SUSTAINABILITY REPORT

FANUC

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This “Sustainability Report 2022” is a PDF version of the information on the website as of October 2022.
The website may also be frequently updated from October 2022.

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Sustainability Information Guidelines Referenced

- GRI Standards (Global Reporting Initiative)
- Environmental Reporting Guidelines (2012 edition / 2018 edition) (Ministry of the Environment)
- ISO26000

Sustainability Report 2022

General

Sustainability Basic Policy

FANUC provides indispensable values throughout the world in the field of factory automation through unceasingly creating technological innovations, and will continue to be a company that is trusted by all stakeholders.

FANUC Sustainability Mark

This mark consisting of a “tree leaf” and an “infinity” symbol represents FANUC’s commitment to creating a sustainable society by overcoming environmental and social challenges through unceasingly creating technological innovations.

Materiality

Materiality	Risks	Opportunities
Maintain and improve competitiveness	●The emergence of competitive products utilizing new technologies may cause our products to lose their core competence. ●Our factory may come to an almost complete stop, if a large-scale disaster happens in the area where the factory is located.	●We can maintain our superiority by developing competitive products, enhancing our services, and providing our customers with attractive products. ●Creation of new markets through the use of new technologies also introduces new business opportunities for FANUC to expand its business domain and grow. ●We have nearly finished establishing multiple production sites for our CNC (computer numerical control) systems and robots, so that we can continue to serve our customers, even in the event of a large-scale disaster.
Response to environmental issues	●Stricter environmental regulations on resource conservation led by Europe, such as reducing greenhouse gas emissions and managing chemical substance, may lead to increased costs. ●The transition from internal combustion engines to EVs powered by electric motors, driven by measures taken by the automobile industry to combat climate change, may have a major effect on the market environment for our main products in the FA business.	●We strive to provide highly dependable, high quality products that are “Reliable, Predictable, Easy to Repair” and to minimize downtime at our customers’ factories by putting “Service First.” In particular, the concept of lifetime maintenance, which embodies our commitment to continue providing maintenance as long as our customers continue to use our products, has helped to reduce waste for our customers around the world. ●Leading the development of energy-saving products and products high in energy efficiency will provide opportunities to expand sales of our products in developed markets such as Europe. The transition to EVs will broaden the range of robot applications, and create opportunities to increase product sales. The number of sensors and cameras mounted to EVs will grow, and is expected to stimulate the increase in sales of ROBOSHOTs (electric injection molding machine). Furthermore, the demand for high-precision parts used in EVs and the demand for molds for EV components are both expected to increase. This will boost the demand for machine tools in this sector, leading to a higher demand for CNCs.
Shrinking labor force population	●It may become difficult to hire competent people.	●The rising need for automation in manufacturing sites also represents an opportunity to expand the industrial robot market, and will lead to the development of safe and secure work environments.
Building a governance system	●There is a possibility that correct management decisions will not be made, or that decision-making will be delayed.	●Proper decision-making will be made possible by establishing a governance system under which the roles and responsibilities of the executive bodies (the management) are separated from those the monitoring bodies (the Board of Directors).

ESG Promotion Framework

At FANUC, various committees conduct activities related to the factors of ESG, such as the environment, health and safety, and compliance, with important matters being reported to the Board of Directors.

- Board of Directors
  Approval of policies, approval of medium- to long-term targets

- Risk Management Committee
  Addressing risks that may adversely affect the business continuity, enhancement of the corporate value, or sustainable development of the business activities

- Cyber Security Committee
  Reinforcement of cyber security system

- Compliance Committee
  Checking the status of whistleblowing and discussing issues

- ISO14001 Meeting
  Decisions on environmental activity plans, formulation of medium- to long-term targets

- Health and Safety Committee
  Deliberations and decisions regarding basic policies and measures on health and safety

Dialogue with Stakeholders

Stakeholders	Communication method	Frequency	
Customers	Sales representatives	As needed	Collect and provide feedback on demands and requests to FANUC. In addition, give customers tours of factories to enhance their understanding about new products and development schemes. Cancelled tours of factories in 2021 due to the COVID-19 pandemic.
	Service	As needed	More than 2,300 service and support staff members around the world provide telephone support, onsite customer support, and maintenance parts management.
	Membership website	As needed	Answer customer inquiries by email and chatbot. In addition, we enable customers to purchase maintenance parts thorough our membership website.
	New products open house show	Every year	Invite customers and introduce our latest products. Cancelled our new products open house show due to the COVID-19 pandemic, but in 2022 it was conducted under adequate infection prevention measures.
	Exhibitions	As needed	Exhibit at trade shows in Japan and abroad to introduce our latest products.
	ESG Rating	As needed	Answer questionnaire for Ecovadis, CDP etc.
Employees	Labor union	At least twice a month	Hold discussions, negotiations, and exchanges of opinions through regular monthly meetings and committees, quarterly meetings, and labor-management negotiations. Conducted these activities online in 2021 due to the COVID-19 pandemic, as in the previous year.
	Organizational culture assessment	Every year	Every year, we conduct an “organizational culture assessment” to ascertain employee awareness. Each organization uses the results of the survey to identify organizational issues and implements countermeasures in a PDCA cycle to consistently improve the workplace environment and enhance employee job satisfaction.
Shareholders	General meeting of shareholders	Annually	Report on business reports, consolidated and non-consolidated financial statements, and audit results, and deliberate and make resolutions on matters to be resolved after Q&A.
	Financial results briefing	Quarterly	Hold briefings and telephone conferences on the contents of financial results and business forecasts, as well as engage in Q&A sessions.
	Individual dialogues with institutional shareholders	As needed	Explain FANUC’s initiatives and governance, and exchange opinions.
	ESG disclosure	As needed	Publicize ESG activities, as needed.
Communities	Coexistence with communities	As needed	Contribute to the revitalization of the local economy through tax payments, job creation, and having business with local companies.
	FA Foundation	As needed	Award prizes to recognize research results on factory automation (FA) and industrial robot technology.
	Economic and industry associations	As needed	Participate in the planning and implementation of various initiatives by organizations.
	Public-private joint projects	As needed	Participate in various public-private joint projects and promote technical exchanges.

Coordination with External Initiatives

FANUC promotes partnerships with various organizations including public institutions and organizations in industrial and academic fields, to realize sustainable development.

Public Institution

The Consortium of Human Education for Future Robot System Integration (CHERSI)	FANUC participates in the Study Group on Establishing an Industry-Academia Collaborative Framework for Human Resource Development, held by the Ministry of Economy, Trade and Industry. We are actively engaged in robotics human resource development activities, such as participating in CHERSI, which will develop human resources specialized in robotics, and giving online lectures on the latest robotics technology for College of Technology.
New Energy and Industrial Technology Development Organization (NEDO)	FANUC participated in the Strategic Innovation Program for Energy Conservation Technologies conducted by NEDO by submitting a research plan on the development of machine tools for realizing energy saving, “R&D on Energy-Saving Machine Tools that Apply New Structural Materials,” jointly with the Japan Machine Tool Builders’ Association and other organizations and achieved the plan’s energy-saving targets through research extending over three years.

Economic and Business Associations

FA Foundation	This foundation was established for the purpose of giving awards for research achievements related to FA (factory automation) and industrial robot technology. It is operated using the interest from funds donated by FANUC at the time of its establishment and subsequent donations by FANUC.
Japan Business Federation (KEIDANREN)	As a member of KEIDANREN, FANUC strives to resolve international issues and strengthen economic relations with other countries through dialogue with concerned parties and attendance at committees, while complying with the Charter of Corporate Behavior.
The Japan Machinery Federation	This organization aims to contribute to the overall progress and development of the machinery industry and to the advancement of the Japanese economy. FANUC belongs to this organization as a company member and serves as a general executive officer.
Japan Machine Tool Builders’ Association	The Association is a comprehensive organization related to the machine tool business, which is mainly comprised of machine tool builders in Japan. FANUC’s Chairman, Dr. Yoshiharu Inaba, serves as its Chairman.
Japan Robot Association	The Association is an organization that encourages research and development on robots and associated system products, and promotes the use of robot technology. FANUC’s President and CEO, Kenji Yamaguchi, serves as its Chairman.
The Japan Society of Industrial Machinery Manufacturers	FANUC is a member of the Society, which is an organization that drafts and promotes measures to increase productivity and to rationalize production structure in the field of environmental equipment, plastic machinery, and other industrial machinery.
Optoelectronics Industry and Technology Development Association	FANUC regularly participates in the Multi-Technology Integrated Optical Process Study Group hosted by the Association.
Japan Forming Machinery Association	FANUC participates in the drafting of relevant ISO standards as a member of this Association.
ROBOT Industrial Basic Technology Collaborative Innovation Partnership (ROBOCIP)	FANUC participates as a member of the ROBOT Industrial Basic Technology Collaborative Innovation Partnership (ROBOCIP), in which robot manufacturers collaborate in basic technological research of industrial robots, with the aims of broadening and deepening the scale and content of research beyond what could be accomplished independently as well as strengthening the foundation for technological innovation in line with the SDGs (Sustainable Development Goals).
TCFD (Task Force on Climate-related Financial Disclosures)	In December 2021, we have agreed to the TCFD recommendations and disclosed information on the impact of climate change on our business activities.

Academic Associations

Participation in various conferences	FANUC participates as a sponsor in academic societies of relevant fields (The Japan Society for Precision Engineering, The Japan Society of Mechanical Engineers, The Institute of Electrical Engineers of Japan, The Robotics Society of Japan, The Japan Society for Abrasive Technology, The Society of Instrument and Control Engineers, The Japan Society of Polymer Processing, etc.), as well as in academic lectures, to collect the latest technical information.
Exchange of opinions with universities	Every year, FANUC invites faculty members of several universities to its new products open house show in April, where we introduce our latest products and have the professors introduce the latest technologies, targeting technical exchange.
Collaboration with universities	FANUC collaborates with major domestic and overseas universities, such as the University of Tokyo, Tokyo Institute of Technology, the University of California, Berkeley (USA), and other universities to conduct joint research and exchange opinions. We also provide scholarship donations to help cultivate young researchers for the future.

Sustainability Report 2022

Approach to Sustainability

Approach to Sustainability

FANUC operates the businesses of FA, ROBOT, and ROBOMACHINE, as well as the IoT business that improves these three businesses. Since its foundation, we have developed a tough corporate structure by focusing on these businesses, without blindly seeking to expand the scale of its business. And we aim to remain a company trusted by stakeholders by working to provide essential value to not just customers but also to society through persistent technological innovation in all of our businesses and fulfilling our social responsibility through our business activities. Demand for factory automation is expected to continue to grow. FANUC will continue to aim to achieve SDGs by creating new value and working to resolve environmental issues such as climate change and other social issues including the need to improve work environment.

Two Perspectives on Sustainability

FANUC's two perspectives on sustainability are "energy saving and carbon neutrality" and "SDGs."

Energy Saving & Carbon Neutrality

We are engaged in efforts to reduce greenhouse gas emissions, reduce power consumption, and utilize green energy by switching from hydraulic to electric power.

SDGs

We will contribute to achieving 8 of the 17 goals, in particular, improving the working environment, increasing productivity, reducing waste, etc.

Initiatives in Products (FA) (Contribution to Customers)

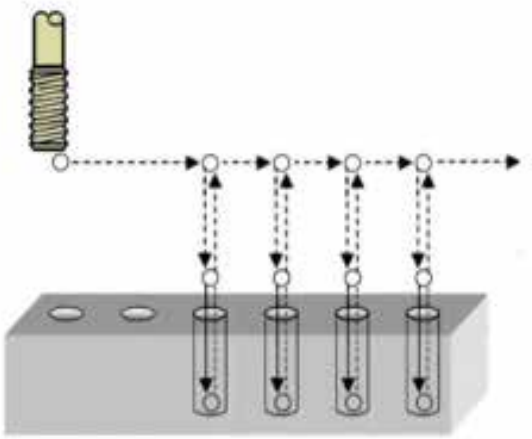
Reduction of power consumption dependent on machining

We are working to reduce power consumption of CNC, servo, and laser systems.

- Development of low power consumption CNC
- Power supply regeneration returns deceleration energy to the power supply for effective use (35% reduction compared to the resistance regeneration method in our example)
- Amplifier loss reduction through the application of low-loss power elements (loss reduction has been achieved continuously since the past and is currently up to 28% less than in 1995)
- Motor loss reduction by high-speed current control
- Laser power saving function

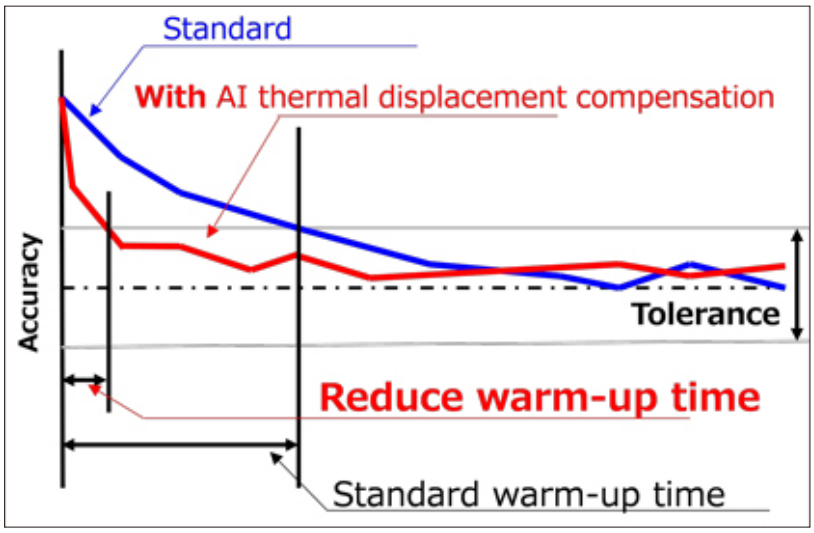
Power consumption reduction dependent on processing time

- Control technology for cycle time reduction reduces operating time of auxiliary equipment, etc.
  - Drilling and tapping processes are sped up through the optimization of machining paths
  - Cycle time reduction through speed control that optimizes cutting load
  - Handling of the latest machining tools and technologies, such as turning through a reciprocating motion
  - Improved efficiency of peripheral device operation, etc., through faster sequence control



High speed drilling and tapping

- AI thermal displacement compensation using machine learning corrects thermal displacement immediately after machine power-on. Reduces warm-up time and power consumption. (In the example below, warm-up time is reduced to 1/6.)



Reduction of warm-up time

Power consumption reduction of the entire machine

- Displays supplied power and power recovered by power regeneration in real time on the power consumption monitor
- Provides an energy saving level selection function that allows selection of operation settings that prioritize machining time or power consumption, enabling confirmation of power consumption and machining time. Level can be set by confirming the power consumption amount and machining time on the CNC screen
- Visualizes operation status and power consumption through MT-LINK*i* and supports optimization of machine operation
- Reduces power consumption during trial machining by utilizing machining simulation to reduce trial machining

Initiatives in products (Robots) (Contribution to Customers)

- We conduct product development that is environmentally conscious. In the development of the CRX, the weight was significantly reduced to 40 kg, compared to the 150 kg mass of the conventional 10 kg payload class machine. This has reduced power consumption to 100-300W.

- In addition to weight reduction, we are working on various other initiatives.
  - Reduction and visualization of power consumption through energy-saving functions
  - Reduction of CO_2 emissions during transportation through weight reduction
  - Peak power dispersion through nighttime operation of robots
  - Contribution to an increase in the ratio of renewable energy

Initiatives in Products (Robomachines) (Contribution to Customers)

ROBODRILL initiatives

- Improved productivity
  - ○High machining performance...Reduces cycle time with a unique fixed cycle that ensures smooth and lean operation.
  - ○High operating rate...ROBODRILL-LINK*i* collects and visualizes operating information, contributing to improved operating rate and work efficiency.
  - ○Ease of use...Utilization of dedicated G-code significantly reduces programming time
- Power consumption reduction
  - ○Power supply regeneration...Motor regenerative energy is returned to the power supply for reuse.
  - ○Energy-saving functions...Various energy-saving functions minimize power consumption during standby.
  - ○Power consumption monitor...Visualizes power consumption and can be centrally monitored with ROBODRILL-LINK*i*.
- Waste reduction
  - ○Rechargeable battery unit...Reduces disposal of backup batteries, making the machine maintenance-free.
  - ○Longer spindle life...Environmental resistance has been improved by adding air purge to the rear side of the spindle.
  - ○Longer life of each spindle cover...Each spindle cover has been reinforced to improve durability.

ROBOSHOT initiatives

- Improved productivity
  - ○High molding performance...Simultaneous operation reduces cycle time.
  - ○High operating rate...ROBOSHOT-LINK*i*2 can be used to analyze the operation rate and examine ways to improve it.
  - ○Ease of use... Outstanding operability achieved by a large screen display unit.
- Power consumption reduction
  - ○Power supply regeneration...Motor regenerative energy is returned to the power supply for reuse.
  - ○Barrel heat insulation cover...Full enclosure with heat insulation material suppresses heat dissipation from the heater and reduces power consumption.
  - ○Power consumption monitor...Analyzes power consumption and supports energy-saving activities.
- Support for environmentally friendly resins
  - ○Recycled resins...The deep groove of the plasticizing screw enables stable measurement of recycled resin (crushed material).
  - ○Biomass resin...Molding of biomass-derived resin contributes to carbon neutrality.

ROBOCUT initiatives

- Improved productivity
  - High machining performance...High-speed machining conditions improve machining speed.
  - High operating rate...operating rate is improved by high wire connection rate with AWF3 automatic wire connection.
  - Ease of use...Guidance function prevents operation errors and supports lean operation.
- Power consumption reduction
  - Discharge power regeneration...Energy stored in the feed cable when generating discharge pulses is regenerated and reused in the DC power supply of the discharger.
  - Sleep mode...Minimizes power consumption during standby to reduce unnecessary power consumption.
  - Power consumption monitor...Visualizes power consumption to support energy-saving activities.
- Longer life of expendable parts
  - Longer life of filter...Filter life is extended through flow control.
  - Extended electrode pin life...Contact pressure between wire and electrode pin is increased to suppress wear caused by electrical discharge, extending the life of the electrode pin.
  - ROBOCUT-LINK*i*...The usage of expendable parts can be monitored remotely.

FA Business

- Products
  - CNCs, servos, lasers
- Strengths
  - FANUC's basic technology
  - Top-level global market share of CNCs (FANUC estimate)

Business Overview

The FA business is the origin of FANUC and its basic technology. FANUC is the first private-sector company in Japan to have developed numerical control (NC) and servo technologies that control machine tools using numerical information. Until then, highly skilled engineers, who have acquired know-how through many years of training, were indispensable for high-precision processing by machine tools. FANUC made it possible to complement skilled engineers' skills with NCs and servos. Computer-controlled NCs (CNCs) and servos further made it possible to process complex shapes and produce varied items efficiently. Currently, FANUC offers CNCs and servos covering a broad range from simple machine tools to composite machining equipment with complex configurations to industrial machinery. Further, demand for introduction of robots in machine tools is increasing at machining sites, with an aim to automate processes or labor saving. Believing improved compatibility between machine tools and robots is important, FANUC is developing the functions to enhance it.

Value Created by FA Business

High-machining performance CNCs and high-speed, high-precision servos contribute to improved productivity as they enable more precise, higher-speed machining. We have implemented energy saving features in our servos. Laser products contribute to improving quality of products of users with their high-quality machining capability supported by FANUC's CNCs and servos installed in them. It is essential to improve operating rates for improving productivity of factories. In order to avoid extended suspension of production lines due to machine trouble or emergency maintenance work, we attach importance to functions and designs for preventive maintenance. Factory operation at high operating rates becomes possible through monitoring of insulation resistance of motors, drops in the numbers of rotations of fan motors for CNCs and servo amplifiers, etc. and conducting preventive maintenance in advance of a halt of the machine.

Ensuring Customer Safety

It is important to help operators not used to operating machines use FANUC products safely, as the numbers of people working in the manufacturing industry and highly skilled engineers are expected to decrease. FANUC's products are compliant with safety standards, including the ISO/IEC standards, and certified by accreditation organizations. In addition, sufficient attentions are paid to safety use as CNCs are equipped with functions to suspend operation upon receiving an alarm in case of operational errors.

ROBOT Business

- Products
  - Robots
- Strengths
  - Products applied with CNCs and servos, FANUC's basic products
  - Top-level global market shares (FANUC estimate)

Business Overview

FANUC exclusively targets industrial robots, instead of service, medical, or entertainment robots. We concentrate on helping customers automate or robotize their factories and contributing to improved productivity. Our industrial robots, which include types for welding, material handling (transportation of articles), assembly, and painting, according to application, are used in wide-ranging industries, including automotive, electronic parts, logistics, food, pharmaceuticals, and cosmetics. FANUC's industrial robots are general-purpose robots and used in many industry sectors.

Value Created by ROBOT Business

Robots help solve a variety of issues society is facing. Robots, which perform strenuous work as programmed even under harsh environment, release workers from dangerous, dirty, and difficult jobs. Robots can also improve productivity and reduce night shift for workers as they can perform precise work over a long time at a certain speed, even at night. COVID-19 outbreaks occurred in 2020. In such a time, robots can help protect health and safety of people by substituting some workers to allow them to avoid the "Three Cs" (closed spaces, crowded places, close-contact settings). Introducing Zero Down Time (ZDT), a preventive maintenance and problem prediction using IoT, can service robots before they break down, helping to avoid extended suspension of a production line just because of trouble in a single robot. Robots thus not only promote automation and robotization of factories and contribute to improved productivity but also help improve work environment, ultimately achieving improved productivity in labor-intensive industries through technology, a target of SDGs.

Robots for a new age

The market of "collaborative robots," which can work alongside human workers, is growing. As collaborative robots automatically stop safely when touched by humans, they do not require safety fences. By assisting work alongside human workers, operators can avoid strenuous work and workers whose physical power is weak can work safely. The CRX series, light-weight collaborative robots FANUC announced in December 2019, are a new type of collaborative robots developed to achieve thorough ease of use for customers. As these products are light, you can carry and install them without using a crane. The manual guided teaching feature that allows users to directly move the arm by hands enables intuitive robot operation. Users can design teaching programs in a smartphone-like operation, using drag-and-drop operation on a tablet device they are familiar with. The robots, designed with an aim to create an appearance that coexists with humans, make workers feel safe. They are robots for a new age, equipped with a safety feature that stops itself when touched and maintenance-free (for 8 years), high reliability.

Targeting Expanding Robot Market

According to statistics by the International Federation of Robotics, the number of industrial robots in operation has increased year by year and is expected to continue to grow. FANUC develops robots that can help solve issues faced by society and as measures to improve productivity of customers' factories and address decreases in working population and highly skilled workers.

ROBOMACHINE Business

- Products
  - ROBODRILLs (compact machining centers)
  - ROBOSHOTs (electric injection molding machines)
  - ROBOCUTs (wire electric discharge machines)

- Strengths
  - Products applied with CNCs and servos, FANUC's basic products
  - Top-level global market share of ROBODRILLs (compact machining centers) (FANUC estimate)
  - Top-level global market share of ROBOSHOTs (electric injection molding machines) (FANUC estimate)
  - High precision performance, high operating rates, easy to use

Business Overview

Products of the ROBOMACHINE business are comprised of machine tools or industrial machinery installed with FANUC's CNCs and servos. They are used for production in factories of machine users. They are all highly compatible with FANUC robots. Factory automation is enhanced through the combination of ROBOMACHINEs and robots.
Machine users can improve quality of their products and shorten the time it takes for machining by using FANUC's highly reliable, high-performance ROBOMACHINE products. The products will contribute to improved productivity of machine users' factories.
Furthermore, a function to monitor the operational status of the entire factory in real time will enable designing of more precise production plans and improvement in operating rates (ROBODRILL-LIN*i*, ROBOSHOT-LINK*i*, and ROBOCUT-LINK*i*).
ROBOSHOTs and ROBODRILLs became eligible for a subsidy for business expenses supporting promotion of advanced energy-saving investments, allocated in the FY2022 supplementary budgets in recognition of their energy-saving potential. Furthermore, ROBOSHOT became eligible for a subsidy in the FY2022 for ESG lease promotion business for the establishment of a decarbonized society.
ROBOMACHINE products are used in the production of medical instruments, including syringes and artificial bones, contributing to efforts to achieve a goal among SDGs of securing healthy life.

Value Created by ROBODRILLs

ROBODRILLs are compact machining centers. They are used for machining metal materials, such as iron and aluminum, with tools and for drilling holes.
The products have superior machining performance for their compactness and contribute to making production equipment smaller and saving energy. They improve production efficiency by thoroughly reducing redundancy in machines' operation, and achieve more stable machining through the use of AI thermal displacement compensation function. These features help improve machine users' product quality and productivity.


Impeller for automotive superchargers


Aircraft turbine blades


Wristwatch bezel

Value Created by ROBOSHOTs

ROBOSHOTs are electric injection molding machines. They form melted plastics, etc. into shapes by casting them into metal molds. Many components used in daily lives, including mobile phone components, auto parts, and medical instruments, are made using injection molding machines.
FANUC's products can perform more precise and stable molding thanks to the highly-rigid and low-friction mechanism and contribute to manufacturing of high value-added precision molded products. AI backflow monitor helps estimate the amount of wear on backflow prevention rings, allowing for replacement of components at optimum timing. This contributes to reducing molding defects and improving operating rates.

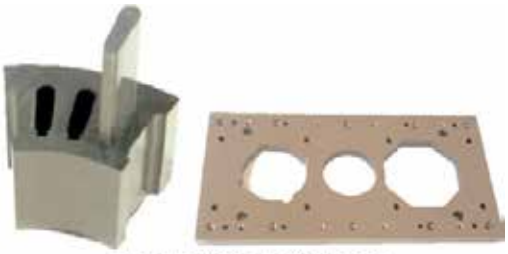

Auto headlight


Syringe

Value Created by ROBOCUTs

ROBOCUTs are wire electric discharge machines, which use discharge phenomena between wire electrodes and the workpiece to perform machining. They can perform machining on anything from thin boards to ultrahard materials, which are difficult to process for cutting tools, into complex shapes as long as the material is conductive, regardless of its hardness.

By achieving stable machining through the use of the AI thermal displacement compensation function, these products contribute to improving machine users' product quality. The automatic wire feeding (AWF3) can automatically recover feeding when a wire is accidentally cut and disconnected during machining, thereby enabling unmanned operation for long periods. These features contribute to improving operating rates.



Mold parts for motor cores

Sustainability Report 2022

Social

Social

FANUC contributes to the development of its customers' businesses and the manufacturing industry, by promoting the automation and robotization of customers' factories. In addition, our employees, who support FANUC's corporate activities, are also regarded as important stakeholders.
FANUC gives due consideration to people and society, while contributing to the creation of an affluent society as well as its sustainable development.

