

# Stainless Steel Company

Contributing to these SDGs



## Kazuya Fukatsu

Managing Executive Officer and Stainless Steel Company President

### Profile

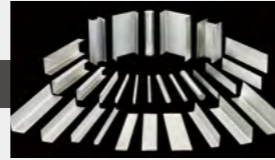
Kazuya Fukatsu took on the role of Stainless Steel Company President in April 2020.



### Value for society

The Stainless Steel Company supplies stainless steel materials (formed steel, flat steels, round bars, and deformed bars) and enhanced stainless steel building structure engineering functions (design partnership, plant manufacture, and onsite construction) through which it helps customers to shorten processes and reduce costs. It is also contributing to the realization of the hydrogen society and rebuilding of infrastructure.

Wide variety of stainless steel materials



### Business fields

- Main products: Stainless steel materials (formed steel, flat steels, round bars, and deformed bars), wrought titanium materials (round bars, flat bars, and angle bars), stainless steel building structure engineering (design partnership, plant manufacture, and onsite construction)
- Main applications: Construction components for the civil engineering field (road bridges, tunnels, etc.), plants, and energy

### Company strengths

- Product range (approximately 2,000 varieties) with shapes and dimensions for a range of applications and needs enabled by technology development capabilities that include Japan's first hot-rolled stainless steel angle bar production
- Stainless steel building structure engineering technologies for design partnership, plant manufacture, and onsite construction

## Business environment

Demand for stainless steel in the civil engineering field is expected to increase in Japan and overseas as aging infrastructure (roads, bridges, rivers, dams, sewerage systems, etc.) is upgraded and due to increasingly intense climate change-related natural disasters. Greater demand is also expected due to demand for plant construction in growth fields (pharmaceuticals, foods, semiconductors, etc.) and for construction components in energy-related fields (hydrogen, LNG, biomass).

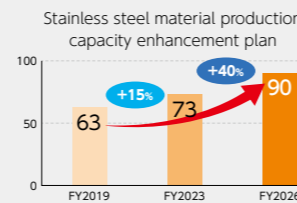
Percentage of various types of domestic infrastructure that is 50 years or older

Types and numbers	FY2017	FY2022	FY2032
Road bridges	Approx. 730,000	Approx. 25%	Approx. 39%
Tunnels	Approx. 10,000	Approx. 20%	Approx. 27%
River management facilities	Approx. 10,000	Approx. 32%	Approx. 42%
Sewerage culverts	Approx. 470,000 km	Approx. 4%	Approx. 8%
Harbor and port quays	Approx. 5,000	Approx. 17%	Approx. 32%

## Medium- to long-term growth strategies

### 1. Enhancing capacity through production improvements and process reform

We are enhancing supply capacity, including by improving manufacturing equipment capacity, to meet greater demand in growth fields.



### 2. Expanding components and parts business functions

We are working to expand the potential of design partnership, plant manufacture, and onsite construction, and to grow our business into the parts field.

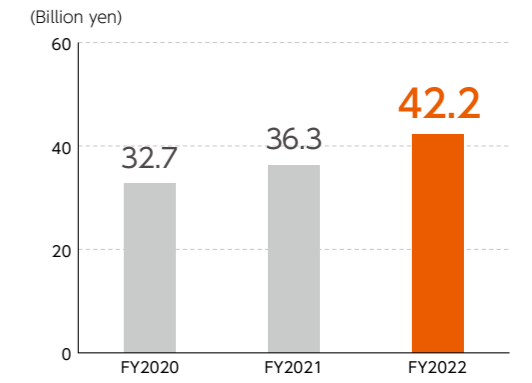
### 7 projects

Project	Project Description	Objective
Project 1	Restructuring product strategies	Optimize the product range and manufacturing processes
Project 2	Planning alliances	Investigate external ties rather than being closed to them
Project 3	Expanding material and components and parts business functions	Enhance steel building structure engineering functions
Project 4	Enhancing ties with consolidated subsidiaries	Expand collaborations with Aiko Corporation and Aichi Techno Metal Fukuami Co., Ltd., etc.
Project 5	Improving production and reforming processes	Improve productivity while enhancing production capacity
Project 6	Creating new markets	Strengthen businesses related to hydrogen, deformed bars, water treatment, and blades
Project 7	Achieving carbon neutrality at Kariya Plant	Create sustainable, attractive plants

