Providing Quality Products and Enhancing Customer Satisfaction

Basic Policy

Under its corporate philosophy of contributing to society with the world's most innovative technology, the JFE Group will continue to be a company that provides world-class products and services for a prosperous global future.

JFE Group Standards of Business Conduct

❶ Provide quality products and services
Earn the trust and acclaim of customers by endeavoring to provide safe, high-quality products and services based on superior technologies, and by fully respecting and protecting the privacy of personal and customer information. Also, leverage our superior technologies for the sustainable growth of our Group and society.

Targets and Results

Under its Standards of Business Conduct to provide quality products and services, the JFE Group has identified three key management concerns: sustainable manufacturing through improving sales and production capabilities, promoting proper quality assurance, and enhancing product and service competitiveness through DX. The Group has established KPIs to monitor progress and promote relevant initiatives.

› **FY2025 KPI Results and FY2026 KPIs** (P. 19)

Initiatives

JFE Group's Quality Initiatives

The JFE Group manages quality by ensuring compliance with quality standards set by each operating company. Each operating company involved in manufacturing and services has obtained ISO 9001 certification for its quality management system and has established and operates a management system to continuously and reliably provide high-quality products and services.

Strengthening Quality Assurance System

ST Initiatives to Improve Product Quality

To serve customers by meeting their quality requirements and delivering products that boast the world's highest quality, JFE Steel has established a quality assurance system with advanced sensors for process monitoring, in addition to its ongoing efforts to develop new products and advanced manufacturing technologies.

We are conducting activities across the company in line with the Guidelines for Enhancing Quality Assurance Systems formulated by the Japan Iron and Steel Federation (JISF) to strengthen our quality assurance system. In addition to conducting product tests using high-precision testing and inspection equipment, we are striving to thoroughly prevent errors in identification tasks and data tampering by promoting automation in every process, from issuing test instructions and collating specimens to reporting results.

Moreover, the company intends to provide customers with innovative value by operating its quality management system based on ISO 9001 and by advancing the acquisition of various domestic and international assurance certifications required for steel products, including the JIS mark and approvals from ship classification bodies. We are also actively promoting the formation and standardization of international rules in conjunction with future DX promotion and the social implementation of technologies obtained through research and development.

EN Promoting Quality Activities Based on the Companywide Quality Policy

JFE Engineering has established a companywide quality policy stating that products and services that JFE Engineering designs, procures, manufactures, or constructs must comply with all required rules, regulations, and standards, and quality must satisfy the needs of our customers and that we will continually undertake improvements. Under this corporate policy, the company continually strives to improve the quality of its products and services.

Specifically, our certified inspectors conduct on-site inspections at each phase of a plant construction project, including procurement, manufacturing, construction, and pilot operations. We also conduct witness inspections by customers during critical processes and at the time of equipment delivery to ensure quality.

In addition, JFE Engineering has published quality-assurance manuals based on the specific characteristics of each product and obtained ISO 9001 certification for each product category.

To further strengthen its quality assurance system, JFE Engineering uses an electronic document processing system throughout the entire process, from purchases to installation and operation, to prevent omissions in inspection and operation data and data tampering, and all inspection data is electronically stored to further ensure traceability.

SH Maintaining and Improving Quality Assurance Level Based on Quality Philosophy

Guided by its quality philosophy of continuing to provide products that satisfy the required quality to ensure that we are always trusted by our customers, JFE Shoji is constantly striving to enhance the level of its quality assurance for customer confidence and satisfaction. Its processing centers in Japan and abroad are systematizing and automating operations to eliminate human errors. Raising employee awareness is essential for preventing human error at every stage, from receiving orders to processing, inspecting, and shipping. The company provides quality education for employees by introducing case studies of nonconformance at other companies as well as at Group companies in Japan and abroad. Moreover, we conduct periodic quality audits at all relevant Group companies in and outside of Japan to identify quality assurance risks, and we provide follow-up toward improvement. When follow-up is necessary, individual responses are carried out to maintain and enhance the level of quality assurance.

Stable Supply of Products

ST Initiatives to Supply High-Quality Products

JFE Steel is strengthening its manufacturing base by introducing a cyber-physical system (CPS) for all manufacturing processes and has already introduced CPS to over 80% of these processes. It is also accelerating the deployment of CPS with J-DNexus™, a platform that integrates production data from all steelworks. In addition, the company is improving quality and yield by fully implementing J-astquad™, a quality prediction technology that uses integrated data covering the entire process, from steelmaking to the final stage. The company is improving reliability by automating product inspections. It completed the migration to open systems for its steelworks' core systems at the end of FY2025. And it will also develop a platform for consolidating and using operational data and know-how, further improving production efficiency and quality.