Policies

- FANUC Code of Conduct
- Human Rights Policy
- CSR Procurement Policy

Respect for Human Rights

Basic Approach

At FANUC, we respect the human rights of all persons involved in our business, based on the understanding that it is the basic principle of all activities, in accordance with our Human Rights Policy.
In addition, the FANUC Code of Conduct prohibits “discrimination based on race, beliefs, gender, social status, religion, nationality, age, mental or physical disability, sexual orientation, sexual identity, etc.”
We are constantly engaged in efforts to foster awareness, so that employees do not infringe the human rights of others through harassment prevention education and line-care training.

- Human Rights Policy
- FANUC Code of Conduct

Laws and International Norms of Behavior

FANUC respects human rights as defined in international norms, such as the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work, in accordance with the guiding principles on business and human rights.

Human Rights Due Diligence

The following items will be addressed as priority issues.

Prohibition of Discrimination

- Prohibition of discrimination based on gender, age, nationality, ethnicity, race, place of origin, religion, beliefs, disability, sexual orientation, sexual identity, etc.

Respect for the Rights of Workers

- Ensuring employee health and safety
- Prohibition of all forms of harassment
- Prohibition of child labor and forced labor
- Respect for the rights of foreign and migrant workers
- Respect for freedom of association and the right to collective bargaining
- Prevention of low-wage labor (labor less than the minimum wage and living wage)
- Prevention of excessive amounts of overtime

Respect for the Rights of Vulnerable People

- Respect for the rights of local and indigenous peoples related to our business
- Respect for the rights of women, children, persons with disabilities, minorities, and the elderly
- Avoiding complicity in conflicts and human rights violations relating to mineral procurement

Protection of Privacy and Personal Information

- Respecting the privacy of customers, employees, and other parties concerned, and protecting personal information

FANUC will evaluate and identify potential and actual human rights risks and implement measures to avoid or reduce such human rights risks.

We will encourage our business partners and related parties not to infringe human rights if they have a negative issues on human rights.

When it is clear that our business has caused or has engaged in any violation human rights impacts, we will endeavor to implement remedies them, and will establish a grievance system as necessary.

Promotion Framework

A helpdesk has been established in both the Human Resources Division and the labor union to provide advice across the entire company. A helpdesk has also been set up in the Welfare Department of the Human Resources Division, led by the executive employees in charge (one male and one female). This helpdesk offers advice on all forms of human rights-related harassment, including sexual harassment, maternity harassment (harassment related to pregnancy, childbirth, child-care leave, etc.), and power harassment. The existence of this helpdesk is being widely advertised through the company-wide portal site. We have established a framework to respond to inquiries from employees and offer advice.

In these consultations, due attention is given to the protection of privacy, and consideration is given to ensure that anyone seeking advice and anyone who is involved in confirmation of the facts of the matter are not subjected to unfavorable treatment. Based on confirmation of the facts, the consultations are handled by the parties concerned, taking confidentiality into account, and appropriate measures are taken. In this way, we strive to improve the workplace environment to make it a more comfortable place to work.

Communication

- We thoroughly inform all employees and our group companies of our human rights policies.
- Communicate with relevant stakeholders on measures against risks and impacts on human rights.
- We will appropriately disclose and report information on our Human Rights Policy and related initiatives.

Harassment Prevention Training for All Employees

Harassment in the workplace is not only an act that unjustly harms the dignity and character of the individual, but it is also an absolutely unforgivable act that damages the workplace environment.
FANUC strives to prevent harassment, with the aim of achieving workplace environments in which all employees can maintain good mental and physical health and work energetically with peace of mind.

Our efforts to establish workplace environments that will not give rise to harassment include harassment prevention training on an e-Learning platform, group harassment-prevention training for executive employees, company-wide preventive measures, and fostering understanding of diversity.
We post examples of harassment and the company’s responses on the company-wide portal site to thoroughly raise awareness among employees.

With Our Customers

Basic Approach

The three philosophies of FANUC are comprised of “one FANUC,” “Reliable, Predictable, Easy to Repair,” and “Service First.” FANUC contributes to the manufacturing industry around the world by conforming to, and practicing these philosophies.
In development, FANUC focuses on ensuring its customers’ safety and enhancing their productivity.
FANUC strives to enhance the quality, safety, and reliability of its products, and has established a quality management system toward this end.
FANUC provides lifetime maintenance to its products for as long as they are used by customers, through more than 260 service locations throughout the world. In addition, FANUC strives to improve customer satisfaction through the provision of training courses at FANUC ACADEMY and support at the time of product installation.

Improving Customer Productivity

FANUC pursues the automation and robotization of our customers' factories as well as their high efficiency. FANUC has realized a high operating rates by analyzing failure information regarding our products, and conducting ongoing research and development to enhance reliability.

FA Business

FANUC provides highly reliable CNCs, servos, and lasers, which constitute the basic technologies of FANUC. As well as improving ease of use for machinery manufacturers, we also enhance end users' productivity by improving performance and save space by reducing the size of devices.
In addition, we contribute to improving the quality of end users' products by achieving high-quality machining. The manufacturing of a variety of industrial products using machine tools equipped with FANUC's CNCs and servos contributes to an efficient society, including the manufacturing industry.

Developing a simulation function	The development of CNC simulators and CNC GUIDE has made it possible to provide education on machining programming, even in the absence of actual machine tools. This leads to the improvement of educational efficiency at training sites in the manufacturing industry, as well as a reduction in the required number of units of training machinery and equipment, thereby helping to reduce resources. In addition, predicting the machining results before the actual machining through the Digital Twin of CNC utilizing CNC GUIDE 2 to reproduce the operation of CNC enables the detection of errors in machining programs and the optimization of machining conditions. This leads to the reduction of defects caused by machining errors in the actual machining.This reduction enables cost cutting as a result of curbed power consumption at the time of performance of relevant tasks (such as regular disposal of cutting chips) and machining, because it reduces the amount of cutting chips and coolant discharged.
Developing customizable functions	Since the structures and functions of the machine tools provided by machine tool builders, who are our customers, differ, the required operating screens and control functions also vary. The development of functions allowing customers to easily customize tasks, such as designing displays and controlling signals, enables each customer to provide operators with operability suited to their own machines.
Servo Learning Oscillation	The biggest obstacle to automating turning is that long chips become entangled in the workpiece or tool during turning or drilling. In addition, such long chips are difficult to discard. This function solves these issues by shredding chips during turning or drilling, mitigating problems such as damage to tools and defective machining.
Fast Cycle-time Technology	This is a group of functions that reduce machining time. Through optimization of the actual machining operations of the machines as well as a reduction in non-machining time, the overall machining time is shortened and the operating rates of the machines is improved.
SERVO GUIDE, AI Servo Tuning	We provide our customers, manufacturers of machinery, with support tools to easily realize high-level tuning of parameters to control the servo motor. The inclusion of an AI-based tuning support function improves the machining performance of machine tools.
AI Servo Monitor	By using FANUC CNC and servo data, signs of malfunctioning spindle axes and feed axes of machine tools can be detected without a separately installed sensor. The AI servo monitor detects changes such as damage to spindle axes and feed shafts as anomalies, preventing sudden malfunctioning of machine tools and contributing to stabilization of production and maintenance plans.
***i*HMI**	***i***HMI provides a user interface that simplifies the operations of the operator who is the actual user of the machine tool.
MT-LINK*i*	With MT-LINK***i***, it is possible to identify machining processes that may constitute bottlenecks in the production line, by knowing the operational status of the machine tools installed in the factory. This facilitates process improvement.
Fine Surface Technology	This CNC and servo control technology realizes high-quality machining. This technology can reduce the quantity of work in subsequent processes, such as polishing the machined surface, and enables reduced friction in components used in the manufacturing of automobile parts. This results in enhanced automobile quietness, and solves problems such as noise.
Failure diagnosis function Preventive maintenance function	The failure diagnosis function provides guidance when warnings and alarms are issued, which indicates the cause along with countermeasures, thereby shortening recovery time, as well as a preventive maintenance function that detects signs of failure, thus reducing machine downtime.
Improving spindle motor output	By molding the stator with highly thermal conductive resin to improve cooling performance, the output of the spindle motor can be increased without changing its size, thus contributing to the improvement of the machining performance of machine tools.

Laser-related products	CNC and highly reliable lasers that have highly synchronous connections between robot axis control and laser output commands enable pinpoint laser irradiation, for the realization of machining with an exceptionally high degree of precision. Further, the combined application of the many laser machining functions that we have built up over the years, such as laser-power control that controls laser output according to machining speed, dramatically improves the speed, precision, and quality of machining and ease of use and raises our customers' work efficiency.

ROBOT Business

Robots which utilize the basic technologies of CNCs and servos relieve workers from dangerous, dirty, and difficult jobs by performing tasks that were previously handled by humans. At the same time, robots revolutionize work styles, such as by reducing work hours and eliminating night shifts. Through the development of intelligent robots using visual sensors and force sensors, the areas in which robots can be used are expected to expand.
In addition to automating production lines and enhancing efficiency, the utilization of robots improves and stabilizes product quality, as they can continue consistent production over long periods.

Saving space	The Robot R-2000*i*D, which is frequently used in spot welding and handling applications, has a footprint that is 23% smaller than those of conventional models. Our wide range of models can be mounted in a variety of configurations, including on shelves, walls, and ceilings, and save space by optimizing the factory layout.
Reducing robot cycle time	FANUC has acquired a patent for the world's first practical learning robot. For example, in a conventional car body welding line, the utilization of 30 robots reduced cycle time by 10.2% after learning.
Improving cost efficiency	An automatic guided vehicle (AGV) equipped with a collaborative robot can move autonomously, allowing a single robot to work at multiple locations, and improves the operating rates of the robot in processes with long cycle times.
Automation system design support tool	The use of ROBOGUIDE, a software that automatically calculates the optimal layout of machines and robots, can reduce the time for trial and error required to design an automation system. Optimizing the operating program using ROBOGUIDE reduces cycle time.
Reducing downtime	Zero Down Time (ZDT) is a "predictable" function that alerts users before failure and improves productivity by reducing the downtime in factories. ZDT is connected to more than 25,000 robots around the world, and has prevented more than 1,700 downtime cases.
Remote monitoring of operation	A robot's teach pendant screen can be viewed from a remote PC via a network. Accordingly, the operating conditions of many robots can be conveniently checked from the office, eliminating the need to make rounds of the factory to inspect the operating conditions of each robot.
Software Provision Platforms	With the new collaborative robot CRX, we have established a platform in which customers can download the latest software from our website and update it as needed by themselves, eliminating the need for our service personnel to attend customers' factories to set it up. This enables our customers to operate their machine tools with the up-to-date software at all times.
Reducing equipment costs	The 7-axis Robot P-1000*i*A, used for painting automobile bodies, contributes to drastically reducing the size of the paint booth compared to the use of conventional 6-axis robots. It is possible to greatly reduce initial costs when a paint booth is built as well as running costs such as air-conditioning.

Awards on ROBOT Business

Winner of the President's Award (2021): 10th Technology Management and Innovation Awards, Japan Techno-Economics Society

Triple award winner (2020): Minister of Economy, Trade and Industry Award at the Ninth Robot Awards; Nikkei Sangyo Shimbun Award in the 2020 Nikkei Superior Products and Services Awards; and the 63rd Nikkan Kogyo Shimbun Ten Great New Products Awards Main Prize

FANUC Robot CRX-10*i*A

Winner of double awards (2019): Nikkei Sangyo Shimbun Award for Excellence in the 2019 Nikkei Superior Products and Services Awards/62nd Nikkan Kogyo Shimbun Ten Great New Products Awards Main Prize

FANUC Robot R-2000*i*D/210FH

Winner of double awards (2018): Minister of Economy, Trade and Industry Award and Minister of Internal Affairs and Communications Award at the Eighth Robot Awards

Zero Down Time (ZDT)

ROBOMACHINE Business

ROBOMACHINE Business provides three product groups, consisting of ROBODRILLs (compact machining center), ROBOSHOTs (electric injection molding machine), and ROBOCUTs (wire electrical-discharge machine), which utilize the basic technologies for CNCs and servos. All of these product groups boast high performance and high operating rates, and help our customers adopt IoT in their factories.

Saving space	Compact ROBODRILLs with high machining performance provide the benefits of both saving factory space and increasing flexibility in terms of factory layout.
Reducing machining time	ROBODRILLs shorten cycle time and achieve high productivity by thoroughly reducing idle time by executing tool changes and table positioning operations concurrently. In addition, we are proactively expanding compatibility with new machining methods using special tools.
AI backflow monitor	ROBOSHOTs leverage AI to evaluate and predict wear on expendable parts (backflow prevention ring), and conduct "predictable" preventive maintenance. This makes visual inspections, which is the conventional way to confirm wear, unnecessary, thus reducing the workload.
Multi-functionalizing standard models	A second injection unit was developed for ROBOSHOTs. With this unit, molding of two types of resin materials with different functional requirements is made possible with in a single mold achieves high-value-added molding and less man-hours in the assembly process.
AI thermal displacement compensation function	Fluctuations in cutting accuracy caused by changes in the temperature of ROBOCUTs are predicted and controlled using AI technology. As a result, compensation accuracy improved by roughly 30% compared with the conventional models.
High reliable auto wire feeding (AWF3)	The ROBOCUT features highly reliable automatic wire feeding that can automatically recover feeding when a wire is accidentally cut and disconnected, thereby enabling unmanned operation for long periods.
Job Interruption Function	In ROBOCUTs, we have developed a function that allows the user to interrupt the current machining operation to perform another one with a higher priority, if necessary during machining, and easily continue the original machining after the job is finished. This enables flexible operation of the machine and improves the productivity of our customers.
ROBODRILL-LINK*i* **ROBOSHOT-LINK*i*2** **ROBOCUT-LINK*i***	Monitors the operating status of the entire factory in real- time and supports the early detection of errors for quick recovery, contributing to improvements in operating rates of factory equipment. ROBOSHOT-LINK*i*2 enables significant increases in the number of connectable injection molding machines and in the quantity of data stored. It also makes it possible to view the system from mobile devices such as tablets. In addition, the periodic inspection and testing function provides comprehensive support for everything from inspection scheduling to work recording.

QSSR of ROBOMACHINE (QSSR=Quick and Simple Start-up of Robotization)	Our automation introduction packages, which combine ROBOMACHINE and ROBOT products, reduce the technical roadblocks involved in building robot systems. Simple installation, simple settings, and simple operation significantly reduce man-hours in the design process and start-up time. • ROBODRILL-QSSR Support automation of machining systems • ROBOSHOT-QSSR Support automation of injection molding systems • ROBOCUT-QSSR Support automation of wire electrical-discharge systems

Awards on ROBOMACHINE Business

51st Industrial Machinery Design Award IDEA: The Japan Society of Industrial Machinery Manufacturers (JSIM) Award (2021)

Display Unit PANEL *i*H Pro for ROBOSHOT α-S*i*B Series

64th Nikkan Kogyo Shimbun Ten Great New Products Awards Main Prize (2021)

ROBOCUT α-C*i*C

66th Okochi Memorial Foundation Okochi Memorial Production Prize (2019)

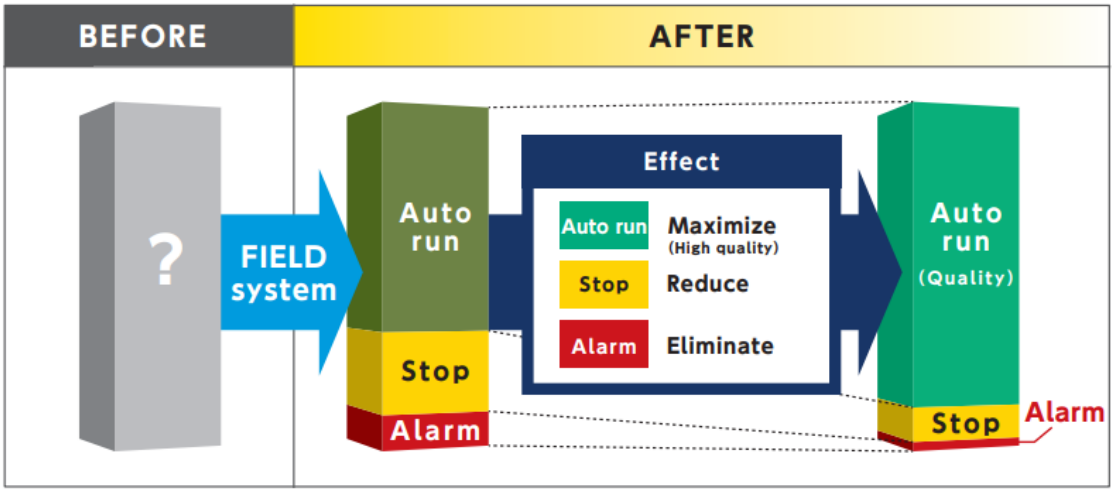
ROBOSHOT

5th (1994)/28th (2017) Japan Society of Polymer Processing Aoki Katashi Innovation Award

Development of AI Pressure Tracking Control for a Fully Electric Injection Molding Machine (1994)
Movement Detection Technology and Injection Volume Stabilization Technology for a Backflow Prevention Ring (2017)

FIELD system

The FIELD system (FANUC Intelligent Edge Link & Drive system) is an open platform for manufacturers that aims to further improve productivity and efficiency within the industry. This system helps increase yield, quality, and productivity by visualizing factories, thereby contributing to the improvement of our customers' revenue.
The FIELD system offers an SDK (Software Development Kit), so that third-party developers can also freely develop and sell application software and converters for devices. The design guide of the SDK provides a comfortable development environment with constant surface speed (CSS) that integrates universal design.



Energy-efficient Products/Waste Reduction

Energy-efficient Products

FANUC will continue to make energy-efficient products, which will contribute to conserve energy in our customers' factories.

Development of large-capacity servo motors	We have developed a high-precision, high-efficiency, large-capacity servo motor fully utilizing our advanced digital control system ahead of other companies. In the field of industrial machines, including press machines, which require tremendous power, we have realized energy saving by introducing this large-capacity servo motor in place of hydraulic pressure.
Adoption of power supply regeneration system	In the servo amplifier, we use a power supply regeneration system that returns energy to the power supply when the motor decelerates. This effective use of the power supply leads to energy savings. When mounted on a ROBODRILL, it reduces energy consumption by approximately 35% compared with the resistance-regeneration method. Furthermore, the adoption of new power devices has continuously reduced energy loss of the servo amplifier. It is reduced by maximum 28% compared to that in 1995.
Power consumption monitoring function	Through the power-consumption-monitoring function, we have made it possible to monitor the amount of power consumed by our CNC systems, enabling the efficient adjustment of the cycle time. In addition, CO_2 emissions can also be displayed. By using the energy-saving level-selection function, we have made it possible to choose the type of operation: one that prioritizes cycle time and one that prioritizes power consumption. When there are differences in cycle times in the production line, in case fast processing is not necessary, choosing the power consumption priority operation contributes to energy savings for the entire factory.
Fast Cycle-time Technology	This series of functions reduces cycle time. Reducing operating time contributes to reductions of energy consumption by peripheral equipment, such as a coolant pump.
Averaging the load of power demand	Night operation using robots disperses peak power and curbs power consumption.
Reducing CO_2 emissions by reducing weight	The design of the robot mechanical arms with lighter weight reduces power consumption. For the robots with a payload of 165 kg, the Robot S-430*i*W in 1997 weighed 1,300 kg while the Robot R-2000*i*C/165F in 2013 is lighter with weight of 1,190 kg. In addition, the collaborative robot CRX has a robot mass of 40 kg with a payload of 10 kg, which is considerably lighter than the robot mass of 150 kg common to robots in the same class thus far, and reduces power consumption. Even the LR-10*i*A/10 fully enclosed handling robots are more than 1/3 lighter than conventional robots with the same 10 kg payload, and consume 30% to 40% less power.
Optimal operating program	By optimizing the operating program with ROBOGUIDE, power consumption is reduced and the lifetime of the reducer is extended to reduce running costs.
Efficient robot utilization	Use of an autonomously moving, Automatic Guided Vehicle (AGV) with collaborative robots allows a single robot to work in multiple locations, improving the efficiency of robots. This reduces standby power, compared with installing multiple robots. In addition, the latest model of the collaborative robot CRX has a very light robot mass of 40 kg, and the AGV can also be made compact. Furthermore, the CRX can be moved on a handcart instead of on an AGV, making it possible to move the robot to the place where and when it is needed.
Instruction operation panel backlight automatically turns off	Reduces power consumption by automatically turning off the backlight of the LCD screen on the robot's teaching operation panel when no operation is performed for a certain period of time.
Energy-saving design	We have developed a new type of heavy payload robot, M-1000*i*A, with a serial link mechanism that is compact and has a wide motion range. Using the latest structural analysis, the M-1000*i*A has the necessary strength and rigidity while making extensive use of curved surfaces, at the same time, saving energy through the use of arms designed to be lightweight and power regeneration that reuses the robot's deceleration energy.
Highly reliable automatic wire feeding (AWF3)	ROBOCUT is capable of unmanned operation for long periods, thanks to the highly reliable automatic wire feeding AWF3, which can automatically recover feeding even when a wire is accidentally cut and disconnected. Stable night-time machine operation disperses peak power usage and curbs power consumption.
Discharge control *i*Pulse3	With ROBOCUTs, our newly developed discharge control *i*Pulse3 reduces machining time by approximately 10% compared to that of conventional control. Reduced machining time curbs power consumption.

Electrification of peripheral equipment	Additional axis options for ROBOSHOT can electrify hydraulically controlled peripheral equipment.

Awards and Topics on Energy Saving

ROBOSHOTs and ROBODRILLs became eligible for a subsidy for business expenses supporting promotion of advanced energy-saving investments, allocated in the FY2022 supplementary budgets in recognition of their energy-saving potential. (2022)

ROBODRILL α-D*i*B Plus Series
ROBODRILL α-D*i*B$_{ADV}$ Plus Series
ROBOSHOT α-S*i*A, α-S*i*B Series

Eligible for a subsidy in 2022 for ESG lease promotion business for the establishment of a decarbonized society (2022)

ROBOSHOT α-S*i*A, α-S*i*B Series

ROBODRILLs and ROBOSHOTs became eligible for a subsidy for business expenses supporting promotion of advanced energy-saving investments, allocated in the FY2021 supplementary budgets in recognition of their energy-saving potential. (2021)

ROBODRILL α-D*i*B Plus Series
ROBODRILL α-D*i*B$_{ADV}$ Plus Series
ROBOSHOT α-S*i*A, α-S*i*B Series

ROBODRILLs and ROBOSHOTs became eligible for a subsidy for business expenses supporting businesses rationalizing energy use in production equipment, allocated in the FY2019 supplementary budgets in recognition of their energy saving potential. (2020)

ROBODRILL α-D*i*B Series
ROBODRILL α-D*i*B$_{ADV}$ Series
ROBOSHOT α-S*i*A Series

Approved for subsidies for the introduction of energy-saving equipment for local factories and small- and medium-sized enterprises (2014)

ROBOCUT α-C*i*A Series

Prize of the Director General of Agency of the Natural Resources and Energy, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (2003)

For our large-capacity servo system with a power regeneration feature and precision digital control and for our large-size AC Servo Motor αi Series

The Minister Award of the Ministry of International Trade and Industry, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (1999)

Digital servo system using phase control regeneration and cycle time reduction, AC Servo Motor α Series

The Minister Award of the Ministry of International Trade and Industry, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (1998)

For our wire-cut electric discharge machines equipped with a high-speed automatic wire feeding mechanism and thick plate tracking control
ROBOCUT α Series

The Minister Awards of the Ministry of International Trade and Industry, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (1995)

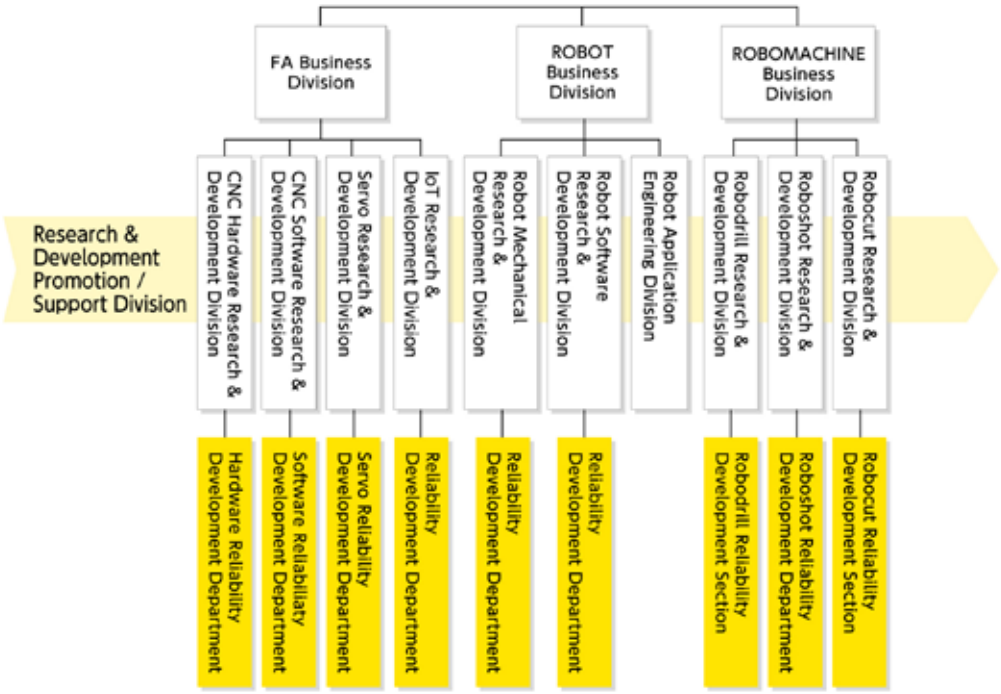
ROBOSHOT Series

Waste Reduction and Effective Utilization of Resources in Our Customers' Factories

FANUC 's products also contribute to waste reduction and the effective utilization of resources.
Resources and Waste

Framework to Promote Product Quality and Safety

FANUC promotes activities to improve quality in all processes, from development and design of products to product quality buildups and after-sales services following manufacturing and shipment, in an effort to enhance the quality, safety, and reliability of its products. The Research & Development Promotion / Support Division functions across multiple research & development divisions to ensure the quality and reliability of products and to ensure the prevention and prompt resolution of issues about quality. At the same time, a section devoted to reliability development has been established in each research & development division in each business division engaged in product development and design. In addition, research & development divisions regularly share information on both development and technology in various technology meetings and use such information during development.
Through after-sales services following manufacturing and shipping, we have built a system to feed back reliability issues discovered in the field to production divisions and research & development divisions and to continue improvement through the PDCA cycle.



FANUC strives to ensure the safety and quality of its products through a quality management system based on ISO 9001. We carry out checks through design review and verification in order to meet the requirements of laws, regulations and standards as well as the requirements of individual customers. In addition, we conduct risk assessments of our products.
FANUC conducts the following ongoing activities with the aim of improving and enhancing product quality.

