman of the Board, President
Capital Stock	30.6 billion yen
Number of Shares Outstanding	266,690 thousand shares
Number of Shareholders	45,585
Employees	Consolidated 14,880(Including temporary employees)
Net sales	Consolidated 479.1 billion yen (Fiscal year ended February 2022)



Directors and Exective Officers (As of May 26, 2022)

Representative Director,
Chairman of the Board, President
Hiroshi Ogasawara
Representative Director,
Senior Managing Executive Officer
Shuji Murakami
Director,
Managing Executive Officer
Yoshikatsu Minami
Representative Director,
Senior Managing Executive Officer
Masahiro Ogawa
Managing Executive Officer
Akira Kumagae
Director,
Senior Executive Officer
Yasuhiko Morikawa
Outside Director
Yuichiro Kato

Director and Member of the Audit
and Supervisory Committee (full-time)
Yuji Nakayama
Director and Member of the Audit
and Supervisory Committee (full-time)
Koichi Tsukahata
Outside Director, Member of the Audit
and Supervisory Committee
Junko Sasaki
Outside Director, Member of the Audit
and Supervisory Committee
Hideo Tsukamoto
Outside Director, Member of the Audit
and Supervisory Committee
Toshikazu Koike
Outside Director, Member of the Audit
and Supervisory Committee
Kaori Matsuhashi

Senior Executive Officer
Michael Stephen Knappek
Senior Executive Officer
Junichi Nakano
Senior Executive Officer
Nobuaki Jinnouchi
Senior Executive Officer
Kenji Ueyama
Senior Executive Officer
Bruno Schnekenburger
Senior Executive Officer
Akinori Urakawa
Senior Executive Officer
Tatsuya Yamada
Senior Executive Officer
Hiroshi Takata

Executive Officer
Masahiro Okura
Executive Officer
Takenori Otsuka
Executive Officer
Yukio Tsutsui
Executive Officer
Ayumi Hayashida
Executive Officer
Michiaki Higuchi
Executive Officer
Ryuta Matsutani
Executive Officer
Shunrin Mizutani
Executive Officer
Yasushi Ichiki
Executive Officer
Manabu Okahisa
Executive Officer
Albert Shiina
Executive Officer
Shinya Araki
Executive Officer
Shouichiro Shimoike