EN Securing Managing Engineers

JFE Engineering has been designated as a special construction business operator under the Construction Business Act to undertake mechanical, civil engineering, and building construction work, and it assigns dedicated managing engineers at construction sites to oversee the technical aspects of construction work. The smooth implementation of plant construction projects depends on licensed specialists. The company is always striving to secure the necessary human resources by encouraging employees to acquire qualifications by granting allowances and through mid-career hiring of licensed personnel.

Proper Export Procedures

Each JFE operating company promotes international peace and security by working against the spread of weapons of mass destruction and excess accumulation of conventional weapons. Specifically, the company carries out internal inspections to confirm the final destinations, customers, and applications of its exported products and then ensures that export procedures are carried out properly. In addition, the Legal Affairs Department conducts internal briefings to disseminate knowledge of export-related laws and regulations, such as the Foreign Exchange and Foreign Trade Act. Also, education on export security controls and related measures is implemented for the employees of Group companies involved in trading.

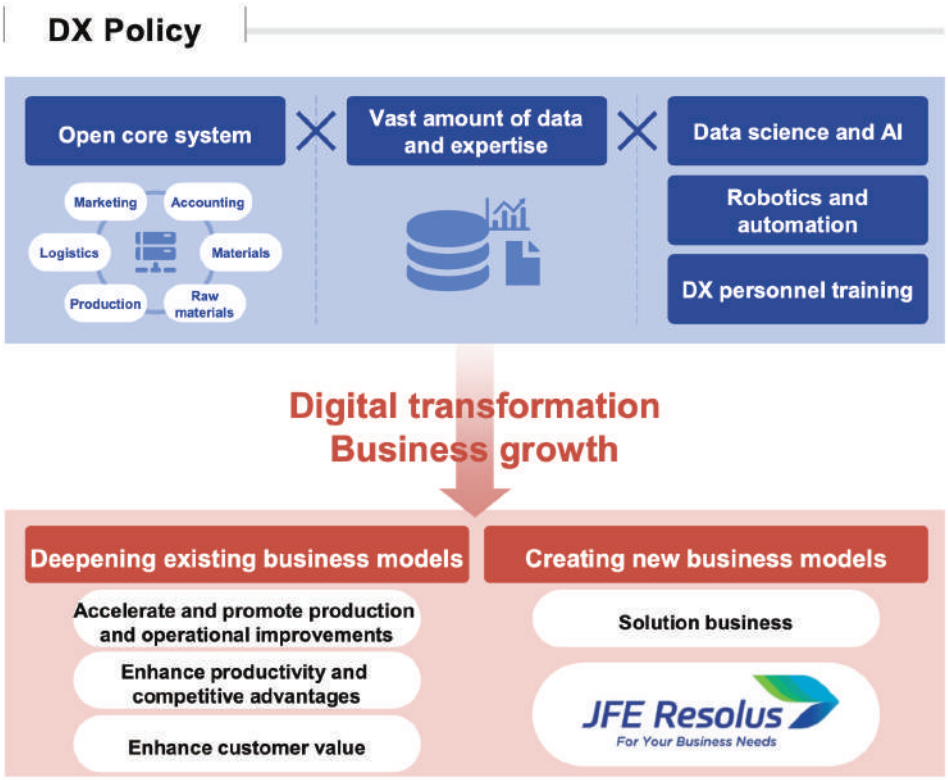
Improving Customer Satisfaction

ST Aggressive Advancement of DX

JFE Steel's digital transformation (DX) strategy revolves around technological innovation based on the active introduction of advanced technologies such as IoT, AI, and data science (DS) and the application of data assets.

These technological and data assets will not only transform production and business processes but also lead to the expansion of the company's solutions business, contributing to addressing challenges across the entire manufacturing industry. This will enable the company to establish a competitive advantage and achieve sustainable growth in corporate value.

Advancement of Digital Transformation (DX)



For more information on our DX, please refer to:

› **DX REPORT** (https://www.jfe-holdings.co.jp/en/investor/library/dxreport/index.html)

ST Testing and Research Centers for Collaboration with Customers on Product Development

JFE Steel collaborates with customers in research and development. The Customers' Solutions Lab (CSL) for auto industry customers and the JFE Welding Institute-Center for Integrity against Fatigue and Fracture (JWI-CIF2) are located in eastern Japan, while the Customer Center Fukuyama (CCF), which develops materials and conducts applied technology research, is in western Japan. Using these facilities to strengthen early vendor involvement (EVI)* enables the company to quickly identify customer needs and develop products based on cutting-edge evaluation techniques and innovative production processes.