- Technology meetings (held for executives of research & development divisions)
- Reliability development technology briefings (held for researchers)
- Reliability meetings (held in each research & development division)
- Quality meetings (held to improve manufacturing quality in production divisions and research & development divisions)

“Visualization” of Quality and Reliability

The status of quality and reliability in all processes, from product design to manufacturing and after-sales services, is monitored in order to promptly respond to defects. We collect data from our after-sales services, analyze it, identify issues, and give feedback to our production divisions and research & development divisions. These activities improve our products’ quality and reliability.

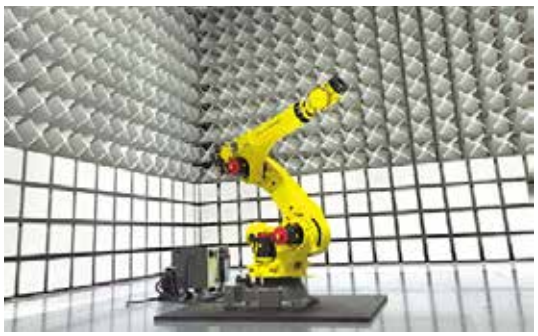
Reliability Development Technology

We promote the development of a framework to design and manufacture highly reliable products, as well as sharing of knowledge, in order to enhance the reliability development ability of our researchers.
The Research & Development Promotion / Support Division works with members of the reliability development departments in each research & development division to regularly review methods to improve reliability-related issues and proceed with standardizing reliability development methodologies.
In addition, the Defect Management Procedures have been established to systematize rules regarding response procedures when defects arise.
All defects that arise are registered in a database called the Defect Record, which centrally manages the entire range of processes, from the investigation of the cause to the measures taken. This allows us to “visualize” the progress of the response, and prevent any oversights. The knowledge and lessons of the Defect Record are utilized companywide, and have proven to be effective in terms of quality buildup and quality improvement measures, prevention of the occurrence and recurrence of defects, and the education of young engineers. Furthermore, the Reliability Evaluation Building has an area featuring lessons learned from past defects, where actually used products with quality and performance are displayed. This area is used to educate researchers by encouraging them to learn from past failures.

Reliability Evaluation Technology

As FANUC products are used in manufacturing sites, they are exposed to extremely harsh environments. In order to ensure that our products can operate stably for long periods of time under these conditions, while contributing to minimizing downtime in our customers’ factories, we are promoting the standardization of evaluation tests by conducting them in a variety of surroundings.
The Reliability Evaluation Building, which opened in 2016, has a total floor area of approximately 22,679 square meters (103 meters wide × 198 meters deep), and houses a variety of equipment for thorough reliability verification.
This facility is equipped with dedicated test rooms, such as an anechoic chamber, an EMS (electromagnetic susceptibility) test room, a vibration test room, a mist test room, a variable temperature room, a variable humidity room, a capability limit test room, a noise measurement room, a submergence test room, a clean room, and a precision measurement room. In this facility, a variety of tests are performed while taking into account variations in data under various conditions, including the accelerated life test to evaluate long-term reliability.

Reliability Evaluation Building



Anechoic chamber

Mist test room

Ensuring Customer Safety

FANUC contributes to the improvement of safety and the minimization of downtime at its customers' factories. To this end, it is essential to enhance product safety in order to protect operators from danger. FANUC engages in research and development to ensure a higher level of safety, and its FA, ROBOT, and ROBOMACHINE products comply with the relevant safety standards.

Complying with safety standards	We fully meet safety standards, such as ISO and IEC, and have been certified by certification bodies. The ROBOSHOT α-S*i*B series meets the newly established safety requirements for injection molding machines (ISO 20430, JIS B 6711). This will ensure the safety of operators and molding worksites in accordance with the new safety standards.
Dual Check Safety (DCS)	DCS complies with safety standards (IEC61508 SIL 2, IEC62061 SIL 2, and ISO 13849-1 PL d) and has been certified by certification bodies. Safety-related signals are duplicated for comparative monitoring. In the event of a failure of one hardware safety circuit, the other detects the failure, thus maintaining the safety of the system.
Custom Programmable Machine Controller (PMC) safety function	In our ROBODRILL, the customer or system integrator can apply the abovementioned DCS to the control of peripheral equipment that is additionally installed on the ROBODRILL. This will make the separate safety circuits and control equipment unnecessary.
Malfunction prevention function	The design gives consideration to safety, such as by halting and issuing an alarm in the case of accidental operations by the operator. In the future, we will work on a feature that stops functions pertaining to hazardous and accidental operations, as well as one that prevents such choices.
Fully covered structure for high temperature parts	FANUC's unique structure features a fully covered machine, including the high temperature area where the ROBOSHOT heater is mounted, in order to avoid the risk of operator contact with high temperature parts during molding operations.
Collaborative robots	Collaborative robots do not require a safety fence, because they securely stop operating when coming into contact with humans. These robots are used to assist in tasks alongside human workers, enabling operators to avoid heavy lifting, so that persons with less physical strength can perform tasks safely.
Smooth stop function	This function stops robots on a procedure that has been confirmed to be safe in the shortest possible time, in case of any abnormality.
Brake error diagnosis function	If a failure occurs on a brake while the robot is in operation or at rest, the power of the brake may decrease, causing the robot's gravity axis to fall. This function provides early diagnoses of such brake malfunction, and notifies the user in advance.

Product Design

In line with our "Simple & Smart" design policy and the human-centered design (HCD) concept, we create products that fulfill our users' requirements and greatly satisfy them, without being deficient or excessive. While complying with ISO, JIS, and local laws and regulations, we aim for designs that seriously take into consideration user-friendliness and safety. We are in the process of formulating related guidelines. Our new collaborative robot CRX, released in December 2019, gives the rough, rugged image of industrial robots a fresh new look. The clean, rounded lines of this novel design offer a soft external appearance that allows the operator to share space with the CRX comfortably.

Solutions for Decreases in the Workforce and Skilled Engineers

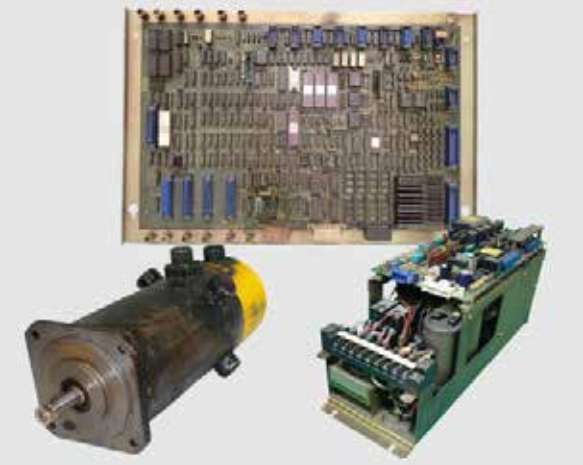
The number of workers in the manufacturing industry, as well as the number of skilled engineers is expected to decrease in the future. FANUC promotes labor saving through the automation and robotization of factories, in order to solve the problem.
In addition, if engineers cannot operate the machines properly, not only will productivity decline, but also the facility operating rates will decrease due to such failures, and the engineers themselves may be injured. We strive to solve this issues by developing user-friendly products.

Partial automation of work processes by collaborative robots	Collaborative robots do not require a safety fence, because they securely stop operating when coming into contact with humans. This enables the partial automation of work processes at manual labor production sites. Collaborative robots provide additional options for solving labor shortage.
QSSR (Quick and Simple Start-up of Robotization)	In order to reduce the technical roadblocks involved in building robot systems, we have packaged the basic elements required to connect CNCs and robots. FANUC facilitates the introduction of systems that easily connect machine tools and industrial machinery to robots and easily check operation status, as well as with robot control by CNC programming (G code command) and manual handles, including a function that automatically views and recognizes the relative positions of the machine and the robot, without requiring correction of the robot's position teaching.
Visual guidance screen	With ROBOCUT, functions such as a simple adjustment for adjusting machining parameters, which enables easy fine-tuning, are displayed on the guidance screen, to provide visual guidance on how to use the machines. We give attention to make them user-friendly even for unskilled operators.
Easy-to-use user interface (UI)	By making the UI of the teaching pendant used in the teaching of robots easier to use and adopting a tablet style for the pendant, we have made it easy even for unskilled workers to conduct operation and programming. The new collaborative robot CRX has made the creation of teaching programs easier, enabling operators to use their hands to move the robot arms directly and control the robot easily even on first-time use. With the tablets now widely used, operators can create teaching programs by dragging and dropping icons, just as they would with a smartphone.
Easy connection of laser oscillators	Highly- synchronous connection with machine tools and robots through simple settings supports the smooth building of machining systems.
SERVO GUIDE, AI Servo Tuning	We provide machinery manufacturers with support tools for the easy realization of high-level tuning of parameters to control the servo motor. The inclusion of an AI-based tuning support function enables even unskilled operators to carry out servo tuning.
CRX arc welding function	It is easy to handle the robot and replicate the welding techniques of experienced welders even for first-time users, thanks to Direct Teach, which lets you move the arm directly by hand, and the intuitive arc welding operation, through icons on a tablet. In addition, because the CRX is a cooperative robot, it can be easily introduced without safety fences.
Dual-screen simultaneous display	ROBOSHOT uses a 21.5-inch display, one of the largest in the injection molding machine industry, and our unique dual-screen simultaneous display for improved screen operability. The help display corresponding to each setting item allows even first-time ROBOSHOT operators to set up the screen without a manual.
Multilingual support	ROBOMACHINE promotes multilingual operation screens so that all customers around the world can comfortably operate the machine in their local language.

Lifetime Maintenance

FANUC provides lifetime maintenance for its products as long as they are used by customers, even for models that are no longer in production. Lifetime maintenance makes it unnecessary for our customers to renew their equipment due to discontinued maintenance service, thereby allowing them to use FANUC products at a low cost for several decades.
At our Repair Factory, we perform approximately 90,000 repairs per year in Japan, including products that were manufactured more than 40 years ago. We have a stock of over 3 million pieces of 17,000 types of repair parts, including old parts that are no longer in production, ready to repair used motors, PCBs, or units.
Even in cases where some parts run out of stock, the Repair Factory has a system for finding replacement substitutes or redesigning them. In addition, old manuals are also digitized as part of our efforts for lifetime maintenance.
Units which have broken down are cleaned in an automatic washing machine using robots or other means, and after drying them overnight with a drying furnace, they are repaired. Not only damaged parts, but also parts that are starting to deteriorate are replaced, to attain a quality in repair that is equal to a brand new unit.
We collect parts that have deteriorated but can still be regenerated and overhaul them for re-use, thus contributing to the reduction of waste as well.
The Repair Factory has performed over 1.9 million repairs thus far, and its know-how is utilized in domestic and overseas repairs, as well as being fed back to laboratories.

Example of repair for PCB, spindle motor and servo amplifier unit over 40 years ago.



Before repair

After repair

Providing Global Services

Based on the spirit of “Service First,” FANUC provides lifetime maintenance for its products for as long as they are used by customers, through more than 260 service locations supporting more than 100 countries throughout the world.
Service

Basic Approach

Based on our spirit of “Service First,” FANUC strives to improve customer satisfaction by providing prompt and careful services and lifetime maintenance.

Policy

Conforming to the spirit of “Service First,” FANUC provides lifetime maintenance to its products for as long as they are used by customers, through more than 270 service locations supporting more than 100 countries throughout the world.

Service First

Promotion Framework

In order to promote our basic policy, once a year, we hold the Global Service Conference, organized by the President and CEO, which is attended by top management of Group companies and service personnel from locations around the world, as well as key members from FANUC Headquarters.
From 2020, due to the Covid-19 pandemic, we use online discussion boards to hold conferences, and just as in real conferences, participants share case studies and knowledge about topics like parts and technical information, maintenance tools, service training, and service DX through various working group activities to improve and strengthen our services.
The 2022 Global Service Conference, although held online, was attended by a total of about 540 participants with more than 1,200 comments and lively discussions.

Goals

We aim to improve customer satisfaction by providing better services. To this end, we make efforts to shorten the average waiting time for services, and increase the percentage of maintenance parts that can be delivered immediately on demand.

Initiatives

To Realize Flexible Services

More than 2,300 service personnel and support staff (all are FANUC Group employees) around the world handle phone calls, provide services at customer sites, and manage maintenance parts. Units replaced at the request of our customers are repaired at Repair Factories in 14 locations around the world to be reused. Using these units in subsequent maintenance services leads to waste reduction and the effective utilization of resources.
In our domestic services, we are striving to enhance mobility, primarily by having all field service personnel carry a mobile device, so that representatives can visit customer sites as quickly as possible, based on the current locations of all personnel.
To further reduce wait times, we do not divide the introductory training into groups by machine type for new hires after 2021. Instead, all new hires receive the same training.
Younger employees who joined the company before that time also receive cross-training, not just on the machines with which they are proficient. We focus on training multi-skilled service personnel who can handle all types of machines, including FA (CNC), LASER, ROBOT, and ROBOMACHINE.
The realization of flexible services requires all types of maintenance parts that amount to an enormous quantity.
FANUC has a global parts warehouse in Japan to store maintenance parts for which there is extremely low demand. We also strive to visualize inventory around the world.
By globally managing our inventory of maintenance parts, regardless of how old or rarely used they may be, they are stored at some locations around the world. Inventory data is updated to provide parts as quickly as possible. In addition, we prepare an overall demand forecast for maintenance parts, in order to utilize the data to streamline the supply of parts.
Furthermore, we established additional core locations in Japan as part of our business continuity plan (BCP), to secure the continuity of our services. We have also ensured that we can continue providing lifetime maintenance by establishing call centers and parts warehouses in the two locations of Hino, Tokyo and Komaki, Aichi, as well as by mirroring the servers that contain accumulated information, including past service data.

Nagoya Service Center


Hino Branch Office

Enhancing Our Service System

In our after-sales service, in addition to carrying out repairs in a short time, we are strengthening our efforts to implement preventive maintenance by detecting signs of trouble before breakdowns. We are actively marketing ZDT (Zero Downtime), which enables the monitoring of information and preventative maintenance by centrally managing information on mechanical parts, processes, system status, and maintenance timing by connecting the AI Servo Monitor, which connects CNCs via a network and collecting servo motor data to predict failures.
In addition, we are encouraging preventive maintenance in order to improve operating rates in our customers' factories. In our call centers, we accept inquiries regarding repairs in case of failures and parts sales.
We have established and deployed a toll-free line in Japan. Call centers use a dedicated reception software which are updated as needed, reflecting requests from service personnel and operators.
Similar software is used in our overseas offices tailored to the circumstances and characteristics of each country.
Key data from individual maintenance reports is shared among countries, and utilized primarily to improve reliability, and develop jigs and tools.
To accommodate the new normal era created by COVID-19, we are pursuing new types of services, such as remote diagnosis and online support, as a project for service DX.
Our first step was to launch FabriQR Contact, a contact service using QR codes, in Japan in October 2020.

Services in Japan

We accept calls until 5:10 p.m. on Saturdays for customers who operate their factories on weekends.
After long public holidays and other times when there is a heavy concentration of calls, all staff in each location, including veteran field engineers, handle calls, and calls are automatically forwarded from the call center to available lines at locations to prevent a fall in response rate.
We also provide the CS24 service (for a fee) to customers who request availability at night and on Sundays and holidays.
Some overseas offices have individual contracts with customers to provide maintenance services 24/7.
In addition, we provide a maintenance contracts after expiration of the warranty period. Customers who have signed the contract to prepare for any product failures after the warranty period expires, are entitled to repair services which are free of charge within the contract term for an unlimited number of times (certain parts and supplies are excluded).

Membership Website

A membership website established in April 2015 provides downloads of electronic data for outline drawings to members free of charge. There are two types of membership, i.e., general membership open to the general public amounting to around 32,000 members, and customer membership limited to actual users of FANUC products currently consisting of around 12,500 members (as of June 30, 2022).
Customer membership website is a very convenient site where a customer can download materials including electric manuals and purchase maintenance parts.
In December 2019, we added a chatbot function, launching a registration service for customer product information and a Q&A service regarding the membership website. Compared to the past when service personnel entered such registration information sent back from customers on postcards, such information can now be self-registered by customers, enhancing convenience for both parties. We are launching a new maintenance information service based on the registered information.
We have also begun responding to customer members' technical inquiries with the use of a chatbot function. We are engaged in initiatives to enhance convenience for customer members by regularly adding and updating Q&A content.

Membership Website (in Japanese)

*Japanese site services are available only in Japan.

Customer Satisfaction Surveys

FANUC America, FANUC Europe, and other overseas group companies conduct regular customer satisfaction surveys. In Japan, we conduct anonymous questionnaire surveys of customers that we attend on site, in order to reflect customer feedback in improvements to our services.

Support for Restoration from Natural Disaster

Many natural disasters occur in Japan every year, and we dispatch service personnel to respond according to the needs of our customers.
In 2021, there was an earthquake off the earthquake off the coast of Fukushima Prefecture in February, flooding in Numazu City, Shizuoka Prefecture in July, and a heavy rain disaster in western Japan in September, etc. Our service personnel visited 44 companies and 320 units for restoration work.
Overseas, we cleaned and repaired as needed in response to flooding in Durban, South Africa. The Global Service Division took the lead in arranging parts and handling repairs at repair shops in neighboring countries, enabling the customers' factories to be restored as soon as possible.
FANUC responds to disasters under our philosophies of "one FANUC," "Reliable, Predictable, Easy to Repair," and "Service First."

Support for Customers

Technical Support for Our Customers

Each business division provides support to our customers per product, to enhance customer satisfaction.
In the FA Business Division, the Sales Engineering Department plays a central role in providing technical support and adjustments for installing CNCs at the design/production sites of machine tool builders, who are our customers, as well as support for building machining systems for laser oscillators and determining machining settings. Engineers are dispatched from research & development divisions as necessary to share the latest technical information and hold technical meetings to deal with new models designed by our customers.
The ROBOT Business Division and the ROBOMACHINE Business Division also provide technical support for automating production lines of our customers.
In addition, the ROBOMACHINE Business Division has established an environment to conduct remotely machining and molding tests without the need for customers to visit the company, as a way of providing technical support during the COVID-19 pandemic.

Efforts to Facilitate the Introduction of New Models

FANUC facilitates the introduction of new machine tool models at manufacturing sites. For machining programs using G code, which are primarily utilized in FANUC CNCs, the program of old models can be used as-is, without making changes. As such, machine tools equipped with FANUC CNCs can reuse the programs and settings of old models, thereby facilitating the introduction of new machine tools for our users.
Even during the introduction of new ROBOT and ROBOSHOT models, the programs for old robot models can be converted and reused. In ROBOSHOTs, various settings data and parameter files for molding conditions can be transferred to other models. Combined with our efforts for lifetime maintenance, we realize the long-term use of our products, and promote improvements in customer satisfaction and the effective utilization of resources.
Our collaborative robots do not require a safety fence and can be easily installed later without the need to re-design the existing production line layout.
The robot mechanical arms and controller of the new collaborative robot CRX are lightweight, enabling them to be carried by hand, eliminating the need for a crane for transportation and installation. In addition, while industrial machinery often uses a three-phase power supply, which is for commercial use, CRX is compatible with AC100V/200V single-phase power supply, so it can be plugged into a normal power socket.

FANUC ACADEMY

Overview

FANUC has been focusing its energy on training our customers, as well as domestic and overseas service personnel since its foundation, in order to promote automation and robotization in our customers' factories around the world.
In 1982, FANUC established the FANUC Technical Training Center and over 100,000 participants have graduated to date.
In March 2018, FANUC established FANUC ACADEMY, an educational facility that expanded the size and content of the Center. FANUC ACADEMY offers training programs for all products, from CNCs, Servos, and Lasers, Robots, Robomachines, and the FIELD system, with training lasting from two days to three weeks, depending on the needs of the participants.
In 2020, the number of trainees decreased due to the spread of COVID-19 and the measures we took to prevent infection, but we responded to the demand for education by enhancing eACADEMY, a new online education system with live and on-demand seminars through FY2021.
During the one-year period from April 2021 to the end of March 2022, as a result of thorough countermeasures to prevent the spread of COVID-19 such as limiting the number of participants in face-to-face seminars and holding only those seminars considered highly necessary, the number of face-to-face Academy seminar participants continued to decline, but we had 2,462 participants from Japan. Live seminars and on-demand seminars continued to accept participants.
In addition, FANUC ACADEMY is also working with Training Departments established in the United States, Europe, and China to build a system for conducting training based on FANUC's global standard to customers around the globe.
We are engaged in efforts to provide a high level of customer service while also educating our trainers and service engineers around the world on the latest products through live seminars.

FANUC ACADEMY offers robotics education to students from local technical high schools.
The students presented this initiative to visitors at the opening seminar of the International Robot Exhibition 2019, which was very well received.

Click here to see the initiatives taken at FANUC ACADEMY in response to COVID-19.

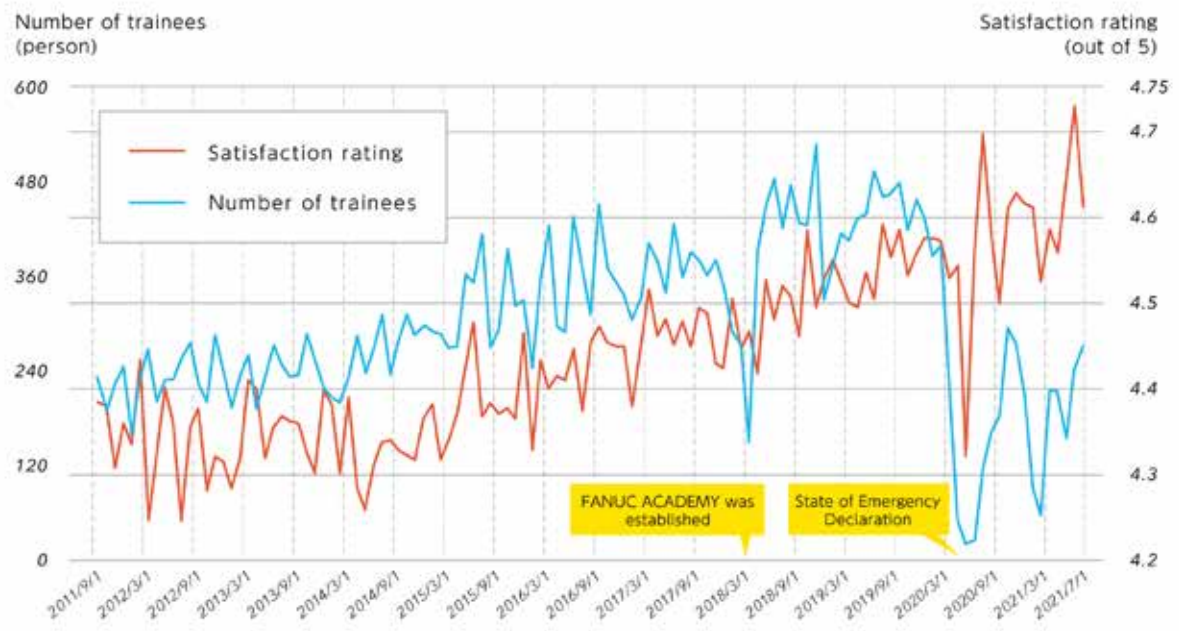
Systems to Enhance Educational Effectiveness

Workshop classrooms	Actual products are installed in our classrooms, so that trainees can practice directly on CNCs or machines by their side, while listening to lectures.
eACADEMY	eACADEMY offers two styles of training: live online seminars that even persons living far away can attend, and on-demand seminars providing training material that can be studied multiple times, regardless of time or location. Tablets are available for eACADEMY students so that they can participate in on-demand seminars during the course period. It is possible to study in the classroom during breaks and in accommodation rooms in the evenings.
Abundance of machines for practice	For training on CNCs, ROBOTs, and ROBODRILLs, one unit is provided to each trainee.
Guest House	There are 110 spacious guest rooms. There is also a cafeteria and onsen facilities (hot spring baths)

FANUC ACADEMY's Satisfaction Rating and Number of Trainees

We have revised our systems to thoroughly enhance educational effectiveness, and have received a rating of 4.5 or higher out of 5 on the trainee satisfaction survey, since 2019.The average satisfaction rating for the FY2021 was 4.60.

FANUC ACADEMY's Satisfaction Rating and Number of Trainees



* The number of trainees decreased from February to March 2018, due to the transition from FANUC Training Center to FANUC ACADEMY. During this period, the Nagoya school continued to offer training.
* Due to COVID-19, the number of trainees decreased 2020.

Respect for Trainee Diversity

When we built FANUC ACADEMY in 2018, we set up a Muslim prayer room for trainees. This was done to ensure the facility takes into consideration the religions and customs of employees and trainees from around the world.
Food served at the facility includes vegetarian items and gluten-free items.

Door sign

Place for wudu

Prayer room

With Our Employees

Basic Approach

FANUC considers its employees to be human resources who are indispensable for the Company's business activities. We will support the health and growth of our each of employees and provide an environment that allows each employee to attain self-realization with a sense of purpose.

Promotion of Employees' Diversity & Equal Oppotunity

Basic Approach

FANUC respects and supports the diversity and equal oppotunity of our employees, and creates an environment that accepts diversity, based on the philosophy that diversity gives rise to new values.

Initiatives

(1) Gender-Related Initiatives

<Promoting the Active Participation of Women>

In addition to striving to ensure that employees can play an active part in the workplace regardless of factors such as nationality and gender, etc. FANUC has enhanced various systems including maternity leave, child-care leave, and short time working until children finish elementary school, so that women can pursue their careers without interruption. In this manner, FANUC fully supports the active participation of women.
In April 2021, we renewed our General Employer Action Plan Based on the Act on Promotion of Women's Participation and Advancement in the Workplace. We are actively promoting the recruitment of women, with the aim of increasing the percentage of female employees. Under this plan, FANUC has established a target of 10% of regular female employees for the Company as a whole. To achieve these goals, we are promoting efforts such as having female researchers visit schools and handle company visits by female students when recruiting for technical positions, and promoting efforts to create opportunities for women to discuss work and actual lifestyles. We are also implementing initiatives such as external seminars to support career development for female employees.
Recently, women have increasingly been playing active roles as executives in various fields, with two female employees promoted as officers.

<Support for Balancing Work and Home Life>

At FANUC, 100% of the female employees who have used the child-care leave system during the past three years have returned to work, which confirms that the Company's working environment is comfortable for women. Furthermore, we opened a nursery for employees' children in the Headquarters' site in April, 2019, using the company-initiated nursery business system, supervised by the Cabinet Office. To reduce total actual working hours, we have set the annual paid leave-taking rate to at least 80%, and supporting for balancing work and home life.
As an initiative to encourage male employees to take child-care leave, we have posted on the companywide portal site Q&A and guidance documents regarding leave systems for child care and nursing care as well as support offered by the government. A help desk has also been set up in the Human Resources Department to support the balance between work and child care and nursing care. This approach has spread knowledge and understanding of our initiatives within the Company, and more male employees are taking child-care leave.