## Fiscal 2022 Business Performance

There was a noticeable downturn in the global stainless steel market, and in high demand countries like China in particular, which led to an inventory adjustment phase as sales volumes declined year-on-year. Increased manufacturing costs, due to sharp increases in energy costs and price rises for raw materials such as nickel and chromium, also suppressed earnings. Despite such a business environment, the Stainless Steel Company was able to increase both net sales and operating profit through efforts to reduce manufacturing costs and improve sales prices.

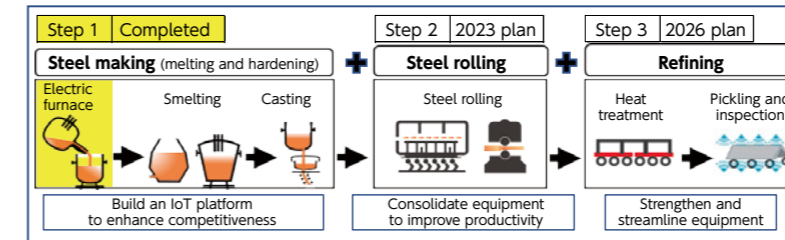
Net sales



## Achievements and Future Initiatives

### Project 5. Improving production and reforming processes

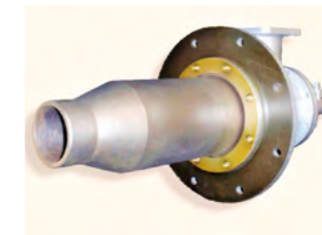
To meet forecast expansion in demand and enhance market competitiveness, the Stainless Steel Company is working to improve productivity and enhance production capacity by reforming its integrated manufacturing process, from steel making through to refining. Comprising three steps, the reform will be completed by 2026. We have already completed the first step, which entailed improving the steel making process underpinning our capacity enhancement. Initiatives included stabilizing crude steel supply capacity by upgrading the stainless steel electric furnaces, building an IoT platform for reducing manufacturing costs by visualizing and optimizing production, and reducing CO<sub>2</sub> emissions by improving energy usage efficiency.



Upgraded 50 ton electric furnace

### Project 7. Achieving carbon neutrality at Kariya Plant (from April 2023)

In addition to thorough efforts to save energy, we effectively achieved carbon neutrality at our Kariya Plant, which is our manufacturing site for stainless steel materials, through the purchase of FIT non-fossil certificates with tracking and adoption of carbon neutral city gas. With the aim of utilizing hydrogen fuel in the future, we will begin developing, and conducting verification trials for, hydrogen fuel combustion technologies in cooperation with Toho Gas Co., Ltd. We will make use of burners that can operate on both hydrogen and city gas, which we installed in a steel heat treatment furnace.



Dual-fuel burner (hydrogen and city gas) adopted at Kariya Plant  
Photograph provided by: Toho Gas Co., Ltd. and Nippon Furnace Co., Ltd.



Steel heat treatment furnace with burners installed

## Group company initiatives

### Aiko Corporation

The Kinuura Plant, which is the primary plant of Aiko Corporation, has been certified as a Stainless Steel Building Structure Manufacturing Plant by the Organization for Building Steel Structure Qualification, a part of the Japanese Society of Steel Construction. By expanding its business to include the manufacture of stainless steel building structures, and strengthening its ability to meet customer needs, Aiko aims to achieve further growth by capturing high demand from new plant construction not only in the traditional civil and water treatment fields, but also in the pharmaceuticals, food, and beverage industries. The company plans to obtain a steel structure construction business license as an ordinary construction business in 2024, enabling it to provide onsite construction, so it is working to also become a site for plant manufacture for the stainless steel components and parts business.