*Participation in customers' new product development from an early stage to propose and develop steel applications, component processing methods, and performance evaluations suited to the new product concept.



Customers' Solutions Lab

ST Enhancing Our Response to Customer Needs

In an effort to strengthen the company's total capabilities for better responding to customer needs, its sales department emphasizes enhanced sales education for sales personnel by position at the headquarters and branch offices. Specifically, we develop abilities in areas such as engaging in technical conversations, picking up clues from customer relations and using them in product development, offering suggestions to improve logistics and distribution, and analyzing financial indicators and costs. We also constantly strive to improve our systems so that customer product specifications are accurately reflected in manufacturing, and we will continue to work on improvements.

ST Unified Customer Care

JFE Steel regularly conducts customer questionnaires and interviews to draft strategies for greater customer satisfaction. Business strategies are shared among the sales divisions, the business planning functions, and steelworks to facilitate unified customer care and proposals that leverage the collective strengths of the JFE Group.

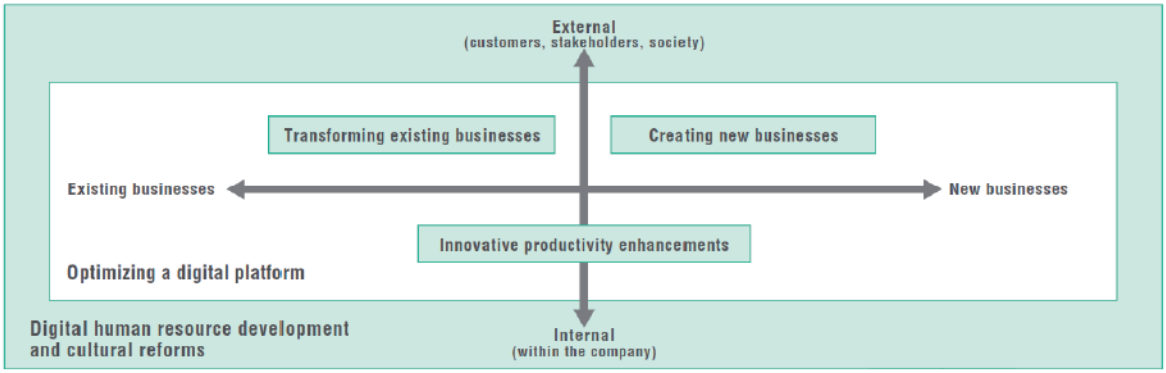
EN Create and Continue to Care for the Foundation of Life by Maximizing DX

JFE Engineering plans, designs, builds, and operates the infrastructure that supports people's lives and industry.

Digital transformation (DX) is a crucial growth engine for transforming and accelerating these businesses.

The company aims to improve overall business productivity and profitability by leveraging data accumulated over many years of infrastructure construction and operation to enhance decision-making and by automating and improving operations through DX after optimizing business processes. By digitizing a wide range of operations and creating new strengths and added value, DX will powerfully drive JFE Engineering's evolution as a company that creates and continues to care for infrastructure, contributing to global efforts to achieve carbon neutrality and promote a circular economy.

JFE Engineering's DX Strategy



For more information on our DX, please refer to:

> **DX REPORT** (https://www.jfe-holdings.co.jp/en/investor/library/dxreport/index.html)

EN Company Assessments Based on Customer Evaluations

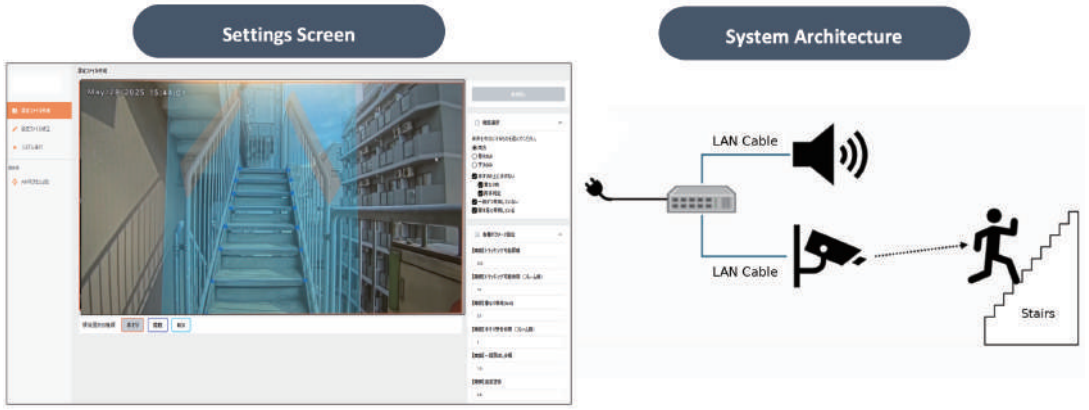
JFE Engineering uses customer surveys, interviews, and contractor performance evaluation forms to collect and assess data on the company's construction management, quality, advanced technologies, and innovation. Each division analyzes and applies the data for quality improvement, new product development, and the overall strengthening of aftersales service to ultimately enhance customer satisfaction.