(2) Disability-Related Initiatives

When determining assignments, FANUC takes into account the characteristics of each individual's disabilities as well as his/her aptitudes, while also considering safety aspects so that persons with disabilities can play an active role in the Company.
We have also established a support system to promote the employment of persons with disabilities, by cooperating with the Japanese government's Hello Work employment centers and the Yamanashi Prefecture Vocational Center for Persons with Disabilities, and by appointing vocational life counselors for persons with disabilities.

(3) Initiatives for Nationality, Race, and Religion

FANUC thoroughly implements the "prohibition of discrimination based on race, creed, gender, social status, religion, nationality, age, mental or physical disability, etc." in its recruitment practices as well. While we hire students from overseas, we do not treat them differently or discriminate against them in any way because of nationality.
FANUC also strives to provide a working environment that is comfortable for employees from overseas. We have facilities that take into consideration the religions and customs of employees from around the world. We offer vegetarian food, gluten-free food, etc. to employees for whom religious dietary considerations are required. FANUC ACADEMY also has a Muslim prayer room for employees and trainees from overseas Islamic companies.

Entrance display


Place for Wudu


Prayer room

(4) Age-Related Initiatives

In October 2006, FANUC extended its mandatory retirement age from 60 to 65 years.
Employees who have reached the retirement age of 65 years may continue to work at the Company if both the Company and the employee so wish.

Health and Safety of Employees

Health and Safety Principle

FANUC considers the health and safety of its employee's first issue.
1.Safety is created through the collective creativity and ingenuity of each individual in each workplace, with the participation of all employees.
2.We create a clean, bright and comfortable workplace.
3.We promote the mental and physical health of our employees.

Policies

Safety Management Policy

FANUC accurately communicates information to workers on the production site through the team leader. Further, provide work guidance based on work observation results and implement activities to reduce accidents.

Health Management Policy

FANUC places an emphasis on preventing heat strokes during the summer in view of recent exceptional weather conditions, while working to maintain and manage the physical and mental health of our employees.

Promotion Framework

FANUC has established the FANUC Health and Safety Committee as an organization that mainly discusses and determines company-wide safety and health management policies, related measures and significant issues.
The Committee holds two meetings per year, with the President and CEO designated as the responsible person, and officers of each business division and the union leader as its members. The Safety and Health Department of the Human Resources Division serves as the secretariat engaged in coordinating activities.
In addition, we have established District Safety and Health Committees based on the law in four factory districts and five sales office districts for health and safety activities. Each District Safety and Health Committee holds meetings of the Workplace Safety and Health Committee, which is a sub-organization per department, to notify instructions and other matters from the District Safety and Health Committees to each workplace.

Initiatives

Scope of Health and Safety

FANUC has implemented Health and Safety Regulations to ensure the health and safety of FANUC Group employees, contract employees and part-time employees, in order to make work smoother and improve productivity.
When employees of contractors and subcontractors perform tasks at FANUC, we do its best to prevent accidents, injuries and health problems from occurring, in conformance with FANUC's Contractor Safety Management Regulations.

Priority Activities for Health and Safety

FANUC has specified five priority activities, and is pursuing our efforts through the establishment of a promotion department, that mainly works together with the Safety Section and each workplace.
We aim to reduce occupational accidents by setting single-year goals regarding safety management.

Preventing occupational accidents	We will prevent equipment-related accidents by introducing pre-commissioning risk assessment of production equipment when equipment is installed. We will establish a system to provide internal notifications of the cause of each accident and countermeasures taken, with the aim to prevent accidents.
Improving the work environment	We will improve the work environment based on the results of working environment assessment.
Health maintenance and promotion	Efforts are being made to eradicate occupational diseases by conducting special health examinations, along with follow-ups of the health examinations results.
Preventing fire accidents	Efforts are made to prevent accidents by improving the management of equipment that use fire within the workplace.
Preventing cargo handling and transport accidents	Efforts will be made to create a system for preventing forklift accidents.

Designated operator system	As an initiative for preventing forklift accidents, a designated operator system will be introduced as an in-house qualification. Under this scheme, only forklift driving license holders who are recognized by the workplace as having skills above a certain standard will be permitted to drive forklifts.

Risk Management of Production Equipment before go-live

As an assessment before go-live of new production equipment, FANUC identifies and assesses risks and conducts risk management related to health and safety. The Production Engineering Department, Manufacturing Department, and Health and Safety Department conduct risk assessments from their respective viewpoints and make determinations of “operable,” “provisionally operable,” or “operation suspended.” For determinations other than “operable,” countermeasures are taken within 30 days, and the equipment in question can be put into operation after it is determined to be safe.

Health and Safety Education

FANUC conducts position-based and job-based education programs on occupational health and safety. It also conducts safety education for all employees at the start of employment and at times of operational changes.

Division and Department Heads	Training at the time of appointment of safety officer
Section Heads	Supervisor education
Newly appointed team leaders	Supervisor education delivered by specialist institutions Health and safety education by Health and Safety Department
Company fleet drivers	Risk prediction training through discussions among small groups of drivers belonging to the same section
Service personnel	Risk prediction training for representatives of each location by specialist institutions

Number of Participants of Health and Safety Education

In FY2021, FANUC conducted the following education programs.

Type of Education	Times Held	Number of Participants
Supervisor education by specialist institutions	4	53
Health and safety education by Health and Safety Department	5	23
Risk prediction training through discussions among small groups of drivers in the same section	A total of 1,068 times by the end of December 2021	A total of approximate 5,000 employees took part in this education program by the end of December 2021
Danger prediction training for service personnel	-	92
Danger prediction training for team leaders	4	84
Training at the time of appointment as safety officer *Cancelled in 2021 due to the COVID-19 pandemic.	0	0

Health and Safety Patrols

With the aim of reducing occupational accidents, FANUC conducts monthly patrols at each factory. In addition to patrols by the safety officer, health officer, and industrial physician, we have established a system, in which individual sections patrol the condition mutually.

Based on the results of working environment assessments and special health checkups, we have identified workplaces with noise issues and workplaces that use organic solvents and confirmed the status of operational improvements.

Knowledge and Measures Learned from Occupational Accidents

We investigated the causes of lost-time accidents, eliminated dangerous actions and tasks, and implemented safety measures for both machinery and management. We also strive to prevent occupational accidents by sharing near-miss cases.

Safe Maintenance Work by Service Personnel

As service personnel perform their work alone at the customer's factory, it is important that they are more sensitive toward safety and predict potential risks. Risk prediction training by specialist institutions is provided to the representatives of service locations, who then roll it out in their respective service locations, to improve risk prediction capability.

We also develop maintenance tools for service personnel to achieve safe and efficient maintenance work.

Issue and Distribution of Pocket Safety Card

We have issued a pocket-sized card that features FANUC's Three Safety Principles, Six Safety Action Principles, Six Prohibitions, and the FANUC KY Principles, so our employees can check them anytime, anywhere.
In 2020, we revised the Five Safety Action Principles and Five Prohibitions that had previously only been applicable to manufacturing sites, making them Six Principles and Six Prohibitions that cover the entire Company. In this way, we are striving for company-wide occupational health and safety.

Goals/Achievements

Goals

FANUC has established the Health and Safety Committee, with the President and CEO designated as the responsible officer. This Committee sets and monitors annual goals for lost time injury (LTI) frequency rates and intensity rates every year.

Achievements

There were no work-related fatalities of employees, contract employees, and temporary staff at FANUC CORPORATION. We have now achieved zero fatalities for more than 3 years.

Creating Better Working Environments

Initiatives

Practicing Work and Life Balance

FANUC considers reduction of long working hours to be an issue, and is striving to lower the maximum limit for overtime work and promote the taking of annual vacations as corrective measures. We check the achievement status of these goals and working hours in monthly meetings attended by executives. Annual vacations were taken at a rate of 86% in FY2021, achieving the target of 80%. In addition, to facilitate flexible work styles that achieve a better balance with everyday life, in October 2020, we made it possible to take annual vacation by hour unit.
In addition to annual leave, we have also established systems to make it easier for employees to take various types of leave. We have expanded the system for infertility leave, by adding family care and infertility treatment to the purposes used for accumulated vacation (paid).
To better promote the balance of work and child-care, we have extended the application of the short time working system for child-care, as well as the exemption from overtime and work on holidays for child-rearing employees upon request, until children have finished elementary school.
In recent years, in response to feedback from employees that they would want to continue working while receiving treatment even if they are diagnosed with cancer or other illnesses, we have established a helpdesk to support such employees so that they can work while receiving treatment, by actively promoting short time working, working from home, and other means.

*Official working hours of FANUC CORPORATION is 7 hours 45 minutes a day, 124 vacation days in FY2021, and the annual total official working hours is 1,867 hours.

Main Systems

- Support for Balancing Work and Home Life
- Child-care leave (Return-to-work ratio: 100%; Retention ratio one year after returning to work: 100%)
- Nursing-care leave (e.g., to take care of elderly parents)
- Infertility leave
- Subsidies for specific infertility treatment costs
- Short time working for child care
- Refreshment leave (can be taken after 10 years, 15 years, 20 years, 25 years, 30 years, 35 years, and 40 years of employment)
- Leave due to transfer of a spouse
- Working from home

Promotion of Mental-health Care and Line Care

In addition to treatment by psychiatrists and mental health care mainly by counsellors, as part of our health support initiatives for employees, FANUC offers Employee Asistance Program (EAP) delivered by external specialist institutions to current employees and their family members, as well as former employees who were at least 60 years of age when they resigned.
Eligible persons can receive guidance and advice from specialists, including consultation on health-related concerns, mental health counselling, and second opinions.
By providing line-care training for executive employees on a regular basis, we are working to create comfortable workplace environments and to achieve early detection and treatment for employees with mental health issues.
We also conduct stress checks every year, follow up with individuals with high stress levels, and analyze the ratio of health risks and individuals with high stress levels by organization. In these ways, we are making efforts to help those organizations with problems improve their workplace environment.

FANUC Nursery School (Corporate-led Nursery Business)

With the growing number of employees of the child-rearing generation in their 20s and 30s, to contribute to the enhancement of the child-rearing environment in Oshino-Mura, Yamanashi Prefecture where FANUC Headquarters is located, we established a corporate-led nursery business in the spring of 2019.

Located next door to the workplace, FANUC Nursery School reduces the time required to drop children off at the nursery school and pick them up and enables the safe and certain handover of children in the event of an emergency such as a natural disaster. Responding to users' needs, the facility has been operating at close to full capacity since its first year of operation.

In addition, the facility accepts new enrollments throughout year, facilitating a smooth return to work for employees on child-care leave.

The school is actively engaged in initiatives to improve the quality of child care, such as offering various training programs to its nursery teachers, receiving evaluations from external institutions, and providing dietary education by cooking lunches with local ingredients.

FANUC Nursery School will continue to provide an environment in which its users will be able to balance child-rearing and career development with peace of mind into the future.

Name: FANUC Nursery School

Address: 3515-1, Shibokusa, Oshino-Mura, Minamitsuru-Gun, Yamanashi, Japan

Facility area: Floor area: 259.2 m²; Playground area: Approx. 470 m²

Capacity: 19 (Max. 31)

Eligible ages: From at least 57 days after birth to before starting elementary school

Eligibility: Priority is given to employees of FANUC and its subsidiaries, but children of local residents are also accepted.

Opening hours: 8:00 a.m. – 7:00 p.m.

Promotion of Barrier-free Buildings

We have started to install wheelchair-accessible restrooms whenever new business premises are built and existing ones are refurbished.

Facilities with wheelchair-accessible restrooms

Headquarters area	11 facilities
Tsukuba Factory	3 facilities
Mibu Factory	5 facilities
Local offices, local branches, service centers	9 facilities

Asset-building Support

- Corporate pension plan
  With the corporate pension plans, we guarantee future benefits to employees so that they can work with peace of mind.

- Retirement allowance plan
  FANUC has set up retirement allowance plans to reward employees for their long-term contributions to the company, so that they can live with peace of mind after retirement.

- Employee shareholding association plan
  FANUC has an employee shareholding association to support employees with long-term asset building by acquiring shares in the company.

Creating a Fulfilling Workplace

Basic Approach

A work environment in which each employee can develop a career vision based on the values they cherish and continue to grow to fulfill that vision is necessary to improve the job satisfaction of our employees.
As a mechanism for this purpose, we are currently working to create opportunities for dialogue within the workplace to support individual career development and growth through the implementation of rank-specific trainings, and we have also introduced an internal recruitment system to match departments that recruit personnel with employees who plan to achieve their career goals.
In addition, we are continuously engaged in efforts to improve organizational issues to create a fulfilling workplace through the implementation of a yearly organizational culture survey.

Initiatives at FANUC CORPORATION

Career Development Support

We are working to create opportunities for dialogue between supervisors and subordinates through training programs in order to support the career development of each one of our employees. We provide training for supervisors to improve their management and leadership skills, conveying the importance of supporting the growth of their subordinates through interactive dialogue, as well as to acquire skills and knowledge that can be utilized in dialogue situations with subordinates. For subordinates, we provide “young employee training” to implement growth plans based on values they cherish as well as “mid-career employee training” to pursue areas of specialization as professionals, creating a mechanism for them to share their respective career visions with their supervisors and receive support from them.

Internal Recruitment

We conduct internal recruitment where departments in need of new human resources clarify the requirements they are seeking and recruit personnel internally. With this system in place, employees are encouraged to take on new challenges to achieve their own career goals, thereby revitalizing the organization and enhancing individual motivation.

Organizational Culture Survey

Every year, we conduct an “organizational culture survey” to ascertain employees’ awareness. Each organization uses the results of the survey to identify organizational issues and implements countermeasures in a PDCA cycle to consistently improve the workplace environment and enhance employee job satisfaction.

Initiatives at FANUC America Corporation

At FANUC America, we seek our employees’ feedback in our pursuit of creating a desirable employee experience and continuing to attract and retain top talent. We empower them to share feedback in an annual survey which generates high-quality information that helps us understand how our employees feel at work, where we need to improve our employee experience and what solutions we can implement. Managers whose team includes five or more survey respondents receive specific team reports. These reports are used to drive discussions at the group level and further refine our understanding of the feedback and development of action items supporting employee engagement.

In 2021, 72% of our employees participated in the survey. Employees’ opinions of communications within the company, of their job and of the company continued at the same high levels as measured in previous years. Favorable responses to questions about the ability to accomplish career objectives at FANUC America increased from 83% to 85%, the opportunity for promotion / advancement within the company increased from 63% to 66%, providing a supervisor/manager they can respect increased from 90% to 91% and treating employees with respect and dignity also increased from 90% to 91%. Talent development continues to be an area of focus.

FANUC America also participates in a survey that identifies Top Workplaces in the Southeast Michigan and Chicago regions based on the results of an independent employee satisfaction survey. FANUC America headquarters has been a winner of this award for the past 10 years, and for 2018-2021, FANUC America’s Chicago office was also named as a Top Workplace winner.

2012-2021(Detroit)

2018-2021(Chicago)



Initiatives at FANUC Europe Corporation

1. General intention - set up - participation

Target of FANUC Europe Corporation is to be the Employer of Choice, both for our employees and for new talents we want to attract. To utilize the engagement of our Employees, FANUC Europe Corporation conducted an Employee Survey in December 2021.
More than 1,800 employees in 24 countries received an individual invitation E-mail and a link to the survey from external company to ensure confidentiality.

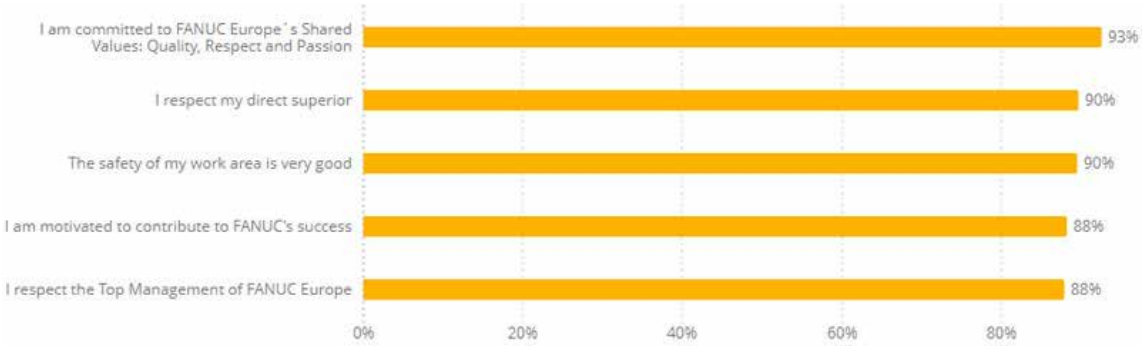
Results of the survey are available through a customized Dashboard with several filter options for Managers. Anonymity measures have been applied to ensure the confidentiality of respondents. For the answers, we applied a 5-point scale from strongly disagree to strongly agree. The survey was available in 9 languages and as desktop and mobile app application to facilitate a high participation rate.

1,431 employees responded to the survey, which leads to an overall participation of 79.1%. This is a very good participation rate for such comprehensive survey in several countries and languages.

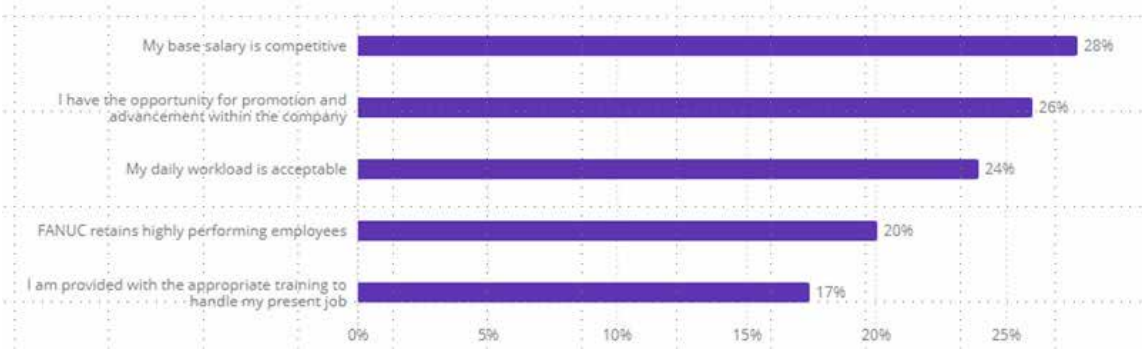
2. Summary of content and results

We asked 43 questions related to the categories Engagement, Work Conditions, Leadership and Communication.

Top 5 positive: (percentage shows employees who rated with “strongly agree” or “somewhat agree”)



Top 5 negative (percentage shows employees who rated with “strongly disagree” or “somewhat disagree”)



3. Communication of Results

All employees have been informed from European HR with a Summary of the overall results. Employees Newsletters from the CEO supported the communication additionally. In parallel, the Management of local Subsidiaries got access to an electronic survey dashboard, the presentation of the results was done from the local Management.

4. Action Plans

Two types of action plans are defined: European Action Plans and local Action Plans. For the European Action Plans, CHRO and HR together with CEO analysed the results to come up with actions that have to be addressed. Local Action plans are defined from each Subsidiary and monitored from European Management

5. Follow up

Besides the continuous monitoring of the implementation of local action plans, a follow up survey is planned for FY 2023.

Communication with Employees

Basic Approach

FANUC recognizes that each employee's individuality, as well as the comprehensive capabilities of our employees constitute the source of FANUC's growth and competitiveness. Accordingly, we believe that it is extremely vital to conduct bidirectional communication, which properly conveys the Company's status, policies, and expectations to our employees, while also receiving input from them.
In order to enhance communication, FANUC engages in indirect communication via the Labor Union, as well as direct communication.

Initiatives

Communication via the Labor Union

1.Production Council (four meetings per year)
The Council explains the Company's production status, hiring plans, work hours, and other short-term conditions to the labor union, and receives requests from the labor union.
2.Spring labor-management negotiations (five times from February to March)
Spring negotiations are held to share the Company's business condition and determine the working conditions based on a labor-management agreement.
3.Regular labor-management meeting (once per month)
A forum is provided for sharing and resolving daily occupational, health and safety issues.
4.Labor-Management Overtime Management Committee (once per month)
The Committee shares the actual situations and issues regarding work hours for objectives such as work style reforms, promotion of health, and work-life balance, and discusses directions for resolving these issues.

Direct Communication between the Company and Employees

1.When announcing financial results, we send a message to our employees regarding the Company's business performance and the associated background, deepening their understanding of the Company's conditions as we strive to foster a sense of unity with employees.
2.Top management sends messages directly to our employees at each milestone, such as when they join the company, promoted to executive employee, or posted overseas, explaining the FANUC's basic principles and management policies and expectations for employees, leading to increased pride and engagement in the FANUC and their work.

Development and Training of Employees

Basic Approach

FANUC supports the growth of our employees as human capital who are indispensable for FANUC's business activities and who contribute to the value enhancement of FANUC.
In order to realize sustainable growth as a company in the future, we believe it is necessary to provide employees with opportunities to deepen their understanding of our basic principles and organizational vision, to act autonomously as strong individuals who recognize their own role, as well as to learn and grow according to their own career aspirations and strengths, and to maximize their strengths through mutual interaction.

Initiatives

FANUC strives to enhance the value of our employees by providing support for their individual growth and career development.
As an educational system for this purpose, we are currently providing executive employees with trainings to improve their management and leadership in the workplace according to their responsibilities.
Furthermore, we are conducting trainings for mid-career employees to pursue their areas of expertise as professionals, and trainings for young employees to implement growth plans based on the values they cherish, and we are working to support their career development and growth through dialogue within the workplace.
We also conduct training for employees to give them the specific knowledge and skills that are required in the individual workplaces. For example, the Service Division strives to improve customer satisfaction by providing technical education to service personnel in Japan and overseas.

Current Education and Training Framework

Trainings for All Employees

Training Name	Trainee	Content
Diversity training	All employees	Encourage understanding of the significance and importance of promoting diversity, foster and instill a sense of ownership, and communicate key points that each individual should be aware of and work on in their own workplace
Harassment prevention training	All employees	Acquire basic knowledge needed to prevent harassment and create a better working environment
Mental health training (line care/self-care)	All employees	Promote understanding and increase awareness of mental health issues, as well as deepen understanding of the care expected of managers for workplace members
Information security education	All employees	Raise employee security awareness and literacy, with the aim of preventing information security incidents
Compliance education	All employees	We post various policies and guidelines on our company-wide portal site, and we are working to foster compliance awareness through awareness-raising and educating activities by providing various types of training. In 2022, we conducted compliance training on whistleblowing system for FANUC officers and employees (including part-time employees and contractors) based on the revised Whistleblower Protection Act.

Management and Leadership Improvement

Training Name	Trainee	Content
Training for division head	All division heads	Improve skills required to overcome management issues that should be considered by management leaders (management skills, growth strategy-making skills, life skills)
Training for department heads	All department heads	Establish management and leadership styles to lead the workplace based on awareness of the role of one's own department from a company-wide perspective
Training on workplace management	All section heads	Learn the basics of management to enhance organizational capability as a manager of an organization and maximize their section's outcomes
Training for new executive employees	Employees promoted to executive positions	Learn leadership for achieving results as a team, with the aim of deepening their own expertise and solving issues that they are addressing as a group

Career Development

Training Name	Trainee	Content
Mid-career employee training	General mid-career employees	Cultivate an awareness as a “professional” who plays a central role in the execution of workplace operations, and pursue their “unique” area of expertise to lead the workplace as a front-runner.
Young employee training	Young employees in career-track positions (three years since joining the Company)	Foster “independent human resources” who can proactively approach their work from their own awareness of the expectations of others, their personal strengths, and their core values

Management Capability Improvement for Manufacturing Sites

Training Name	Trainee	Content
Team leader training	All team leaders	Raise awareness of one’s role as a supervisor at the frontline of the manufacturing site and improve the knowledge and practical skills required to manage a workplace as a leader
Young technical employees training	Young technical employees (7 or 8 years with the company)	Cultivate an awareness as a member of the organization who is responsible for the execution of manufacturing operations and the preservation and enhancement of organizational strength, and connect it to actions for encouraging others and resolving work issues.

New Recruit Training

Training Name	Trainee	Content
New Recruit Training	All new-graduate recruits and mid-career hires	Learn basic knowledge as employees of FANUC, such as its businesses, history, basic principles, organization, corporate culture and so on, explain governance and various other policies as well as human rights policies and require compliance with them.
Etiquette training	All new-graduate recruits	Acquire business etiquette to facilitate work and become a trusted corporate person through appropriate behavior and communication as a member of society.

Foreign Language Training (English and Chinese)

To help individual employees enhance their skills according to the language proficiency requirements of their work, in addition to the TOEIC exam, we have expanded our training options for language skill acquisition, including business English, English conversation, and Chinese conversation.

Division-based Training

Besides the training programs described above, each division has their employees attend external workshops and provides training sessions for them to acquire the particular knowledge and skills required for their assigned tasks.

Education and Training for Service Enginneers

The Service Division conducts cultivation and education training for service personnel. At FANUC, we believe that improving the level of the services provided by our service personnel is of utmost importance. As such, we are working to provide high-quality services globally through the cultivation and education of our service personnel.

In addition to etiquette training for all new-graduate recruits, we strive to further improve customer satisfaction by giving consideration to personal appearance and speaking manner, based on the Service Engineer Code of Conduct.

In addition, we have started an initiative to transfer young service personnel to the sales and technical support departments (for a designated period of about two years) in order to cultivate a multifaceted viewpoint, which will lead to career advancement and improvement of duties, by allowing them to see their own departments from the outside.

Apart from this, we would like to further improve the efficiency of current duties by appointing younger field service personnel for call center duties, which until now we thought could only be performed by veterans, using databases and reception systems.

As for the new employee training, in 2022, as in 2021, we set up a videoconferencing system available at all times in one of the classrooms at FANUC ACADEMY of FANUC Headquarters, allowing the Hino Branch and FANUC ACADEMY to view each other's activities.

We also provided all employees with a tablet and laptop computer immediately after they joined the Company.

In addition, we provided our new employees with basic knowledge by sharing with them the e-Learning contents produced by FANUC ACADEMY and other resources prepared in-house by individual departments.

Currently, new employees watch the e-Learning contents in their free time for preparation and review.

Over the approximately five months after joining the company, we have provided technical training, basic education as a working member of society, and safe driving education by an external lecturer. For future required qualifications, we have started providing special education for operating industrial robots, low-voltage electricity, full harnesses, etc., from the time they join the company so that they can safely carry out their duties.

Moreover, in order to drive company-owned vehicles on a daily basis, they attend courses such as on-site training from local police departments and "safe driving based on accident examples" from non-life insurance companies to improve their safety awareness. (Domestic Service Division)

Because our business is essentially based on client visits, we conduct not only general information security training, but also training on client information management, in order to ensure thorough information management.

Similarly, for technical education, safe driving education, and lessons on safe working for service personnel already active in the field, we conducted online education by connecting FANUC Headquarters, Hino Branch, and each service location throughout Japan.

In the past, we have had business trips to trade shows and other events, but since we are trying to minimize business trips to distant locations during the COVID-19 pandemic, our service personnel are also watching the customer-oriented online distribution to enhance their product knowledge.

For those who were not able to participate in that either, we are also working on online training courses.

To overseas service personnel, we maintain a high level of service overseas through education and training on maintenance technics by using videoconferencing systems, on-demand seminars and video materials.

Technical education at FANUC ACADEMY	FANUC ACADEMY provides technical education to service personnel Japanese and overseas almost every week, utilizing training programs that incorporate our customers' requests.
Technical education at group companies	We also provide technical education to service personnel at FANUC America, FANUC Europe, and other group companies. With regard to education on new models and advanced technology, the persons in charge participate in programs offered by FANUC ACADEMY to acquire the necessary skills, and deploy them within their offices after returning to their countries.
Introductory training and follow-up training of new employees	In Japan, we provide intensive education to new service personnel for four to five months, at the time of onboarding. Service personnel hired overseas are also given training in a planned manner at the Headquarters. Furthermore, follow-up training is provided to new hires one year after joining the Company.
Winter intensive training (Japan)	In the winter, FANUC ACADEMY conducts intensive skill improvement training, mainly with regard to new products, so that all service personnel are able to provide high-quality service based on FANUC's global standards.

Implementation Status of Education and Training for FY2021

Number of FANUC ACADEMY participants	Domestic service personnel: 236 Overseas service personnel: 96
Number of trainees trained in group companies	Overseas service personnel: 828
Number of FANUC ACADEMY training hours (annual average per trainee)	Domestic service personnel: 20.83 hours

Award Programs

On July 1 every year, at the Anniversary of Foundation Ceremony, FANUC presents awards to groups and individual employees who have made significant contributions to the Company's business performance or who have undertaken outstanding activities that serve as a model for others. Other awards include those for employees who have created patented inventions and other inventions that are beneficial to our business.

In 2021, we presented the Special Achievement Award, Achievement Award, Invention Award, and Outstanding Safety Workplace Award.

The awardees received a certificate of commendation and cash reward, and the Special Achievement Award recipient was also presented with a medal.

The Special Achievement Award and Achievement Award are often given to teams that cross business divisions and administration divisions, signifying the practice of "one FANUC."

The Outstanding Safety Workplace Award was presented to workplaces that achieved remarkable results in the elimination of occupational accidents.

As for services, at the annual Global Service Conference, we present awards to the top service personnel from all over the world who have provided excellent service in the past year. In 2022, we presented awards to 11 individuals or groups from ten companies.

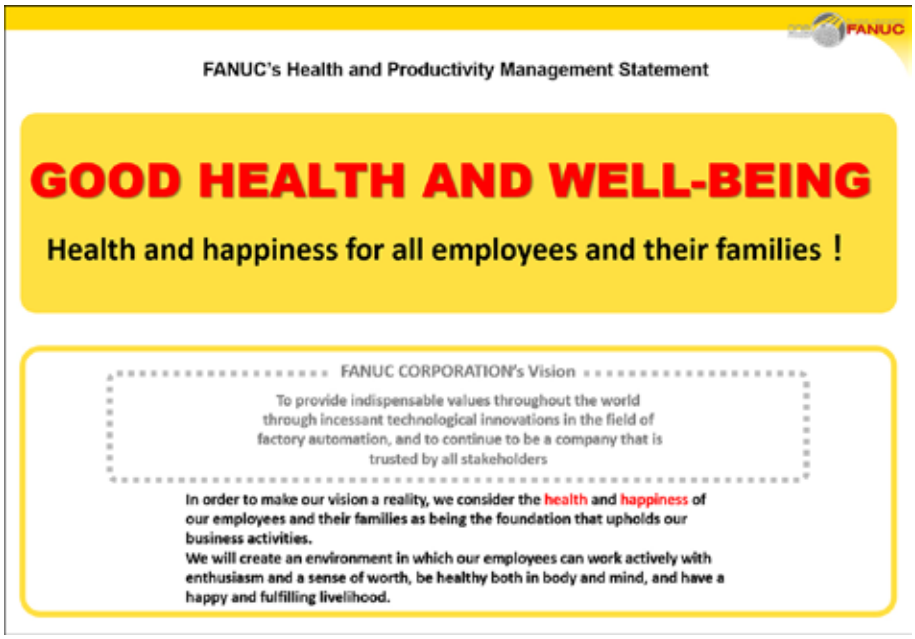
Health and Productivity Management

FANUC's Health and Productivity Management Statement

Creating an Environment in which Employees can Thrive and Feel Fulfilled

In order to make our vision a reality, we consider the health and well-being of our employees and their families as being the foundation that upholds our business activities. Based on this belief, Health Management has been promoted from April 2022.

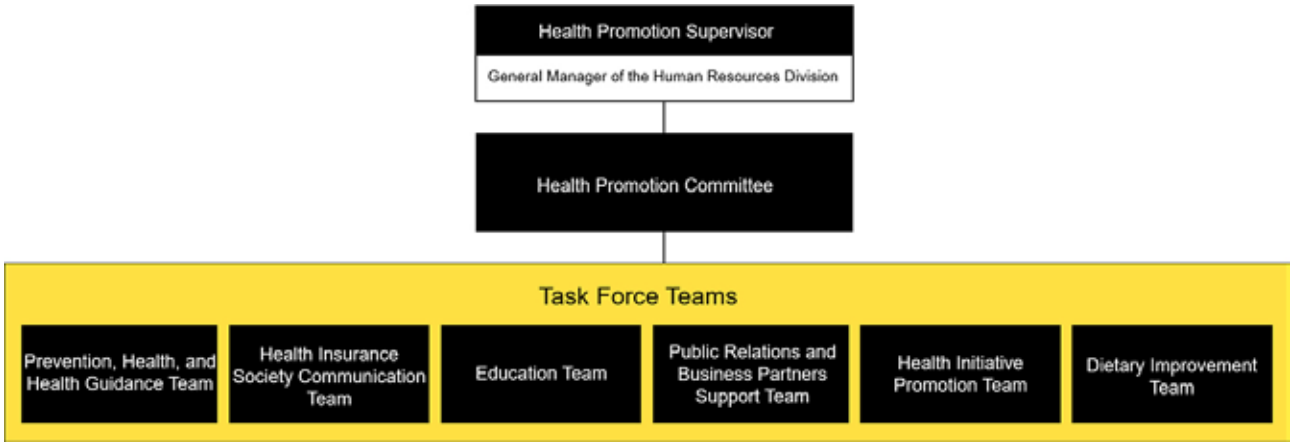
As part of this endeavor, we will create an environment in which our employees can work actively with enthusiasm and a sense of worth, be healthy both in body and mind, and have a happy and fulfilling livelihood.



Promotion Framework

The General Manager of the Human Resources Division is responsible for health promotion, and the Welfare Department serves as the administrative office.

Six task force teams have been established under the Health Promotion Committee to actively incorporate the opinions of related divisions and work together to promote the program.



Activity Policy

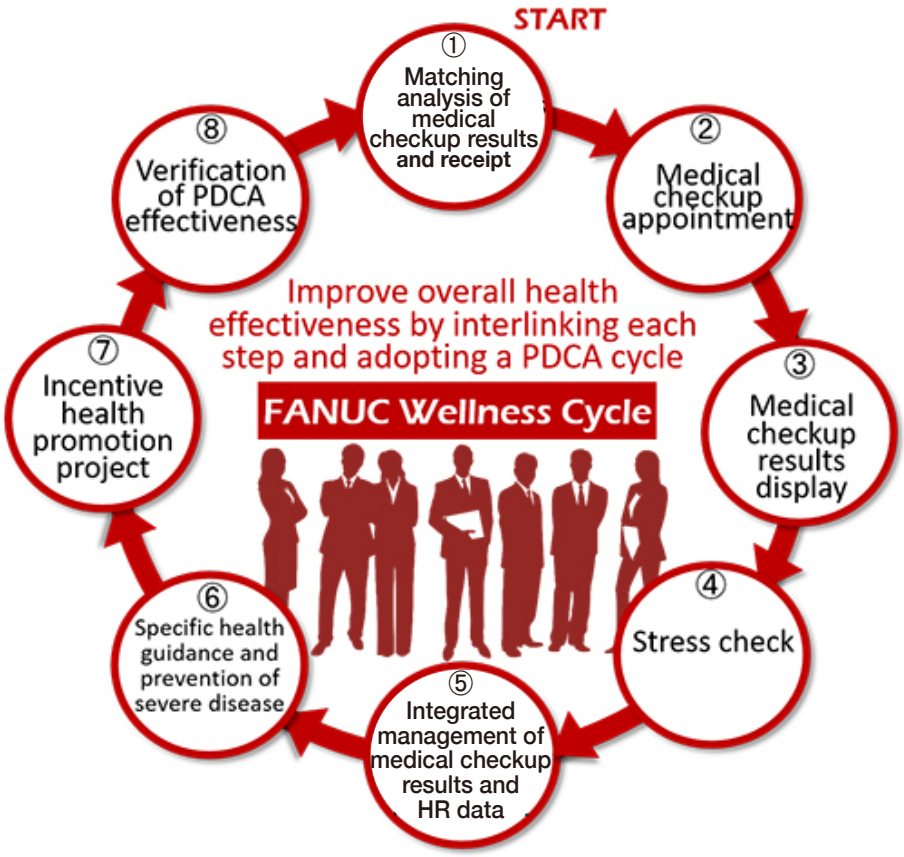
1) We will turn "health promotion," which will further strengthen our health foundation, into a new engine for improving corporate value.
2) We will acquire "Excellent Health Management Corporation" status in FY2022 and promote activities from a medium- to long-term perspective.

Note: "Excellent Health Management Corporation" is a certification program of the Ministry of Economy, Trade and Industry, which is given to corporations that practice excellent health management.

Commitment

1) First, learn proper lifestyle habits in general, starting with “exercise”
2) Stimulate “education” and “communication” to create a corporate culture in which people can work actively
3) Link the effects of each of the health promotion projects

Implement PDCA operation in the annual business cycle.
In this way, we will promote the acquisition of health literacy, which encourages people to become physically and mentally healthy on their own.



With Local Communities

Basic Approach

FANUC has over 260 offices covering more than 100 countries around the world. We aim to earn the trust of all stakeholders of our offices and to be rooted in the communities surrounding them. In our headquarters area, many of our employees have moved from other areas to Yamanashi Prefecture, following a local lifestyle while working close to home. FANUC headquarters employees rely on the organizations and facilities of the local government and community in their daily lives. Accordingly, FANUC makes efforts to contribute to the local community, such as by recruiting human resources from technical high schools in Yamanashi Prefecture every year and making donations to the community.

Supporting Research through the FA Foundation

The FA Foundation was founded in 1989 by Dr. Seiuemon Inaba, the Honorary Chairman of FANUC. FANUC donated funds at the time of establishing the Foundation, and has made donations to cover its operating costs since that time.
The mission of the FA Foundation is to contribute to society by improving automation technology, and automating machinery and machine factories, primarily through official commendations of research achievements related to factory automation (FA) and industrial robot technologies.

In FY2021, a total of eight outstanding theses were commended by the Foundation.

FA Foundation (In Japanese)

The Consortium of Human Education for Future Robot System Integration

On December 18, 2019, under the initiative of the Ministry of Economy, Trade and Industry, industry players, including FANUC and the National Institute of Technology, signed a memorandum for establishing the Consortium of Human Education for Future Robot System Integration to develop human resources in robotics. This initiative aims to match schools and educational institutes with industrial players in the robotics field. It is hoped that such matching will introduce students and teachers to internship programs, promote the dispatch of robotics engineers from companies to schools, and facilitate the development of future human resources in the robotics field.
FANUC contributes to the development of human resources in robotics, through activities such as internship programs for teachers and the dispatch of lecturers to technical colleges and technical high schools. In FY2021, we actively engaged in robotics human resource development activities, including online lectures on the latest robotics technology for technical schools.

Support for Creative Manufacturing Education that Brings Ideas to Life

All Japan Student Indoor Flying Robot Contest

FANUC is a special sponsor of the All Japan Student Indoor Flying Robot Contest.

The 17th All Japan Student Indoor Flying Robot Contest was held from December 17 (Fri) to December 19 (Sun), 2021 at the Ota-City General Gymnasium. This time, the contest was conducted by taking measures to prevent the spread of COVID-19, such as taking peoples' temperatures, disinfecting, and registering participants in advance.

This contest was intended to encourage students to engage in the "making things," but more importantly to develop human resources in aircraft design, control and other areas. A total of 48 teams from universities, technical colleges, high schools, and vocational schools across Japan, from Okinawa to Hokkaido, participated in the contest.

Participants conducted missions such as transporting goods and flying with an autopilot system, and competed in flight performance, control technology, and flying techniques.

At this contest, the FANUC Award was granted to the Tokyo Metropolitan College of Industrial Technology who won the first place in the autopilot category.

Donations to the Community around FANUC Headquarters

FANUC has donated items such as testing machines and other equipment to the Fujiyoshida Municipal Hospital, which often assists us with employee health management and thorough examinations, etc.
Every year, we sponsor Shinto rituals and community events, make ongoing contributions to the Yamanashi Prefecture Community Chest's "Red Feather Community Chest," and also regularly provide food support to the non-profit organization, "Food Bank Yamanashi."
Up to 2019, we had donated 1,570 m^2 of land for road use for village road-widening projects in Yamanakako-Village and Oshino-Village. Furthermore, in FY2022, we plan to exchange and donate the company-owned portion of the land after the completion of the Oshino village road widening project.
Since 2022, we have been donating 10% of vending machine sales commissions from vending machines installed in our headquarters area to the Gold Ribbon Network, a certified NPO.

■ Major Donations

2020	FANUC supported the "Let's Cheer Up Healthcare Workers! Donation Project for COVID-19 Countermeasures" organized by Yamanashi Prefecture, and donated ¥50 million as part of support for COVID-19 countermeasures. We also donated face masks to the government of Yamanashi Prefecture, where FANUC Headquarters is located, and to Fujiyoshida Municipal Hospital.
2021	We built shelters at two bus stops that had no roofed structures and therefore offered users no protection from the wind or rain, and donated these shelters along with the road land to Oshino-village.
2022	Donation of €1 million for supporting the humanitarian crisis in Ukraine through the Yamanashi Branch of the Japanese Red Cross Society. We have been donating 10% of vending machine sales commissions from vending machines installed in our headquarters area to the Gold Ribbon Network, a certified NPO.

Blood Donation Drives

For six days between October 1 and 8, 2021, FANUC Headquarters held a blood donation drive by the Yamanashi Red Cross Blood Center for the fifth time in as many years. The number of employees who donate blood is increasing every year, reaching 535 in 2021.
In 2020, FANUC received the Governor's Commendation for Blood Donation Promotion, which is presented to organizations that cooperate with blood donation at least twice a year or that have had more than 50 blood donors for three consecutive years.
Our Mibu Factory in Tochigi Prefecture has also been conducting blood donation drives since 2018, with 62 people on April 8, 2021 and 73 people on October 6, 2021, for a total of 135 employees donating blood.
As a familiar social contribution activity, FANUC will continue these blood donation drives with the cooperation of our employees.

Initiatives in Japan

Local Employment around FANUC Headquarters

FANUC Headquarters take initiative for securing human resources from technical high schools in Yamanashi Prefecture every year, accepting them for factory tours prior to their application and providing them with opportunities to experience manufacturing sites.

Support for Reconstruction in Disaster Zones

FANUC assists in the restoration of disaster-stricken areas, in order to help disaster victims. Such activities include donations at the time of the Great East Japan Earthquake in March 2011, the torrential rains in the Kanto and Tohoku areas in September 2015, the Kumamoto earthquake in April 2016, and the heavy downpours centered on western Japan in July 2018, as well as recovery support activities for disaster victims, to enable affected customers to resume operations as quickly as possible.
Employees also engaged in volunteering activities in the aftermath of the Kumamoto earthquake.

Inviting a City Gas Station to the Area

FANUC invited a city gas station to be built in the Headquarters area to reduce electric power consumption, which helped promote the use of city gas among local residents.

Harmonization with Local Landscapes

Oshino-Mura, where the Headquarters area is located, offers a harmonic landscape where you can view a lot of nature, such as lakes, ponds and rivers created by Mt. Fuji's subsoil water, and man-made scenery like farming fields and thatched roofs, with Mt. Fuji in the background. The local governments of Oshino-Mura and Yamanakako-Mura have established landscape plans for the preservation of the landscapes, and FANUC is also actively working with those plans.

Most forest resources owned by FANUC consist of trees planted after the war. At FANUC Headquarters, following guidance from the Yamanashi Forestry and Forest Products Research Institute, we maintain and manage trees according to the "FANUC Forest 100-Year Plan," aiming to restore forests to a state in harmony with the region. We are currently promoting a plan to replace the artificially planted coniferous trees with rich broadleaf trees that bloom, bear fruits, and allow coexistence with small birds and animals.

In addition, we are conducting controlled logging of hazardous trees to avoid obstruction of village roads due to fallen tall trees on the site, while planting tree species that naturally blend in with the land and the local area after logging is completed.

All exterior walls of FANUC's existing factories had previously been painted yellow, but when they were repainted during major refurbishments of the individual factories, gray is used as a base color and the amount of yellow used has been limited (e.g., 20% or less of external walls in the Headquarters area, 5% or less of external walls in the Hino area).

Offering the Dormitory Scheduled for Demolition to Disaster Response Training

In October 2022, we offered our dormitory scheduled for demolition to the Tsukuba Fire Department for disaster response training. This was in response to a request from the Tsukuba Fire Department to enhance disaster response capabilities by conducting destructive activities that are difficult to conduct in the training facility used on a daily basis and by conducting various types of training in an environment more similar to an actual disaster.

FANUC will continue to engage with the local community.

Initiatives at FANUC India Pvt Ltd

Towards Zero Hunger

In India, approximately 236 million children attend 1.1 million government schools. Children in government schools, especially those in villages are the children of migrant workers who help with household chores and are unable to eat even one meal a day. A meager dinner does not give them enough energy to last until lunch time the next day. The result is lack of concentration, inattention, lots of trouble, and absenteeism.

FANUC India provides meals to children and migrants.

- Provided breakfast to total of 883 children near Bangalore and lunch to 5,000 children.
- Operate a day care center in Pune, West India, with 130 children attending. The children are cared for and fed while their parents are engaged in work.
- Providing support to orphanages in Bangalore, Madurai and Coimbatore.
- Provided ration kits and cooked meals to migrants near Bangalore affected by the lockdown caused by the COVID-19.

Lunch distribution

Ration kit and cooked meals distribution

Supply Chain

Basic Approach

FANUC purchases raw materials, electric and electronic parts and mechanical parts used in its products, and the equipment, tools and fixtures used in our factories and other facilities, as well as outsources their machining and assembly, from/to approximately 1,000 suppliers. These suppliers are all important partners who are indispensable for the production of FANUC products, and we are working to establish a collaborative system with these suppliers that allows us to grow together. To this end, we strive to develop mutual trust, with a view toward fulfilling the social and environmental responsibilities required of supply chains by domestic and overseas communities.

- CSR Procurement Policy

Promotion Framework

Purchasing Department

At FANUC, as a point of contact with our suppliers, Purchasing Department gathers information on the quality, delivery time, and cost, while internally sharing information in a timely manner. Regarding CSR Procurement Policy and conflict minerals, we require our suppliers to comply with the reduction and elimination of harmful substances contained in products.
The Purchasing Department cooperates with Research & Development Divisions and Production Divisions to actively promote the use of multiple suppliers to reduce supply chain risks. In addition, with regard to parts (especially customized parts) that have only one supplier, the Department works to maintain an appropriate level of inventory even during ordinary times, so that in the event of a disaster, these parts will be secured until the supplier's factory recovers.

FANUC has set up the Supply Chain Risk Management (SCRM) Working Group to consider, and take appropriate measures against supply chain risks in the event of a disaster. The SCRM Working Group studies the location and area of the manufacturing facilities for each part, so as to immediately determine which suppliers may have been impacted, in the event of a disaster. This data has assisted us greatly in securing service parts that became difficult to obtain due to the impact of COVID-19.
In addition, with the cooperation of our suppliers, the Group has built and is operating a system (automatic email transmission) to investigate the safety of suppliers' employees, as well as whether factories and other facilities have been damaged in the event of a disaster (an earthquake with an intensity of 5 or greater, etc.). The Group also investigates and analyzes our suppliers' efforts toward BCP, and urges suppliers to make improvements, when deemed necessary.
Once it had established mechanisms for scheduling the above activities on an annual basis and updating the information every year, and created a manual for each activity, the SCRM Working Group transferred its activities to the Purchasing Department. (July 2020)
Due to the rapid increase in demand starting in 2020, the procurement of various parts, including semiconductors, was in a critical state. We established an Emergency Countermeasures Working Group with the Purchasing Department, Research & Development Division, and Production Division, and the entire company worked together to negotiate parts procurement, purchase market items, adopt alternative parts, and replace production processes, etc. to ensure that production could continue at a high level.

Disaster Response Team

In the event of natural disasters such as earthquakes and typhoons, the Purchasing Department conducts automatic email transmission (as described above). It also identifies suppliers that may have suffered damage based on factory location information it has studied in advance, and confirms their status.
In particular, in the event of a large-scale disaster, the Disaster Response Team initiates its activities in cases where the supply chain is deemed to have been seriously damaged. The Disaster Response Team comprises personnel selected in advance from each research & development division, each production department, and the Purchasing Department. These personnel work together to grasp the status of suppliers, confirm the delivery time of parts, and take supplementary measures for parts difficult to obtain.
In response to the turmoil in the supply chain caused by the impact of COVID-19, we established a Disaster Response Team and took various measures to ensure smooth supply of our products to customers.

Master Transaction Agreement

The following articles are incorporated in the master transaction agreement we conclude with each supplier, and compliance to these articles is required as important items.

Article 33 Environmental Policy and Environmental Laws and Regulations
Article 39 Elimination of Anti-social Forces

CSR Procurement Policy

FANUC established the CSR Procurement Policy in July 2019.
The Supplier Code of Conduct is prescribed within this Policy. We send this Policy to each supplier and request their compliance.

Declaration of Partnership Building

In August 2020, FANUC released a Declaration of Partnership Building with the aims of building mutually-beneficial relationships with suppliers in its supply chain and increasing added value across the entire supply chain through new partnerships with suppliers.
The framework and structure for the Declarations of Partnership Building have been confirmed by the Council on Promoting Partnership Building for Cultivating the Future, which consists of representatives from the business community and labor organizations, as well as government officials, and are being promoted by the Cabinet Office and the Small and Medium Enterprise Agency.
Under our Declaration, we will strive to ensure that SMEs do not bear the brunt of unfair trade conditions caused by the impact of COVID-19, surges in raw materials and logistics costs, and other reasons, and we will continue our efforts to encourage companies to introduce appropriate subcontract practices. We will also encourage the building of new partnerships that involve efforts to increase added value across the supply chain and open innovation that transcends business size, groups, and other boundaries.
To this end, going forward, we will continue to strive to develop mutual cooperation and relationships of trust that will enable us to grow and prosper together with our suppliers, with a view to fulfilling the social responsibilities of the entire supply chain.

Conforming with Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors

FANUC strictly complies with the Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors (hereinafter the “Subcontract Proceeds Act”). Approximately 330 companies, or 33% of all of our suppliers, are subject to the Subcontract Proceeds Act. We pay rigorous attention to ensure that there is no unjust disadvantage to our suppliers, in accordance with the Subcontract Proceeds Act.

Conflict Minerals

FANUC has a policy of not using conflict minerals* in its products. Accordingly, we strive to gather as much information as possible from our suppliers, in order to confirm that the minerals are not sourced by illegal mining from conflict areas.

* Conflict minerals refer to minerals (tin, tantalum, tungsten, and gold) that are illegally mined in conflict areas (Democratic Republic of the Congo and surrounding regions). Companies listed in the United States are required to disclose and report the use of such minerals, under the conflict mineral disclosure rule (Dodd-Frank Act) of the U.S. Securities and Exchange Commission (SEC).

Reduction and Elimination of Harmful Substances Contained in Products

FANUC promotes reduction and elimination of use of harmful substances targeted by the RoHS Directive and the REACH Regulation. Accordingly, we notify our suppliers of the related policies and request their cooperation. Since new substances may be included due to revisions of the regulations, we always strive to obtain the latest information regarding the directive and regulations.

Establishment of the Supplier Hotline

In June 2021, FANUC set up the Supplier Hotline as a contact point for suppliers to report to if they discover illegal, fraudulent, unethical, or suspicious acts related to the business of the FANUC Group. Executives and employees of our suppliers can report directly to designated law firms, enabling us to promptly discover, correct, and prevent problems.

Disposal of Molds and Payment of Storage Fees

In March 2020, to protect subcontractors, the Ministry of Economy, Trade and Industry and the Small and Medium Enterprise Agency revised and enforced the standards for encouraging fair practices and other guidelines concerning approaches to enhancing proper mold management stipulated in the Act on the Promotion of Subcontracting Small and Medium-sized Enterprises. Under the new standards, it is necessary to dispose of molds that have not been used for a long time or to pay subcontractors for the cost of storing them.
FANUC asked our subcontractors that store molds to file an application regarding the molds they wish to dispose of. We approved the disposal of some molds, and decided to pay storage fees for the other molds that should not be disposed of. We began the disposal of molds in March 2019 and the payment of storage costs in March 2020.

Lump-sum Full Payment of Mold Costs

In the payment of mold costs to subcontractors, the standards stipulated in the Act on the Promotion of Subcontracting Small and Medium-sized Enterprises calls for the transition away from long-term payment methods such as 24-month installments, which place a burden on subcontractors, to methods of early payment, such as lump-sum payments. In April 2020, FANUC changed from the 24-month installment payment method we had previously employed to a lump-sum payment method.

Goals/Performance

Single-year Goals

So-called silent change (changes made to the quality of deliverables, unbeknownst to the Company) at our suppliers may have a significant impact on the quality of FANUC products. In order to prevent such silent change, we require our suppliers to apply for changes in 4M (Man, Machine, Method, Material) and obtain FANUC's approval in the event of any changes made to deliverables. We send documents stating our request regarding changes to our suppliers, in order to obtain a response indicating their consent.
If some suppliers do not consent on the grounds of confidentiality or respond by adding conditions, we hold discussions with the said suppliers and strive to increase the number of suppliers who provide consent, so as to maintain a high level of quality without undermining mutual trust.

Performance in FY2021

We have been working continuously to achieve our single-year goals. In FY2021, we also sent the same documents as those of the previous year to obtain responses indicating our suppliers' consent. Even for suppliers whose consent we could not obtain, we have worked with quality control divisions to consider our suppliers' conditions, an approach that has allowed us to reach agreement with them in more and more cases. Going forward, we will strive to increase the number of suppliers who provide consent.

Medium-term Goals

We will build a database for the centralized management of supplier information. In addition to the supplier's information (sales, profit, items handled, and factory information) and the supplier's relationship with FANUC (transaction amount, products purchased, the contact department and PIC within the supplier), the database will also list an evaluation of the quality, delivery time, and cost of each supplier. In addition, we will consider posting information such as the supplier's efforts on ESG-related items.
Over the next few years, we will need to significantly increase production, mainly of robots, but we anticipate difficulties in parts procurement. We will work with our existing suppliers as well as develop new suppliers to establish a stable parts procurement system.