SH Establishing a System to Meet Customer Needs

To respond to diversifying markets and increasingly advanced customer requirements, JFE Shoji is exploring the introduction of DX solutions that take advantage of the strengths of the JFE Shoji Group. Placing safety as a central theme, JFE Shoji Electronics Corporation, a JFE Shoji subsidiary, has begun offering a Safety AI System that detects entry into hazardous areas, detects people throughout the roll area, and monitors workers' behavior at manufacturing sites. As unsafe behavior is a major cause of workplace accidents, JFE Shoji Electronics has also begun offering an AI camera for stair safety. The system monitors whether workers hold handrails, their speed, and how they ascend and descend stairs, automatically detecting unsafe behavior in real time and issuing immediate warnings to help prevent accidents.

Stair Safety AI Camera

- After the handrails, stairs, and detection range have been configured, the camera and speaker automatically detect unsafe behavior and issue warnings. Video footage can also be reviewed later using CSV data.
- Introducing the camera is expected to reduce workplace accidents, raise safety awareness, and lower management costs.



For more information on our DX, please refer to:

> **DX REPORT** (https://www.jfe-holdings.co.jp/en/investor/library/dxreport/index.html)

Promotion of Research and Development

ST Promoting Technological Development to Meet the Needs of Customers and Society at Large

JFE Steel is advancing research and development of innovative technologies in the steelmaking process to contribute to achieving carbon neutrality by 2050. These include CO_2 reduction technology, carbon-recycling blast furnaces with CCU, and hydrogen-based ironmaking. The company is also actively applying data science and robotics to drive technological development that meets the evolving needs of customers and society at large.

In addition, JFE Steel is accelerating the introduction of new products and solutions for each field, with automobiles, including EVs, and new energy as key areas of R&D.

EN Promoting Research and Development Based on the Long-Term Vision

JFE Engineering conducts R&D to achieve its FY2035 target of contributing to a reduction of 30 million tonnes in CO_2 emissions. Key initiatives include developing manufacturing technologies for monopile foundations for offshore wind power generation, technology for detecting abnormalities in wind turbine blades, CO_2 separation and capture technology, waste-to-chemical technologies that convert waste into chemical raw materials, and a new catalyst for producing sustainable aviation fuel (SAF) from a mixture of carbon monoxide (CO) and hydrogen (H_2).

Internal Awards

The following technical and product developments were awarded in FY2025.

Internal Awards (FY2025)

	Prize/Award	Project	Recipient
JFE Steel	Award of Excellence, JFE Steel President's Awards	Establishing a scheme for the continued adoption of JGreeX™ in ocean-going bulk carriers	Logistics Planning Department
		Establishing an optimal production system for steel sheets for cans by consolidating and stabilizing manufacturing bases	Thin Plate Sector Department
		Achieving quality improvement and operational stability by developing the world's most advanced pickling line surface inspection equipment	Steel Research Institute Cyber-Physical Systems Research and Development Department
		Rebuilding the utility supply system in the Keihin area	Planning Department, East Japan Works
		Realizing stable blast furnace operation by developing highly efficient and high-production technology for granular iron	Equipment Department, East Japan Works
		Reducing the companywide hot metal charging ratio through the development of technology to lower hot metal charging ratios	Steelmaking Department, West Japan Works (Fukuyama District)
JFE Engineering	Award of Excellence, JFE Engineering President's Awards for Technology Development	Japan's first large-scale ammonia co-firing engine developed and commercialized, achieving a co-firing rate of over 50% to promote decarbonization in shipping and power generation	Industrial Machinery Division, Social Infrastructure Headquarters

For more on the external awards, please refer to:
› **External Awards** (P. 302)