Responsible Sourcing of Minerals

Basic Policy

As part of its corporate social responsibility, the FANUC Group is committed to acting in a socially responsible manner regarding the procurement of minerals.
The FANUC Group adheres to the “OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas,” in order to respect human rights and avoid contributing to conflicts, by not sourcing mineral resources such as tin, tantalum, tungsten, gold and cobalt, in its procurement activities, which are mined in conflict-affected areas and high-risk areas such as the Democratic Republic of the Congo (DRC) and adjoining countries, where there are concerns of human rights violation in such forms as forced labor or child labor, environmental exploitation, and actions which may fund armed groups.

Approach to Conflict Minerals

The FANUC Group surveys approximately 500 suppliers regarding their use of conflict minerals. If a problem is found, we change the source we procure from to avoid using conflict minerals.

Sustainability Report 2022

Environment

Environment

FANUC Headquarters is located in a stunning forest environment adjacent to the Fuji-Hakone-Izu National Park. We have been working to protect this wonderful natural environment on our premises spanning 1.78 million square meters.
In 1999, in order to conserve the global environment, in addition to protecting the nature on our premises, we established the Environmental Policy, and have continued to update it since then. This policy guides all of our environmental initiatives by summarizing and clarifying our basic stance, which is to reduce the environmental burden at each stage of the product life cycle, from product development to procurement, production, and operation.
Based on our basic vision of “leaving nature and resources to posterity,” we have been working on reductions of CO_2 emissions and energy consumption, which are considered to be the causes of climate change, the efficient use of resources such as water and minerals, as well as the proper disposal and reduction of waste, from both the viewpoints of products and corporate activities.
FANUC shares this Environmental Policy not only within the Company and group companies, but also with its suppliers to work on achieving global environmental conservation together.

Policy

- Environmental Policy and Action Policy

Promotion Framework and Initiatives

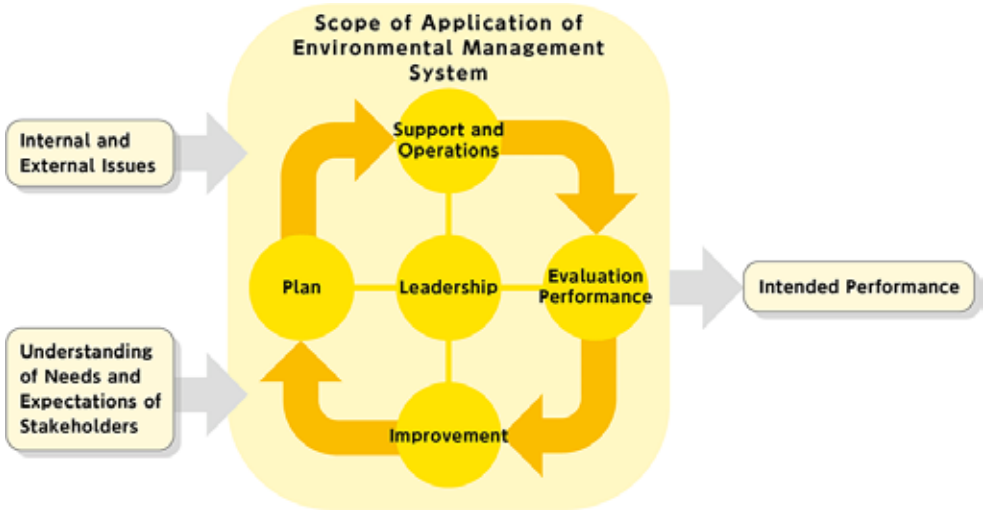
Environmental Management Promotion

FANUC recognizes that actions for the environment are an important tasks, with the President and CEO designated as the person responsible for the initiatives. Important environmental issues, including climate change, are reported to the Board of Directors for decision-making. Reports on the progress of FANUC's environmental initiatives, and the direct and indirect impacts of the environment on our business activities are collected from environmental managers assigned to the relevant divisions, and reported at the ISO14001 meeting, which is chaired by the Executive Managing Officer and General Manager, Production Division. Important matters are reported to the Board of Directors for decision-making.
Regular reports include the setting of environmental goals in March of each year, as well as a report on environmental management for the previous fiscal year in June.

Environmental Management System

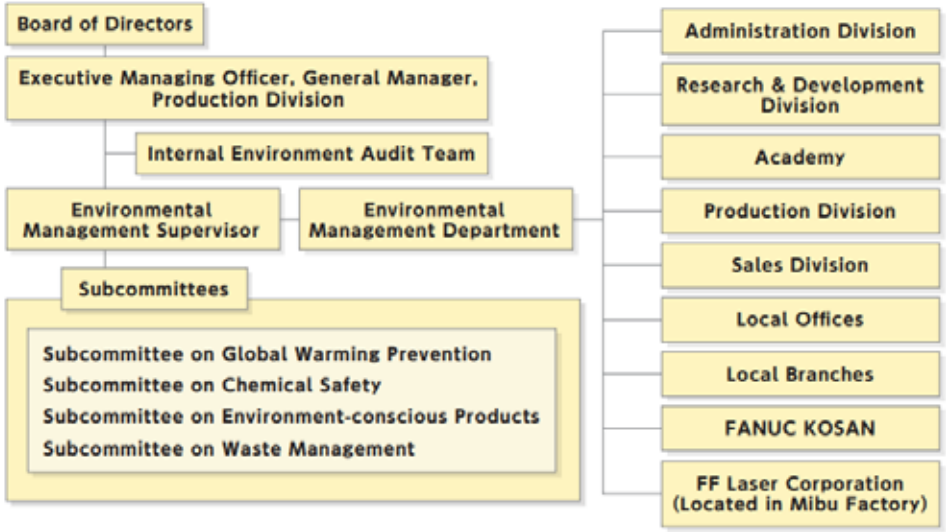
FANUC has acquired certification for the international standard for environmental management systems ISO 14001 (2015 version).
In August 1999, the entire FANUC organization was granted ISO14001 certification, with the registered range being those activities related to FA, ROBOT, and ROBOMACHINE products (including research and development, manufacturing, and sales & service). This not only covers Headquarters (Yamanashi) but also the Tsukuba Factory, Hayato Factory, and each of Hino, Nagoya, Osaka, Hokkaido, Tsukuba and Kyusyu branches and offices. In FY2018, our Mibu Factory was also included.
This environmental management system applies to every FANUC site in Japan, and also to the employees, factories, premises, buildings, facilities, corporate activities and environmental conservation activities related to the products and services offered by FANUC's domestic group companies.

Scope of Application of Environmental Management System



Organization and Structure

With the Executive Managing Officer and General Manager, Production Division serving as the chair, we hold ISO14001 meetings once a year, consisting of representatives of related divisions, to determine activity plans and review activities. Important matters at ISO14001 meetings are reported to the Board of Directors.



Internal Environmental Audit

FANUC conducts internal environmental audits of all divisions every year. The purpose of these audits is to confirm that the environmental management system conforms to ISO14001 standards and is being appropriately implemented and maintained. To ensure objectivity and fairness, the audits are performed by auditors selected from divisions other than those being audited. In cases where nonconformities are discovered in an internal environmental audit, corrective measures are implemented.

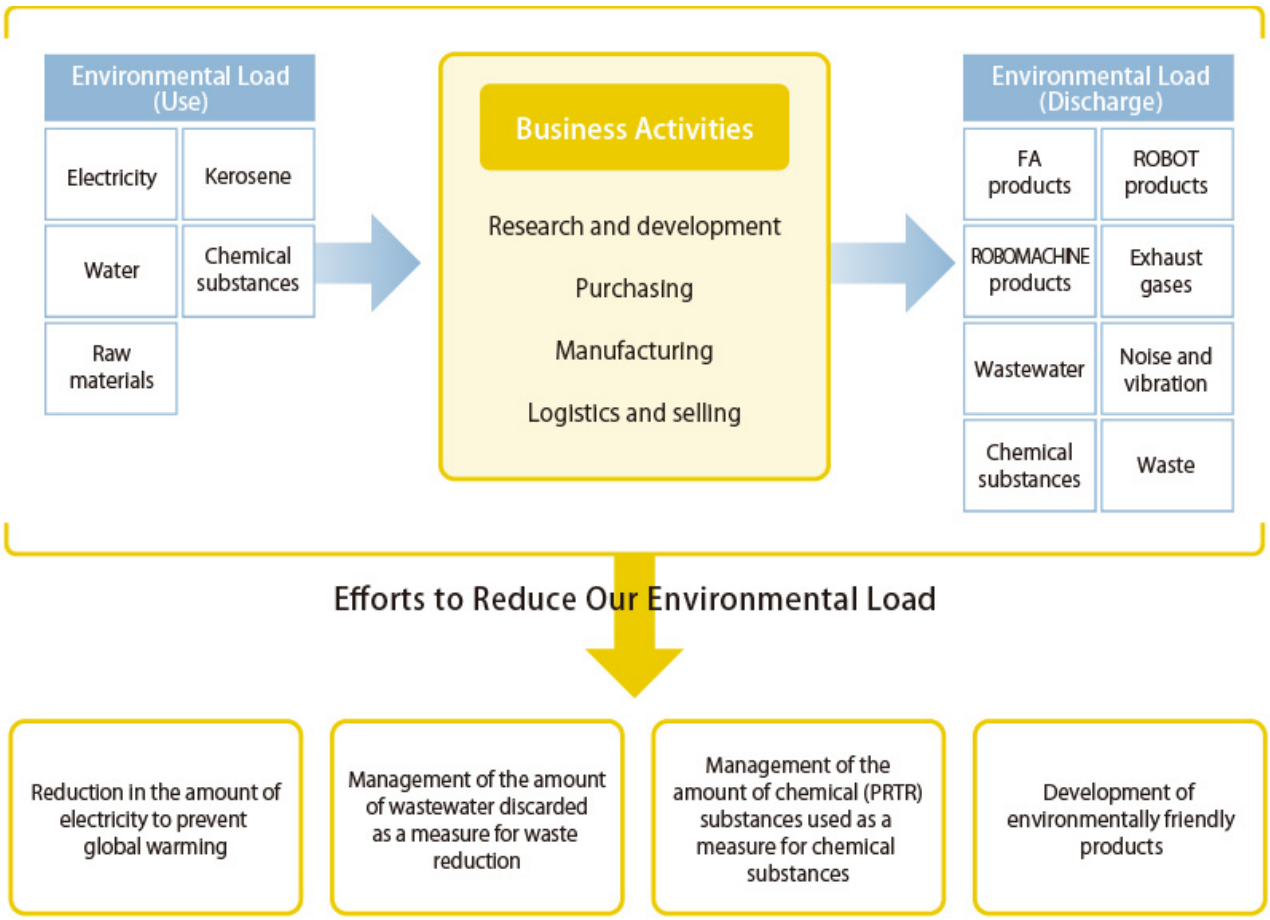
Environmental Education and Information Disclosure

To fully understand the significant environmental aspects, risks and opportunities and to minimize, control and improve the environmental load, we provide environmental training to all our employees.
New recruits, regular employees, people in charge of specific tasks, and people in charge of environmental management are educated in accordance with their respective tasks.

Compliance with environmental laws and regulations

FANUC has established a system to identify environmental laws and regulations, manage data related to both the direct and indirect impacts of our business activities on the environment, and make reports regularly.
In the unlikely event of any violations of laws or regulations, we will take swift corrective actions.
In FY2021 and in the past until now, there have been no serious violations of laws or regulations, fines or civil penalties, or major spillages in relation to the environment. Furthermore, no complaints regarding environmental issues have been filed.

Overview of Environmental Impact from Corporate Activities



Mid-to long-term Environmental Targets

Item	Mid-to long-term environmental target
Amount of electricity consumption (input)	Reduce electricity consumption (purchased electricity) by 10% or more per unit of production from the FY2020 level by FY2030.
Freon refrigerant (discharge)	Reduce refrigerant emissions conducting regular inspections in accordance with laws and regulations by FY2030.
Amount of kerosene used	Change from kerosene to city gas in the Headquarters area by FY2025.
Amount of waste liquid discarded	Using FY2020 as reference, identify the actual amount of waste liquid discarded in proportion to the level of production by FY2025. Thoroughly conduct storage management.
Amount of PRTR chemical substances used	Using FY2020 as reference, identify the actual amount of PRTR chemical substances used in proportion to the level of production by FY2025. Thoroughly conduct storage management.
CO_2 absorption	Promote the switch from coniferous to broad-leaved trees by FY2025.
Amount of fuel used to company-owned cars	Promote the reduction of fuel consumption of company-owned cars used for transportation between sites and buildings by using online conference tools by FY2025.
Development of environmentally friendly products	Implement reduction in size and weight, power consumption, and number of service parts, while extending the product lifetime, etc., by establishing numeric targets for the end of FY2025.

Environmental Targets for FY2021 and Performance

Item	Environmental target for FY2021	Performance in FY2021
Electricity consumption	The target was to reduce the amount used in proportion to the level of production by 0.84% from the previous fiscal year's level.	Target achieved with a 15.7% decrease from the previous fiscal.
Kerosene/LPG consumption	Switch to city gas in the headquarters area.	Target achieved. 1.Switched to city gas.
Amount of discarded waste liquid	Create a feasible goal in proportion to the production level. Through storage management.	Target achieved. 1.Utilization of oil water separators. 2.Collection and reuse of cutting fluid attached to chips. 3.Use of a release agent with less waste liquid. 4.Use of cutting fluid with a long service life. 5.Utilization of distillation and regenerating equipment. 6.Emergency training for waste liquid leaks.
PRTR chemical substance usage	Create a feasible goal in proportion to the production level. Thorough storage management	Target achieved. 1.Use of cutting fluid that does not contain N,N-dicyclohexylamine. 2.Use of lead-free solder. 3.Use of an ethylbenzene-free coating. 4.Thorough storage management. 5.Emergency training for chemical leaks.
Development of environmentally friendly products	For the main products, reduce size and weight, power consumption, and the number of service parts, while extending the life of those parts, etc., by establishing numeric targets	Target achieved. 1.Reduction in size and weight. 2.Reduction of power consumption. 3.Reduction of the number of service parts. 4.Improvement of operating rates. 5.Reduction of hazardous substances in parts.

Environmental Target for FY2022

Item	Environmental target for FY2022
Electricity consumption	The target was to reduce the power consumed in proportion to the level of production by at least 6.11% compared to the previous fiscal year.
Freon refrigerant (discharge)	Reduce refrigerant emissions conducting regular inspections in accordance with laws and regulations.
Amount of discarded waste liquid	Using the previous fiscal year as reference, identify the actual amount of waste liquid discarded in proportion to the level of production. Thoroughly conduct storage management.
PRTR chemical substance usage	Using the previous fiscal year as reference, identify the actual amount of PRTR chemical substances used for production as compared with the level of production. Thoroughly conduct storage management.
CO_2 absorption	Promote the switch from coniferous to broad-leaved trees.
Amount of fuel used to company-owned cars	Promote the reduction of fuel consumption of company-owned cars used for transportation between sites and buildings by using online conference tools.
Development of environmentally friendly products	For the main models of individual products, implement reductions in size and weight, power consumption, and the number of service parts, while extending the product lifetime of those parts, etc., by establishing numeric targets.

Performance in FY2021

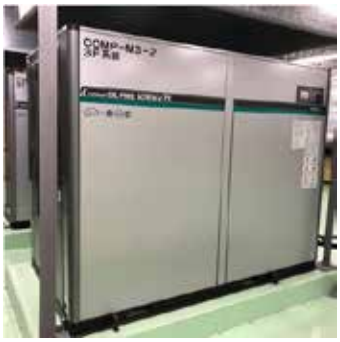
Amount of Electric Power Used

Actual Reduction in the Amount of Electric Power Used

As part of our efforts to reduce our output of greenhouse gases such as CO_2 and thus prevent global warming, we are constantly aiming to reduce the amount of electric power that we use.
The power used in proportion to the level of production in FY2021 decreased increased by 12.4% compared to the previous fiscal year's level, and we could achieve the FY2021 target.

Electric Power Reduction Measures (main measures implemented by FY2021)

1.Some machine tools in our plants were exchanged for those incorporating auto power-off devices.
2.Some of the compressors in our plants were exchanged for those incorporating inverter controls.
3.Energy-saving fluorescent lamps (with electronic ballasts) and energy-saving compressors (inverter type) were installed in new buildings.
4.The roofs of new buildings were changed to silver in color.
5.The roofs of new buildings were enhanced in heat insulation by duplicating them.
6.Power consumption was reduced with motion sensors.
7.Wind-shielding curtains were used for energy saving in air conditioning.
8.Measures were taken against heat emissions from compressors for energy saving.
9.Energy-saving measures were studied by energy-saving consultants.
10.Use of LED lighting was promoted.
11.Co-generation was promoted.
12.Power waste was reduced by preventing leakage of compressed air piping.


Energy-saving compressors (inverter type)


Silver roofs


Duplicated roofs


Motion sensors


Wind-shielding curtains


Measures were taken against heat emissions (1)


Measures were taken against heat emissions (2)


Measures were taken against heat emissions (3)

Amount of Kerosene/LPG Used

Kerosene/LPG Reduction Results

In some parts of the Headquarters area, kerosene and LPG were replaced by city gas.
As a result, we reduced the total amount of kerosene used by 49% and LPG used by 79% compared to the previous year.

Amount of Waste Liquid Discarded and Amounts of Other Waste

Waste Liquid Reduction Results

Identified the actual amount of waste liquid discarded in FY2021 in proportion to the level of production. Improved the management of waste liquid, so as to prevent environmental pollution due to spilled waste liquid.

Waste Liquid Reduction Measures (main measures implemented by FY2021)

1.Reused separated water by introducing oil-water separators

2.Collected cutting fluid attached to chips and reused it.

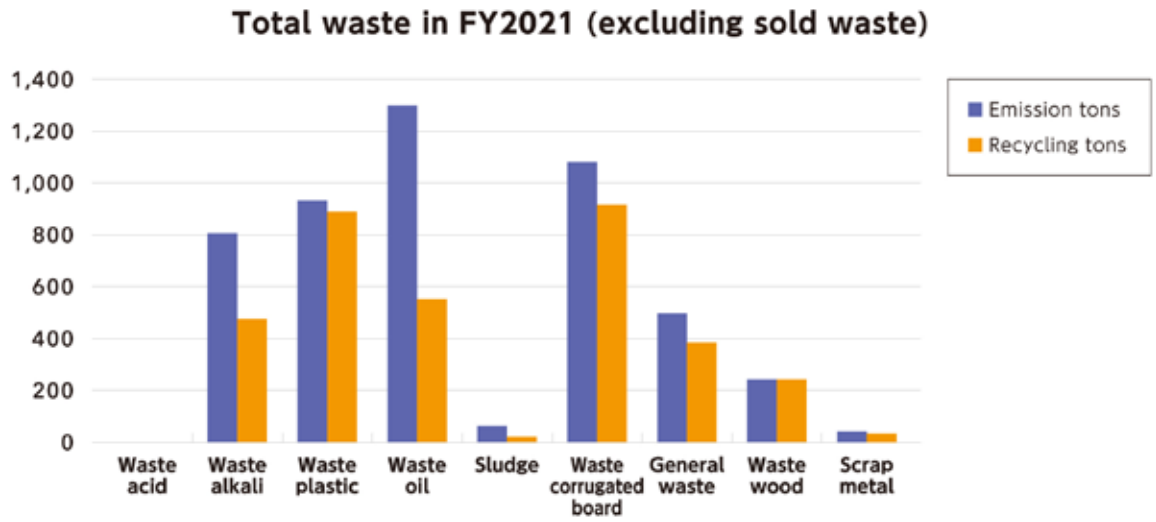
3.Used mold release materials with less amount of waste liquid.

4.Used long-life cutting fluid.

5.Reused distilled water by deploying distillation and regenerating equipment.

Other Waste

Almost all waste was recycled.
We sold waste metal 43,125t, waste plastic 31t, and waste liquid 71t for recycling.



Amount of Chemical (PRTR) Substances Used

PRTR Chemical Substance Reduction Results

Identified the actual amount of PRTR chemical substances used for production in FY2021 in proportion to the level of production.
Improved the management of chemical substances, so as to prevent environmental pollution due to spilled chemical substances.

PRTR Chemical Substance Reduction Measures
(measures implemented by FY2021)

1.Used cutting fluid that does not contain N, N-Dicyclohexylamine.
2.Replaced HCFC 141b with other materials.
3.Used oil not containing xylene.
4.Banned the use of copper salts.
5.Banned the use of ferric chloride.
6.Used lead-free solder.
7.Used coating material containing no ethylbenzene.
8.From HCFC-225 to HCFO type (ozone depletion factor is almost zero, global warming potential is less than one, not subject to PRTR)
9.Products containing ethylene glycol monoethyl acetate (Manufacture 9) changed to non-PRTR products

Total Chemical Substance Control

In order to implement the total field control of objects stored by divisions using chemical substances, we conducted the following inspections and remedied those defects found as a result of those inspections:

1.Entry of stored objects into the ledger
2.Name indication
3.Maximum quantity of dangerous objects that can be held in the storehouse
4.Whether storage containers are free from damage and leakage.
5.Whether periodic inspections are conducted.
6.Whether protective devices are provided.

We also conducted an emergency drill assuming chemical substance leakage.

Development of Environmentally Friendly Products

The research and development divisions evaluate the environmental impact of products, set targets and develop environmentally friendly products.
The Product Development Subcommittee under the environmental management system prepares environmental management plans, and product developments are conducted based on medium- to long-term plans and annual plans.

CNC System	1.Reduction in power consumption 2.Minimizing down time 3.Hazardous chemical substance reduction
LASER	1.Reduction in material consumption 2.Reduction in power consumption 3.Hazardous chemical substance reduction
ROBOT	1.Reduction in number of service parts while extending product lifetime 2.Reduction in size and weight 3.Hazardous chemical substance reduction 4.Reduction in power consumption
ROBODRILL	1.Reduction in number of service parts while extending their product lifetime 2.Reduction in power consumption 3.Hazardous chemical substance reduction
ROBOSHOT	1.Reduction in number of service parts while extending their product lifetime 2.Reduction in power consumption 3.Hazardous chemical substance reduction
ROBOCUT	1.Reduction in number of service parts while extending their product lifetime 2.Environmental load reduction after disposal 3.Hazardous chemical substance reduction

Responses to climate change

To achieve carbon neutrality, FANUC has set mid-term and long-term targets for reducing greenhouse gas (GHG) emissions and is promoting efforts to achieve them.

Targets for reducing GHG emissions

FY2050 Target	●Scope 1, 2 : Carbon neutral by FY2050
FY2030 Targets	●Scope 1, 2 : 42% reduction by FY2030 (in comparison with FY2020) ●Scope 3 : 12.3% reduction of emissions due to the use of sold products by FY2030 (in comparison with FY2020).

FANUC's GHG emissions reduction targets have been certified by the SBT initiative.

FY2030 targets are certified by the SBT (Science Based Targets) initiative.

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Regarding Scope 1 and 2, part of the power consumed in the FANUC Headquarters' area, Mibu factories and Tsukuba factories will be renewable electricity, and other sites will also switch to using renewable electricity in the near future. Furthermore, solar panels will be set up, and measures to save energy will be further accelerated to reduce GHG emissions resulting from our business activities.

FANUC Headquarters

Mibu Factories

Regarding Category 11 (Use of sold products) of Scope 3, FANUC will contribute to reducing the emissions by enhancing of energy saving features of FA, ROBOT and ROBOMACHINE products.

Promotion Framework

FANUC recognizes climate change as a critical business challenge.
At the “Sustainability Committee” chaired by the Representative Director, President, we will deliberate and make decisions on important policies and measures related to climate change, and report to the Board of Directors. Based on the reported content, the Board of Directors will supervise to check whether identification of risks and opportunities, and measures related to climate change are promoted appropriately.

Disclosure in Accordance with TCFD Recommendations

Since the adoption at COP21 (21st Conference of the Parties to the United Nations Framework Convention on Climate Change) of the Paris Agreement, movement towards a de-carbonized society is spreading. FANUC Group with its business activities expanding around the world promotes these initiatives as we recognize climate change as a critical business challenge.
In the meantime, FANUC expressed its support for the Task-Force on Climate-related Financial Disclosures and its recommendations (hereafter, TCFD recommendations) in December 2021.
Further, we would like to utilize the framework of TCFD recommendations, and continue enhancing the quality and amount of disclosures to promote climate change initiatives still further, and contribute to achieving a sustainable society.

Governance

FANUC recognizes climate change as a critical business challenge.
At the "Sustainability Committee" chaired by the Representative Director, President, we will deliberate and make decisions on important policies and measures related to climate change, and report to the Board of Directors. Based on the reported content, the Board of Directors will supervise to check whether identification of risks and opportunities, and measures related to climate change are promoted appropriately.

Strategy

FANUC conducted a scenario analysis targeting mid-term (2030) and long-term (2050) with a 1.5°C scenario, 2°C scenario, and 4°C scenario on the FA business, Robot business, and Robomachine business to identify the risks and opportunities related to climate change, and to check how these will impact FANUC Group businesses. Regarding the scenario analysis, we referred to IEA NZE, IPCC RCP1.9, etc., for 1.5°C, IEA SDS, IPCC RCP2.6, etc., for 2°C, and IEA STEPS, IPCC RCP8.5, etc., for 4°C. For each scenario, we identified the risks and opportunities related to climate change, and quantitatively and qualitatively examined and evaluated the impact on the business.
Among these, we identified the following risks that will have a significant impact on the businesses: "Increase in costs due to introduction of carbon tax," "Increase in costs due to the rise in raw material prices," and "Decrease in demand for a part of FANUC products due to the consumer behavior change and shift to EV/FCV." We also identified the following opportunities: "Increase in demands for FANUC products due to energy-saving and robotization," and "Increase in demands for FANUC products due to the shift to EV/FCV."

	Identified risks and opportunities	Responses to identified risks and opportunities
Transition risks	• Introduction of carbon tax will increase costs. • The rise in raw material prices will increase costs. • Consumer behavior change and shift to EV/FCV will decrease demand for a part of FANUC products.	• Set up a mid- to long-term goal for reducing greenhouse gas (GHG) emissions, and promote energy-saving and introduction of renewable energy, etc., in business activities to reduce GHG emissions. • Promote the support of business continuity plan (BCP) (Multiple production sites and suppliers, etc.) • Promote the development of products that contribute to customers' energy-saving /robotization, and well-demanded products due to the shift to EV/FCV. • Promote the development of products that can maintain high performance and high reliability under harsh operating and transportation environments.
Physical risks	• Increasing severity of natural disasters will damage production sites, etc., and as this negatively impacts production, recovery costs will increase.	
Opportunities	• Energy-saving/robotization will increase demands for FANUC products. • The shift to EV/FCV will increase demand for FANUC products. • Demand for FANUC products capable of working under harsh operating and transportation environments will increase due to the influence of rising average temperature.	

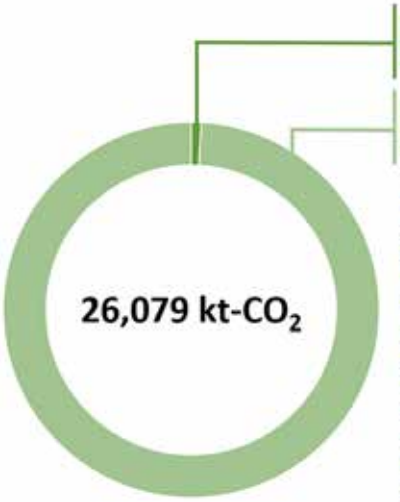
In the 1.5°C and 2°C scenario, the world is expected to undergo major social changes as it transitions to de-carbonization. There is a possibility for costs to increase due to the introduction of carbon taxes and rise in raw material prices, but we believe that we can expand the FA business, Robot business, and Robomachine business as energy-saving/robotization, and that the shift to EV/FCV will expand. The 4°C scenario does not promote low carbonization, and increasing severity of natural disasters will be expected due to climate change, such as increases in average temperature. This creates a potential increase in recovery costs as production sites, etc., will be damaged, having a negative impact on production. For these reasons, we will continue to promote the support of our business continuity plan (BCP), and deal with physical risks.
The findings of the scenario analysis on FA business, Robot business and Robomachine business rated these businesses as highly resilient in all scenarios used for the analysis. We will further promote initiatives in order to meet the challenges of identified risks and realize these opportunities in the future.

Risk Management

To address risks that may hinder the continuity of our business, the enhancement of our corporate value, or the sustainable development of our corporate activities, FANUC has established a Risk Management Committee and risk management policies, and we are conducting appropriate risk management under the supervision of the Board of Directors. The risks of climate change will also be placed in the rules, and managed.

Metrics and Targets

The FANUC Group's greenhouse gas (GHG) emissions in FY2021 (Scope 1, 2 and 3) are as follows:



The breakdown of Scope 3 is as follows

Category	Emissions (t-CO_2)
Category 1 Purchased goods and services	1,874,563
Category 2 Capital goods	159,666
Category 3 Fuel- and energy-related activities (not included in Scope 1 or 2)	30,420
Category 4 Upstream transportation and distribution	158,134
Category 5 Waste generated in operations	3,697
Category 6 Business travel	1,329
Category 7 Employee commuting	3,573
Category 8 Upstream leased assets	-
Category 9 Downstream transportation and distribution	-
Category 10 Processing of sold products	-
Category 11 Use of sold products	23,699,697
Category 12 End of life treatment of sold products	2,021
Category 13 Downstream leased assets	-
Category 14 Franchises	-
Category 15 Investments	-
Total	25,933,100

＊Regarding the third-party verification report on GHG emissions (Scope 1, 2 and 3), please see here.

FANUC has set up a long-term target of reducing GHG emissions from the business activities of FANUC Group (Scope 1, 2) to zero by FY2050. To achieve this long-term target, we have set a mid-term target of 42% reduction of the same emissions by FY2030 (in comparison with FY2020). Regarding Scope 3, we aim for 12.3% reduction of emissions due to the use of sold products(Category 11) by FY2030 (in comparison with FY2020). These mid-term targets are certified by the SBT (Science Based Targets) initiative.

Scope 1 and 2 for FY2021 were 5.7% lower than the base year.
The main reason is that a part of the electricity used in the Headquarters area, the Mibu Factories, Tsukuba Factories, etc. was switched to electricity derived from renewable energy sources. We plan to install and operate solar panels in the Headquarters area and the Mibu area in FY2022, aiming for further emission reductions.
In FY2021, emissions due to the use of sold products for Scope 3 (Category 11) were 42.2% higher than the base year. This was mainly due to a significant increase in the sales of our products. We will continue to aim for emission reductions by further improving the energy-saving performance of our FA, ROBOT, and ROBOMACHINE products.

Product Initiatives (Energy-savings)

FANUC is promoting energy saving in its products. There are two important initiatives, one is to conserve energy at our customers' factories using our products. The other is also to conserve the energy in our own factories. Considering the life cycle of FANUC products, the first initiative has a far greater effect on energy-savings. Therefore, we have long been working on developing energy-efficient products.

Development of large-capacity servo motors	We have developed a high-precision, high-efficiency, large-capacity servo motor fully utilizing our advanced digital control system. In the field of industrial machines, including press machines, which require tremendous power, we have realized energy saving by introducing this large-capacity servo motor in place of hydraulic pressure.
Adoption of power supply regeneration system	In the servo amplifier, we use a power supply regeneration system that returns energy to the power supply when the motor decelerates. This effective use of the power supply leads to energy savings. When mounted on a ROBODRILL, it reduces energy consumption by approximately 35% compared with the resistance-regeneration method. Furthermore, the adoption of new power devices has continuously reduced energy loss of the servo amplifier. It is reduced by maximum 28% compared to that in 1995.
Power consumption monitoring function	Through the power-consumption-monitoring function, we have made it possible to monitor the amount of power consumed by our CNC systems, enabling the efficient adjustment of the cycle time. In addition, CO_2 emissions can also be displayed. By using the energy-saving level-selection function, we have made it possible to choose the type of operation: one that prioritizes cycle time and one that prioritizes power consumption. When there are differences in cycle times in the production line, in case fast processing is not necessary, choosing the power consumption priority operation contributes to energy savings for the entire factory.
Fast Cycle-time Technology	This series of functions reduces cycle time. Reducing operating time contributes to reductions of energy consumption by peripheral equipment, such as a coolant pump.
Averaging the load of power demand	Night operation using robots disperses peak power and curbs power consumption.
Reducing CO_2 emissions by reducing weight	The design of the robot mechanical arms with lighter weight also reduces power consumption. For the robots with a payload of 165 kg, the Robot S-430*i*W in 1997 weighed 1,300 kg while the Robot R-2000*i*C/165F in 2013 is lighter with weight of 1,190 kg. In addition, the collaborative robot CRX has a robot mass of 40 kg with a payload of 10 kg, which is considerably lighter than the robot mass of 150 kg common to robots in the same class thus far, and reduces power consumption. Even the LR-10*i*A/10 fully enclosed handling robots are more than 1/3 lighter than conventional robots with the same 10 kg payload, and consume 30% to 40% less power.
Optimal operating program	By optimizing the operating program with ROBOGUIDE, power consumption is reduced and the lifetime of the reducer is extended to reduce running costs.
Efficient robot utilization	Use of an autonomously moving, Automatic Guided Vehicle (AGV) with collaborative robots allows a single robot to work in multiple locations, improving the efficiency of robots. This reduces standby power, compared with installing multiple robots. In addition, the latest model of the collaborative robot CRX has a very light robot mass of 40 kg, and the AGV can also be made compact. Furthermore, the CRX can be moved on a handcart instead of on an AGV, making it possible to move the robot to the place where and when it is needed.
Instruction operation panel backlight automatically turns off	Reduces power consumption by automatically turning off the backlight of the LCD screen on the robot's teaching operation panel when no operation is performed for a certain period of time.
Energy-saving design	We have developed a new type of heavy payload robot, M-1000*i*A, with a serial link mechanism that is compact and has a wide motion range. Using the latest structural analysis, the M-1000*i*A has the necessary strength and rigidity while making extensive use of curved surfaces, at the same time, saving energy through the use of arms designed to be lightweight and power regeneration that reuses the robot's deceleration energy.
Highly reliable automatic wire feeding (AWF3)	ROBOCUT is capable of unmanned operation for long periods, thanks to the highly reliable automatic wire feeding AWF3, which can automatically recover feeding even when a wire is accidentally cut and disconnected. Stable night-time machine operation disperses peak power usage and curbs power consumption.
Discharge control *i*Pulse3	With ROBOCUTs, our newly developed discharge control iPulse3 reduces machining time by approximately 10% compared to that of conventional control. Reduced machining time curbs power consumption.
Electrification of peripheral equipment	Additional axis options for ROBOSHOT can electrify hydraulically controlled peripheral equipment.

Awards and Topics on Energy Saving

ROBOSHOTs and ROBODRILLs became eligible for a subsidy for business expenses supporting promotion of advanced energy-saving investments, allocated in the FY2022 supplementary budgets in recognition of their energy-saving potential. (2022)

ROBODRILL α-D*i*B Plus Series
ROBODRILL α-D*i*B$_{ADV}$ Plus Series
ROBOSHOT α-S*i*A, α-S*i*B Series

Eligible for a subsidy in 2022 for ESG lease promotion business for the establishment of a decarbonized society (2022)

ROBOSHOT α-S*i*A, α-S*i*B Series

ROBODRILLs and ROBOSHOTs became eligible for a subsidy for business expenses supporting promotion of advanced energy-saving investments, allocated in the FY2021 supplementary budgets in recognition of their energy-saving potential. (2021)

ROBODRILL α-D*i*B Plus Series
ROBODRILL α-D*i*B$_{ADV}$ Plus Series
ROBOSHOT α-S*i*A, α-S*i*B Series

ROBODRILLs and ROBOSHOTs became eligible for a subsidy for business expenses supporting businesses rationalizing energy use in production equipment, allocated in the FY2019 supplementary budgets in recognition of their energy saving potential. (2020)

ROBODRILL α-D*i*B Series
ROBODRILL α-D*i*B$_{ADV}$ Series
ROBOSHOT α-S*i*A Series

Approved for subsidies for the introduction of energy-saving equipment for local factories and small- and medium-sized enterprises (2014)

ROBOCUT α-C*i*A Series

Prize of the Director General of Agency of the Natural Resources and Energy, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (2003)

For our large-capacity servo system with a power regeneration feature and precision digital control and for our large-size AC Servo Motor α*i* Series

The Minister Award of the Ministry of International Trade and Industry, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (1999)

Digital servo system using phase control regeneration and cycle time reduction, AC Servo Motor α Series

The Minister Award of the Ministry of International Trade and Industry, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (1998)

For our wire-cut electric discharge machines equipped with a high-speed automatic wire feeding mechanism and thick plate tracking control
ROBOCUT α Series

The Minister Awards of the Ministry of International Trade and Industry, Excellent Energy Saving Device Award Program by the Japan Machinery Federation (1995)

ROBOSHOT Series

Production Initiatives

FANUC contributes to energy-savings in our manufacturing facilities.

Streamlining the assembly process	At the Hayato Factory (Kagoshima Prefecture), cleaning was previously carried out using an ultrasonic cleaning device during the assembly process of flexible cables. However, this process was eliminated by reconsidering the necessity of cleaning in order to reduce annual power consumption (by 158,976 kWh). With Wire Electrical-Discharge Machine (small and medium size), we have achieved great results in reducing assembly man-hours by sharing parts and making significant design changes such as harness unitization through repeated prototyping and design reviews.
Introduction of cogeneration system	We have introduced cogeneration systems at our Mibu Factory (Tochigi Prefecture) and Tsukuba Factory (Ibaraki Prefecture) to actively utilize waste heat. They have contributed to reduce the amount of electricity purchased and fuel consumption used for gas-fired cold/hot water generators, which eventually reduce CO_2 emissions. The estimated annual CO_2 emissions reduction by the cogeneration system in FY2021 is 1,298 tCO_2e at the Mibu Factory (Tochigi Prefecture) and 739 tCO_2e at the Tsukuba Factory (Ibaraki Prefecture).
Consideration for the environment by switching to city gas	By switching the fuel from kerosene and LPG to city gas, we are continuously aiming to reduce CO_2 emissions, and eventually to promote our BCP. At the same time, we have been working to eliminate kerosene tanks during this transition in order to reduce the risk of soil contamination. The conversion of the plant to city gas was completed in April 2022. Moreover, in the headquarters area, turbo chillers and air-cooled chillers were replaced with city gas-powered chillers and hot- and chilled-water generators. 
Prevention of compressed air piping leakage	Preventing leakage of compressed air piping reduces the load on the compressor and reduces electricity waste.
Reduction of loss due to spoilage	As a result of promoting activities to reduce loss due to spoilage by prioritizing parts with high cost of loss due to spoilage, monthly loss due to spoilage was reduced, greatly contributing to the improvement of management efficiency.
Zero “rust” of machined products	We achieved zero “rust” of machined products in FY2021 by examining cutting materials and utilizing rust-preventive agents.
Reduction of power used for lighting in the workplace	As a measure to reduce power consumption of lighting in the workplace, lighting at the painting robot site was always switched off and only turned on when in use. In addition, lighting in utilities (restrooms, compressor room, and boiler room) was switched to lighting that is compatible with motion sensors.
Reduction of power consumption in aluminum smelting and holding furnaces	At the Mibu Mold Factory, an insulating jacket is installed on the aluminum smelting and holding furnace used in the die-casting facility to reduce power consumption by suppressing heat radiation. Over the years, the factory has also been contributing to the prevention of heat stroke and burns among workers and the reduction of air-conditioning load.

Logistics Initiatives

FANUC contributes to saving energy required for manufacturing products.

Use of truck return trips	The trucks that deliver CNC systems to machine tool builders in Japan are normally empty on their return trips. We are notifying suppliers of the availability of such empty trucks so that they can use them for parts deliveries, thereby improving the efficiency of truck operations (reducing the number of trucks) and reducing CO_2 emissions.
Container packing at our factories	In the past CNC systems for export were transported by truck from FANUC to a port warehouse, and were packed into containers in a port area. We have changed the procedure and have installed equipment to ship containers from FANUC factories, so that they can be sent directly to the packing area. This has made it possible to reduce the number of trucks by improving the container loading rate and by replacing trucks with trailers, which have a larger loading capacity.
Improving on-site logistics efficiency	Local roads surrounding our Headquarters area used to be congested by trucks to accommodate on-site logistics among the many factory buildings. By improving private on-site roads, we have reduced the use of the local roads, secured traffic routes, and facilitated logistics. In the Mibu Factory, all factories are connected by conveyors, eliminating truck-based transportation within the premises. Tsukuba Factory has eliminated the use of trucks for transport within its premises by increasing the size of the building, and connecting all robot production processes by conveyors within the same building.

Initiatives at Non-production Sites

Installation of solar power generation equipment	Solar power generation equipment has been installed in some of the buildings in the Headquarters area. In FY2021, a total of 38.69 MWh was generated from solar power. We are also planning to install new solar power generation facilities in the Headquarters area and at the Mibu Factory.
LED lighting	We have converted mercury lamps and general-purpose fluorescent lamps (used in our factories and offices) to LEDs, and also replaced ceiling lights, guidance lights, and emergency lights with LED lighting. In addition to the use of LEDs, motion detectors have been installed in areas where people are not always present, such as corridors and toilets, in order to prevent unnecessary lighting. In the Mibu Factory office, the room is divided into 38 sections, and we use motion and light intensity sensors to prevent unnecessary lighting. The outside lights at the Tsukuba Factory were switched to LEDs. 
Cogeneration system	We have introduced a cogeneration system in the Headquarters area, using waste heat for the welfare facilities in company housing and dormitories, as well as for the hot water supply and heating at FANUC ACADEMY. In FY2021, the estimated annual CO_2 reduction from the cogeneration system was 1,475tCO_2e.
Building renewal	At the Osaka Branch, we have renovated the entire building, with only the framework left in place, and introduced energy saving air conditioners, LED lighting, and motion detectors. We have reduced air conditioning power consumption by 60% and total power consumption by 40%.
Demand response	In response to a request from the power supply company, we conduct, so-called Negawatt Transactions, to reduce power consumption when the power supply and demand are expected to be tight.
IT infrastructure	By turning off PC monitors during breaks, estimated annual power savings is expected to total 28,800 kWh.
Enhancement of building insulation	To reduce the amount of energy used for heating and cooling, we have introduced various measures to enhance insulation, such as external and internal insulation, double-wall (double-skin) construction for external walls, condensation-proofing, and the use of double-glazed windows. Double-skin walls have been adopted in the parts center building of the Hino Branch and in the Nagoya Service Center. For company housing built in 2017 or later, we are working to build facilities with the aim of obtaining a rating of B+ to A (self-assessed) in the Comprehensive Assessment System for Built Environment Efficiency (CASBEE), by actively introducing external insulation and double-glazed windows.

Collaboration with Stakeholders

Collaboration with suppliers	We collect information on climate change from a total of 12 companies, composed of two manufacturing subsidiaries and 10 of our partner suppliers, whose sales to FANUC exceed 30%. We survey suppliers regarding specific items such as volumes of fossil fuel consumption, electricity consumption, and industrial waste, and provide advice as needed. In FY2021, we confirmed that there were no serious problems or risks, and that they are continuing to work on energy conservation.
Collaboration with customers	We conduct training for our customers in our training facility, FANUC ACADEMY, to explain the benefit of energy saving to be achieved by using our products. Through this training, we also explain how to operate each product, drawing the customers' attention to energy conservation.
Collaboration with industry associations	We have participated in the deliberations of the Japan Machine Tool Builders' Association, the Japan Robot Association, and the Japan Society of Industrial Machinery Manufacturers to encourage setting of the industry target. Through these associations, we are making proposals to and cooperating with the Ministry of the Environment and the Ministry of Economy, Trade and Industry on climate change.
Collaboration with local communities and society	In response to the Tokyo Cap-and-Trade Program, which is part of the Tokyo Metropolitan Government's climate change strategy, the Hino Branch changed its boiler fuel from kerosene to city gas in March 2006. As a result, 2,791 tons of excess reductions had been registered with the Tokyo Metropolitan Government by 2016.

Resources and Waste

Basic Approach

Under the vision of “leaving nature and resources to posterity,” FANUC promotes the efficient use of resources, and proper disposal and reduction of waste.We provide lifetime maintenance to its products as long as they are used by customers. As our customers do not need to discard older used products or purchase new models due to such maintenance service, they will eventually reduce wastes and enjoy effective use of resources.
In addition, we reduce waste and make effective use of resources in every aspect of our business activities, including product development, packaging and reuse of materials, as well as thoroughly managing the use of chemical substances.

Promotion Framework

FANUC recognizes addressing resource and waste management as an important issue, with the President and CEO designated as the person responsible for the related initiatives.
Important subjects relating to this management are discussed in our environmental management promotion and environmental management system.

Environmental Management Promotion

Thorough Management of Chemical Substances

FANUC uses chemical substances as raw materials in production process, but we are working to reduce the use of substances to the absolute minimum.
To ensure that our customers around the world can safely use FANUC products, we are working to comply with chemical substance management regulations in each country and region, and even voluntarily comply with stricter regulations.
FANUC conducts surveys of its business partners regarding their response to the RoHS Directive, U.S. TSCA Regulations, and substances newly added to the Substances of Very High Concern (SVHC) list under the REACH Regulation that are contained in their products.

Monitoring and managing PRTR chemical substances	We have reduced our use of chemical substances in accordance with the PRTR Act. As our measures have proven to be effective and the amount that can be reduced has become limited, since 2016, we have calculated the usage in proportion to production, rather than to the absolute amount.
Conforming with RoHS Directive	Even though FANUC products are not subject to the RoHS Directive (Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical Equipment), FANUC is voluntarily working to eliminate the use of hazardous substances. In new designs, all materials, including auxiliary materials used in manufacturing, are below the threshold dictated in the RoHS2 Directive, and we are in the process of replacing parts in existing designs.

Product Initiatives

Lifetime maintenance	Even for discontinued models, we provide lifetime maintenance as long as they are used by customers. As a result, FANUC products can be used at economical cost for several decades, and therefore generate minimum waste. Lifetime maintenance
Benefits of high-performance products	ROBOSHOT’s high molding performance reduces plastic molding defects, and its function to support the automation of production setup will reduce downtime between production lots, and reduces losses of materials. In addition, we will help reduce the amount of plastic waste by increasing the yield rate when using recycled materials from plastic scraps and waste.
By designing products in small size, we reduce weight and number of components	We have reduced the use of resources by designing products in small sizes and with fewer components. We apply modular designs to standardize parts, thereby reducing the variety of procured components, as well as maintenance components.
Proper maintenance	Grease and oil can be replaced at the most appropriate time with the intelligent grease change reminder function, reducing the amount of grease and oil waste.

Production Initiatives

Reducing failure rate	We have made efforts to optimize solder printing settings and to reduce scratch defects. It has improved the failure rate of CNC equipment from 0.0073 to 0.0066 per unit.
Changing our casting method	By changing the casting method of the arm of high-performance ROBODRILLs from a wooden die to a metal die, we have reduced cutting expenses. This has also reduced the cycle time (per machine) from 18 minutes to 16 minutes.

Initiatives in Packaging Materials

Significant reduction in the use of steel cases	In transporting products in containers directly from a port to a warehouse, we used to pack ROBOTs and ROBOMACHINEs in steel cases. However, we are now able to significantly reduce the use of steel cases by using the containers as the packing cases. It means that we are directly packing ROBOTs and ROBOMACHINEs onto steel skids as much as possible.
Reducing weight and increasing density	We have changed the shipping packaging of SCARA Robots from steel skids to cardboard packaging to improve transport efficiency. We also introduced recyclable cardboard packaging for the new collaborative robot CRX. The new Genkotsu robot model has a more compact cargo form by removing some of the links, which significantly reduces the amount of steel required to transport the robot compared to previous models. Tier stacking is now also possible, thereby improving transportation efficiency.
Saving resources	We have changed the shape of steel skids used in transporting, while maintaining their strength, to reduce the amount of steel used.
Reducing use of cardboard	We have stopped using cardboard in the delivery of eyebolts from suppliers, and introduced reusable mesh pallets. This has led to an estimated annual waste reduction (paper waste) of 120 kg.
Adopting reusable shipping boxes	We have stopped using packing materials in the delivery of sheet metal covers, and adopted reusable shipping boxes with interior padding. This has led to an estimated annual waste reduction (paper waste) of 99.6 kg.

Initiatives for Reuse

Transport packaging, pallets	We have changed shapes of the cardboard (boxes used in delivering CNC systems to machine tool builders in Japan) to be reusable and by arranging delivery trucks to collect the empty cardboard boxes to inspect them and repair for reuse. We also send the steel skids, which are the packing material used when importing castings, back to the foundry for reuse.
Waste liquid	We reduce the amount of waste liquid from machine tools by using waste-liquid-recycling devices. This has resulted in an estimated annual reduction of waste liquid of 852 t. At our Headquarters Factories, Tsukuba Factory, and Mibu Factory, we are promoting the reduction of waste liquid by using long-life cutting fluids. In addition, at our Headquarters Factories and Tsukuba Factory, we are reducing waste liquid by reusing the cutting fluid adhered to chips (metal chips) generated during machining. Die-casting factories in Headquarters and Mibu are promoting the reduction of waste liquid by using mold release materials.
Chips and cutting tools	We hand over chips produced during cutting at our factories, as well as cutting tools that have become unusable due to heavy wear to recyclers, so that they can be reused as raw materials.

Initiatives in Offices

Reduction of paper consumption	We reduce the use of paper by digitizing company documents.
LED lighting	We promote the use of LED lighting, which does not use the mercury, lead, or cadmium contained in fluorescent lamps, etc., thereby facilitating reduction in disposal of lighting.

Water

Basic Approach

FANUC Headquarters is located in the rich natural environment adjacent to the Fuji-Hakone-Izu National Park, and we use the clean and abundant groundwater of Mt. Fuji as a water source. The groundwater pumped from 80 meters below is stable in terms of both volume and quality throughout the year. We can say that FANUC is blessed with water resources, and has almost no risk of water shortages.
However, we are well conscious of the fact that, there are water shortages in other parts of the world, and the United Nations Environment Programme has reported that water shortages will become even more severe in some regions by 2025.
FANUC, therefore is working to conserve water resources, such as through daily water recycling, effluent purification treatment, and water quality management. In order to discharge higher quality wastewater, we comply with regulated amounts of water pollutants.

Promotion Framework

FANUC recognizes addressing the conservation of water resourcesr as an important issue, with the President and CEO designated as the person responsible for the related initiatives.
Important subjects relating to these resource conservation issues are discussed in our environmental management promotion and environmental management system.

Environmental Management Promotion

Initiatives in the Headquarters Area

25 factories are located in FANUC Headquarters, all of which use groundwater when required for production. In addition, our factories reuse the water they have used for production for cooling and other purposes. When discharging sewage, we conduct partial purification to adjust the pH value, striving to ensure high effluent standards.

Reusing Water

Cyclical use of cooling water	We circulate and reuse the cooling water that is used to cool the production equipment in the die-cast factory at the Headquarters area.
Reusing wastewater	In our ROBOT factory No. 1 at the Headquarters area, 92% of wastewater is reused by utilizing oil-water separators. In our servo motor parts machining factories No. 1 and 2 at the Headquarters area, we reuse 19% of wastewater by making full use of distillation and regeneration equipment. In the future, our new factory (servo motor parts machining factory No.3) is expected to be able to reuse nearly 90% of wastewater by increasing the efficiency of wastewater use.
Reusing machining liquid	In our ROBOCUT factory at the Headquarters area, we plan to introduce a new machining liquid tank dedicated to testing, in order to enable 90% reuse of the machining liquid (water) for testing during manufacturing.

Collaboration with Suppliers

Because water resources are used by our suppliers in the process of cooling castings and by our customers in the process of using our products, indirect use of water resources is also an important issue.
FANUC, therefore, are asking suppliers to adopt our CSR Procurement Policy, and to promote the efficient use and cyclical use of water resources.
A total of twelve companies, namely two manufacturing subsidiaries and ten suppliers whose sales to FANUC account for more than 30% of their total sales, are surveyed once a year on specific matters such as water consumption and water emissions. The results are then quantified for evaluation, based on which risks are identified and assessed. We select the top three companies that are defined as significant, set specific goals for reducing the environmental load of their production, and encourage them to take steps toward those goals. In the event of significant changes in the numbers, we check the reasons for those changes and provide advice, as necessary.

Biodiversity

Basic Approach

Following on our basic vision of “leaving nature and resources to posterity.” FANUC is striving to maintain biodiversity, by preserving the stunning natural environment of 1.78 million square meters in which our Headquarters is located, adjacent to the Fuji-Hakone-Izu National Park.
Our Headquarters area is home to a variety of trees including native forests, as well as artificially planted Japanese larches and red pines, making it a treasure trove of wild birds, plants, and flowers. We will continue to take care of the forests and plant new trees, in order to protect the richness of the land around Mt. Fuji, a World Heritage Site.

Forest Conservation Activities

FANUC Headquarters is located in a stunning natural environment neighboring the Fuji-Hakone-Izu National Park. While the greening rate is specified in this area, we are striving to create a FANUC Forest that is more abundant than the designated greening rate. We maintain our forest on a daily basis, and as a result, the trees and flowers adorn the changing seasons, various wild birds and other small animals can be seen here.
When constructing factories and other buildings, we select locations with as few trees as possible, in order to minimize deforestation. Furthermore, our use of land takes advantage of the natural terrain, and we make plans that maximize conservation of the environment, such as by ensuring that the heights of buildings do not exceed the height of the surrounding trees.
Since parking lots require large areas of flat land, we are currently building multilevel parking lots in order to maintain the greening rate. In the construction of parking lots started in 2016, we have completed seven parking lots, comprising a total of 92,250 square meters of floor space and 3,393 parking spaces as of 2019. These multilevel parking lots have preserved 65,300 square meters of green space.

100-year Forest Restoration Plan

Demand for timber during the wartime regime and the period of rapid economic growth encouraged the planting of conifers, so most tree plantations are now coniferous. Parts of our Headquarters are also coniferous forests that were artificially planted. Our basic policy for green space management in the FANUC Headquarters is to convert these existing planted coniferous forests into a broad-leaved forest, which is the original vegetation suited to this area, over the long-term. The current coniferous forests have been planted for many years with fast-growing red pines, larches and firs, etc., which are used as sand protection forests and to satisfy demand for timber. Our aim is to convert these artificially planted coniferous forests into rich forests where small birds and animals can coexist, by changing them into evergreen broad-leaved trees and broad-leaved forests suitable for the surrounding natural vegetation that blossom, bear fruit, and drop leaves.
In order to steadily achieve this goal, FANUC is cooperating with the Yamanashi Forestry and Forest Products Research Institute. We began implementing our plan to regenerate a forest that is suitable for the natural ecosystem of the area in 2015, and have planted trees since 2016. Because it is difficult for the trees to survive, we are engaging in the effort over the long term.
Since 2021, the overgrown tall trees in the forest have made it difficult to secure sunlight to low, and medium-sized hardwoods and other trees, so we have been thinning the tall coniferous trees as needed.

Forest That Absorbs CO_2

Currently, the coniferous forest on the premises of the FANUC Headquarters is densely packed with trees, making it difficult for the sun's rays to reach the forest interior. This means that new young trees receive insufficient exposure to sunlight. With such a high density of tall trees, it will become increasingly difficult for the coniferous forest to perform its inherent function as a forest. To prevent soil degradation and maintain the forest's abundance, FANUC aims for creating a forest that can absorb more CO_2. It will achieve this aim by thinning trees to ensure appropriate tree density and deliver sunlight to the forest interior.
As stated in the 100-year Forest Restoration Plan, because the existing forest was artificially planted with a single species of coniferous tree, we are making efforts to convert it into a mixed-species forest that includes native trees and to change gradually to original vegetation of this area. We are pursuing a plan to replant mainly evergreen broad-leaved trees (e.g., Japanese pieris and longstalk holly, which grow even well on high ground), as well as cultivating deciduous broad-leaved trees that bear fruit, to create a habitat for small animals.

Conservation of Waterside Organisms

The FANUC Headquarters area has eight regulating ponds of various sizes that serve as temporary rainwater storage. Water is retained constantly in seven of these ponds and various species of waterweed, such as common reeds, blood irises, sweet flags, and skunk cabbage, are planted and protected to purify the water and create a habitat for waterside organisms. Weeding management of the ponds is conducted annually from the end of November to early December.
All regulating ponds are also weeded in summer and autumn, and the drainage outlets are managed as needed. Other works, such as status checking, inspection, repair, and cleaning are performed after typhoons and heavy rainfall.

Conservation of Rare Plant Species

In the premises of our Mibu Factory in Tochigi Prefecture, the rare plant Lecanorchis suginoana, which appears in the Red Data Book Tochigi 2018, compiled by Tochigi Prefecture, has been found growing. The entire area can be said to constitute a valuable natural environment.
FANUC complies with environmental laws and regulations, and cooperates with the environmental surveys conducted by Tochigi Prefecture.
In the Headquarters area, in the spring of 2023 we plan to transplant Japanese cypripedium, which is listed as an endangered species II on the Red List by the Ministry of the Environment, to avoid any impact from the construction work.

Sustainability Report 2022

Governance

Governance

FANUC recognizes that a company will last forever and be sound with “strict preciseness” and the corruption of an organization and downfall of a company start from a lack of “transparency.” Based on this basic principle of “strict preciseness” and “transparency,” FANUC has established a system and is endeavoring to achieve sustainable growth as a company, while striving to earn trust of stakeholders, including customers, employees, shareholders, suppliers, and local communities.

Policies

- FANUC Code of Conduct
- Corporate Governance Guidelines
- Information Security Policy
- Anti-Bribery Policy
- Tax Policy
- Guidelines for Restricting Contact with Competitors

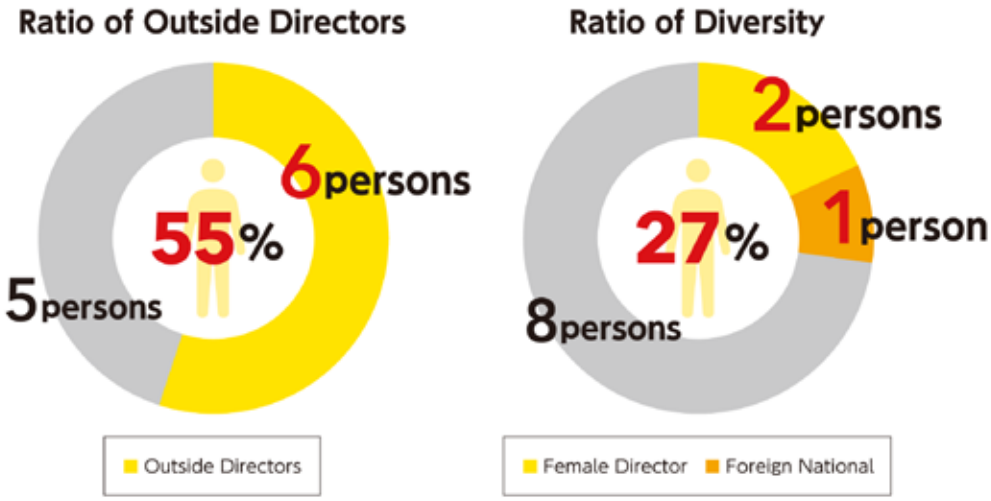
Basic Approach

FANUC has always worked on enhancing corporate governance based on our Basic Principles of “Strict Preciseness” and “Transparency.” As we proceed in separating our supervisory and executive functions, in order to further strengthen the supervisory functions of the Board of Directors and speed up management decisions, we transitioned to a company with an Audit and Supervisory Committee, that allows us to establish an Audit and Supervisory Committee consisting of the Directors who are Audit and Supervisory Committee Members and to expand the delegation of decision-making authority for business execution from the Board of Directors to Directors. Thus, we are further endeavoring to enhance corporate governance and increase corporate value.

In addition, FANUC has established the Nomination and Remuneration Committee, a majority of which comprises Independent Outside Directors, and is chaired by an Independent Outside Director. By increasing the objectivity and transparency of the appointment and evaluation of Directors, this committee ensures the strict preciseness and transparency of supervisory functions to management.

Promotion Framework and Initiatives

- As a company with an Audit and Supervisory Committee, we have separated the Board of Directors (supervisory function) from the management side (executive function) to maintain the independence of each.
- The ratio of Outside Directors and the diversity ratio of the Board of Directors are as follows.



- Three of the five Audit and Supervisory Committee Members are Outside Audit and Supervisory Committee Members, one of whom is a woman.
- We continue to periodically review the contents of the Board of Directors and the Audit & Supervisory Committee from the perspectives of whether the independence of the Board of Directors and management is maintained, whether the effects of diversity are evident, and whether discussions in the Board of Directors and the Audit & Supervisory Committee are active, and make improvements as necessary.

Nomination and Remuneration Committee

With respect to appointment and dismissal and remuneration, etc. of Directors, we have established the Nomination and Remuneration Committee, the majority of which is composed of Independent Outside Directors, and chaired by an Independent Outside Director, to secure the objectivity and transparency, etc. of procedures through consultations by this Committee.

Analysis and Evaluation of Board of Directors Effectiveness

1. Efforts to Improve Effectiveness

To ensure effective good governance, we adhere to our basic principles of “Strict Preciseness” and “Transparency.” We conduct an annual survey of directors to assess Board of Directors effectiveness, and establish opportunities for the exchange of such opinions in a timely manner. Furthermore, we maintain a system that incorporates directors’ opinions and evaluations in the Corporate Governance Guidelines when advisable, and put these results into practice.

2. Evaluation Methods

To evaluate Board of Directors effectiveness, in October, 2021 we conducted a questionnaire survey of all directors who are members of the Board of Directors. In order to increase transparency and evaluate effectiveness from rigorous and multifaceted perspectives, we employed an external organization to design the survey and to analyze and evaluate the results. The survey sought to determine whether the Board of Directors was able to function effectively when making important decisions and overseeing significant matters such as the composition of the Board of Directors, its operations, and management strategy, given our transition to a company guided by an Audit and Supervisory Committee in June 2021 and revision of the Corporate Governance Code.

3. Evaluation Results Summary

Our Board of Directors was highly praised for its diversity in terms of gender, nationality, work experience and other factors, and for its fostering an environment that encourages the free and open exchange of opinions and facilitates the examination of issues from multiple perspectives. On the other hand, the evaluation results pointed to a need for more comprehensive discussions on ways to further develop human resources, to further promote sustainable corporate growth. The FANUC Board of Directors will continue striving to improve its effectiveness.

Directors’ Remuneration

(1) Matters concerning the Policy for Determining the Details of Remunerations for Individual Directors

The Company has established a policy for determining the details of remunerations for individual Directors (excluding the Directors who are Audit and Supervisory Committee Members; the same applies hereinafter in this paragraph) (hereinafter, “Policy”) in place as outlined below. (Resolved at a meeting of the Company’s Board of Directors held on June 24, 2021)

- Fixed remunerations shall be determined according to the position of each Director.
- Performance-based remunerations shall be linked to the current net income attributable to the shareholders of the parent company as in the case of shareholder return in principle.
- Stock-based remuneration shall be provided as remuneration of restricted stock, taking various factors, such as the degree of contribution of the Director, into consideration in a comprehensive manner.
- Remuneration for Directors comprises fixed remuneration, performance-based remuneration and stock-based remuneration whose ratios shall be set considering his/her position, responsibility, performance, etc., in a comprehensive manner.
- Remuneration of Outside Directors shall comprise fixed remuneration only.

The Policy shall be determined by a resolution of the Board of Directors.

As for remunerations for the Directors who are Audit and Supervisory Committee Members, the amount of remuneration for the individual Directors who are Audit and Supervisory Committee Members shall be determined by consultation among the Directors who are Audit and Supervisory Committee Members.

(2) Matters concerning Resolution of Shareholders' Meeting on Remunerations for the Directors

With respect to the aggregate amount of remunerations for the Directors (excluding the Directors who are the Audit and Supervisory Committee Members), it was approved at the 52nd Ordinary General Meeting of Shareholders held on June 24, 2021 that it shall be capped at the sum of (a) the fixed remuneration limit and (b) the performance-based remuneration limit specified below. Further, it was also approved that, in addition to (a) and (b), (c)stock-based remuneration may be provided to the Directors except for the Outside Directors.

- (a) Fixed remunerations of 800 million yen or less annually (including 100 million yen or less annually for the Outside Directors);
- (b) Performance-based remunerations of an amount equivalent to 0.7% or less of the current net income attributable to the shareholders of the parent company for the fiscal year immediately preceding the Meeting of Shareholders at which they are appointed or reappointed (but not exceeding an amount equivalent to three years of fixed remunerations);
- (c) The aggregate amount of monetary remuneration claims provided as stock-based remuneration (remuneration regarding restricted stock, etc.) shall be 350 million yen or less annually. Total number of such restricted stocks allotted for each fiscal year shall be capped at 28,000 shares.

As of the conclusion of the Ordinary General Meeting of Shareholders, the number of Directors (excluding the Directors who are the Audit and Supervisory Committee Members) is six (6), and it is three (3) excluding the Outside Directors.

As for the aggregate amount of remunerations for the Directors who are the Audit and Supervisory Committee Members, it was approved at the 52nd Ordinary General Meeting of Shareholders held on June 24, 2021 to be capped at 200 million yen annually.
As of the conclusion of the Ordinary General Meeting of Shareholders, the number of Directors who are Audit and Supervisory Committee Members is five (5).

(3) Matters concerning Determination on the Details of Remunerations for Individual Directors (excluding the Directors who are the Audit and Supervisory Committee Members)

When reviewing remuneration standards, the Company selects benchmark companies and also refers to remuneration standards that takes into consideration results of surveys conducted by external third-party professional organizations. The Board of Directors then determines the details of the amount of remunerations for the Directors (excluding the Directors who are the Audit and Supervisory Committee Members) after consultation with the Nomination and Remuneration Committee majority of which are independent Outside Directors and chaired by an Outside Director. Since the amounts of remunerations for individual Directors are determined through such procedures, the Board of Directors judges that their details are in line with the Policy.

Frequency of Board of Directors and Audit Committee Meetings

- In addition to the Board of Directors meets once a month in principle, it also meets as needed. (The Board of Directors held a total of 12 meetings in FY2021)
- In FY2021, the Board of Corporate Auditors held two meetings prior to the transition to a company with an Audit and Supervisory Committee on June 24, 2021. The Audit and Supervisory Committee met 11 times in the period from the transition to the last day of the fiscal year.
- Attendance of individual Directors at meetings of the Board of Directors and other meetings is as follows.

	Board of Directors meetings	Audit & Supervisory Board meetings (Until June 24, 2021)	Audit and Supervisory Committee
Kenji Yamaguchi	12 of 12	-	-
Yoshiharu Inaba	12 of 12	-	-
Michael J. Cicco	12 of 12	-	-
Kazuo Tsukuda	12 of 12	-	-
Masaharu Sumikawa	12 of 12	2 of 2	-
Naoko Yamazaki	12 of 12	-	-
Katsuo Kohari	12 of 12	2 of 2	11 of 11
Katsuya Mitsumura	12 of 12	2 of 2	11 of 11
Yasuo Imai	12 of 12	-	11 of 11
Hidetoshi Yokoi	11 of 12	1 of 2	11 of 11
Mieko Tomita	11 of 12	2 of 2	11 of 11

Internal Control System

Basic Approach

Based on the FANUC Code of Conduct, which is derived from the basic principle of “Strict Preciseness” and “Transparency,” we have established basic rules for compliance. In addition, we have established detailed rules for compliance and deployed them internally through rules for an anti-corruption, the prevention of insider trading and the management of confidential information, the Antimonopoly Act, and rules for the protection of personal information, etc.

Promotion Framework and Initiatives

Whistleblowing System

FANUC has established a system under which officers and employees of FANUC and its domestic subsidiaries as well as other stakeholders including suppliers, can make whistleblowing reports to FANUC’s internal and external contacts through hotlines.

In addition, FANUC has established a global whistleblowing system whereby officers and employees of overseas subsidiaries can make whistleblowing reports directly to FANUC through an external point of contact.

In response to whistleblowing reports from both Japan and overseas, we strive to enhance the protection of whistleblowers (including confidentiality of the contents of the whistle-blowing), so that they are not subjected to any disadvantageous treatment such as retaliation including dismissal by the Whistleblowing System Operation Rules, etc.
Whistleblowing reports can be made anonymously at any time (24/7), and are available in multiple languages.

Risk Management

To address risks that may hinder the continuity of our business, the enhancement of our corporate value, or the sustainable development of our corporate activities, we have established a Risk Management Committee and risk management policies, and we are conducting appropriate risk management under the supervision of the Board of Directors. Further, the Internal Audit Department, which reports directly to the President and CEO, conducts internal audits of risk management.

Compliance

Issues related to compliance are discussed by the Compliance Committee, which is chaired by the Senior Executive Vice President, and we have a system in place to ensure the important issues are reported to the Board of Directors and the President and CEO. In addition, the Management Meeting, which mainly comprised of the executives of each business divisions, deliberates also on these issues. Furthermore, the latest cases of whistleblowing are reported to the Board of Directors at least twice a year, so that adequate deliberations are made on related compliance issues as necessary.

Further, the Internal Audit Department conducts business ethics audit including Anti-Bribery and Corruption at the FANUC Headquarters and its subsidiaries in Japan and overseas on an annual basis.

Employee Awareness and Training

We post various policies and guidelines on our company-wide portal site, and we are working to foster compliance awareness through awareness-raising and educating activities by providing various types of training.
In 2022, we conducted compliance training on whistleblowing system for FANUC officers and employees (including part-time employees and contractors) based on the revised Whistleblower Protection Act.

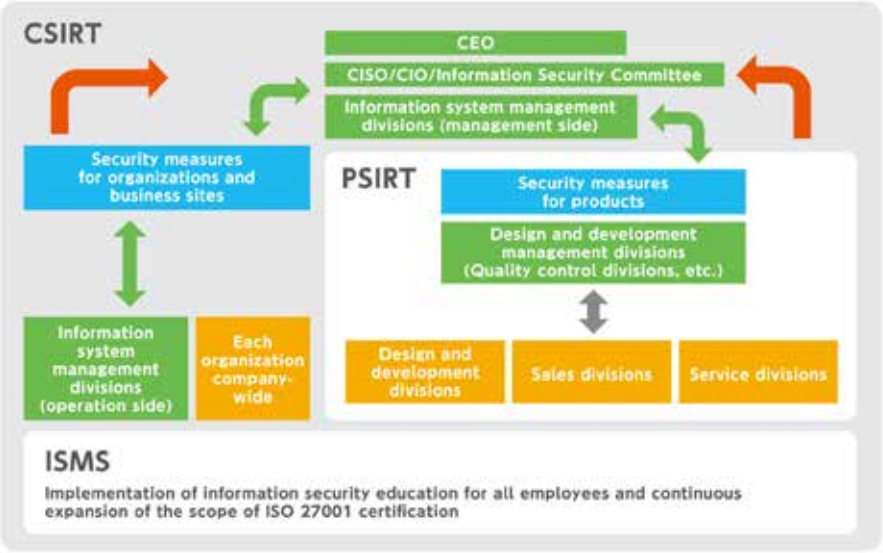
Information Security

Basic Approach

Under "Corporate Governance Guidelines," "FANUC Code of Conduct," "Privacy Policy," FANUC protects important information assets and makes efficient and effective use of them in compliance with laws and regulations, rules, contracts, and other requirements.

Promotion Framework

The Information Security Committee, under the leadership of the Chief Information Security Officer (CISO) and the Chief Information Officer (CIO), was newly established in December 2019 as an information security system to control and manage information security activities.



CSIRT/SOC System

- Ensures the stable supply of our products and services to customers by giving instruction on how to promptly respond to information security incidents caused by cyberattacks (analysis of the type of cyberattack/impact on business, interim/permanent responses) and providing a swift resolution.
- Prevents information security incidents from occurring by collecting information on vulnerabilities, sharing such information within the company, and understanding and controlling the status of response to vulnerabilities.

Establishment of PSIRT

We are currently working on the establishment of the FANUC PSIRT (Product Security Incident Response Team), which is designed to, as an engine for the realization of the Cyber/Physical Security Framework (CPSF) formulated by the Ministry of Economy, Trade and Industry which we aim for, contribute to ensuring security of FANUC products by indicating how to prevent security risks in business and promoting security activities involving customers and other stakeholders inside and outside the company in an efficient and sustainable way.

Vulnerability Information

Initiatives

Recognizing that risks associated with cyberattacks and other threats are priority management issues, FANUC strives to strengthen information security by appropriately allocating resources to cyber security measures, under the initiative of the management.

Acquisition of ISO 27001 Certification (ISMS Activities)

Under “Corporate Governance Guidelines,” “FANUC Code of Conduct,” and “Privacy Policy,” all of which have been announced as our governance systems, we have established and implemented an information security management system and a basic information security policy in order to ensure the protection of important information assets and the efficient and effective use of them in compliance with laws and regulations, rules, contracts, and other requirements.

IS656789 /ISO 27001
Corporate Administration Division, Research & Development Division, Sales Division (Headquarters),
Products Manufacturing Division and Products Management Division (Headquarters).

December/2016: Research & Development Division acquired ISO27001
December/2017: Sales Division (Head Office) acquired ISO27001
December/2018: Corporate Administration Division acquired ISO27001
December/2019: FA Products Manufacturing Division and Products Management Division of Headquarters acquired ISO27001
December/2021: Products Manufacturing Division of Headquarters acquired ISO27001

Information Security Training

1.We believe that the most important information security measures are to improve employee knowledge of information security and to inform them of the procedures to be followed in the event of an incident, and we conduct annual information security training for employees.
In addition, the CISO has released a video message to employees to demonstrate the Company’s commitment to information security.

2.FANUC considers information security measures at domestic and overseas affiliates to be important in light of the recent increase in attacks on supply chains. FANUC conducts annual information security training for these companies.

Intellectual Property

Basic Approach

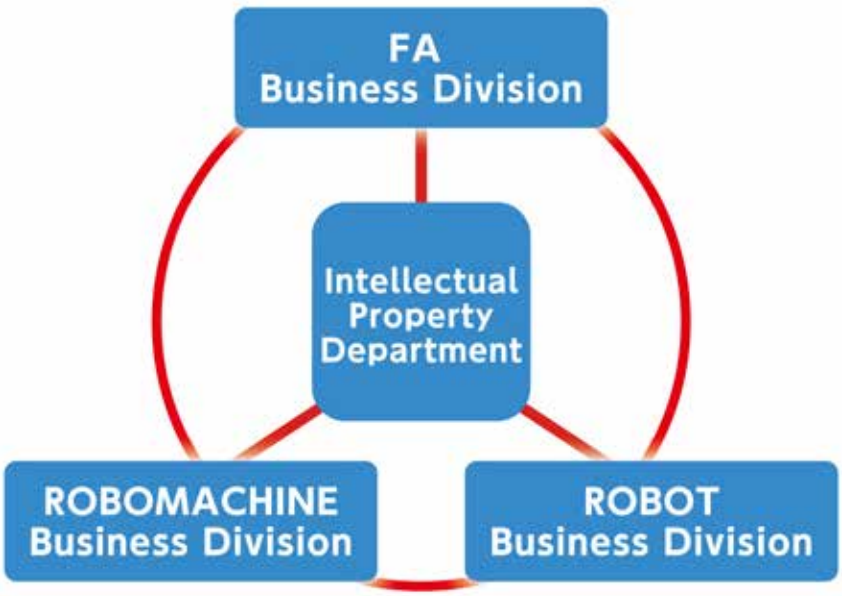
FANUC strives to acquire global intellectual property rights with the aim of protecting the technologies and brands of our own products, while also respecting the intellectual properties of third parties.

Policy

Focusing on our manufacturing and sales locations in Japan and overseas, we aim to obtain global intellectual property rights, including patent and design rights related to the technologies in our own products, as well as trademark rights related to our product brands. Based on this approach, we will build a strong patent network.

Promotion Framework

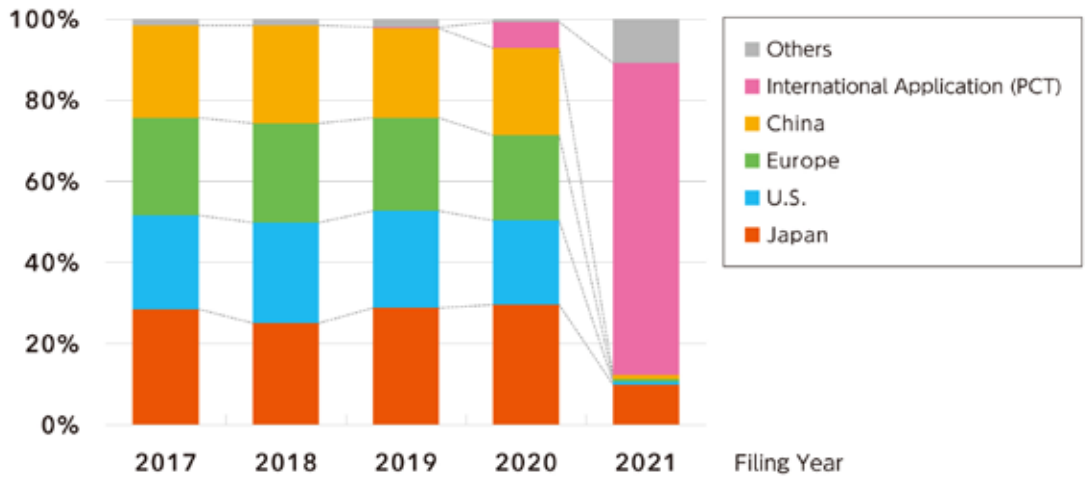
To promote and support the R&D and sales operations of our three Business Divisions, the Intellectual Property Department and IP officers in each Business Division work together closely on various intellectual property-related activities, such as creating inventions and filing applications.



Initiatives

Global Patent Applications

- For patents, in anticipation of the further globalization of our business in the future, we will switch from obtaining international rights with a particular focus on the United States, Germany, and China, and promote global rights acquisition.



Thorough Research of Other Companies' Patents

- To prevent infringements on the rights of other companies, the entire company conducts thorough research on other companies' patents.

Intellectual Property Education for Employees

- Every year, we conduct a range of intellectual property education programs for employees to promote and support research and development that is conscious of the prevention of infringement of other parties' rights and of technology and brand rights acquisition related to the Company's products.

Invention Reward and Award Program

- For inventions, devices, and designs made by our employees, we ensure that reward payments are made at the time of registration in accordance with our in-house rules for handling inventions, devices, and designs. In addition, we also offer the same rewards for confidential inventions. Furthermore, every year, among inventions, devices, and designs that have been registered for 5, 10, and 15 years, we evaluate those that have made a significant contribution to the Company's business performance, and we offer awards and reward payments at our Company's Anniversary Ceremony. By enhancing this Invention Reward and Award Program, we work to motivate employees involved in research and development.

Awards for Intellectual Property Activities

Sponsoring Organization	Award Name
Japan Patent Office, Ministry of Economy, Trade and Industry	Intellectual Property Achievement Award - Award for Excellent Corporation Utilizing the Intellectual Property Rights System (Open Innovation Promoter) (2019)
Clarivate Plc.	Derwent Top 100 Global Innovators 2022 (2012, 2013, 2022)

Tax Policy

FANUC CORPORATION and its domestic and overseas subsidiaries ensure the practice of “Strict Preciseness” and “Transparency,” FANUC’s principle. In terms of tax affairs as well, we comply with laws and regulations and pay taxes appropriately.

Global Tax Position and Minimization of Tax Risks

FANUC CORPORATION and its domestic and overseas subsidiaries pay taxes appropriately, in compliance with tax regulations and relevant laws and regulations in their respective countries. Further, we do not use tax havens for the purposes of tax avoidance.

Transfer Pricings

Prices for international transactions between FANUC CORPORATION and its overseas subsidiaries are compliant with the Transfer Pricing Guidelines published by the Organization for Economic Co-operation and Development (OECD), in consideration of laws and regulations in respective countries as well as functions and risks, thereby ensuring appropriate tax payment in the countries.

Relationship with Tax Authorities

FANUC CORPORATION and its domestic and overseas subsidiaries strive to build a relationship of trust with tax authorities by providing them with information and explanations appropriately and conscientiously.

FANUC CORPORATION

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SUSTAINABILITY REPORT 2022