Overview



As a steelmaker boasting world-leading production facilities and excellent technologies, JFE Steel is well positioned to meet growing demands for high-end steel. By actively developing innovative and unique products that offer superior functionality, JFE Steel will continue to ensure its capability to stably supply high-end steel to customers in Japan, as well as further develop markets worldwide through outstanding production and distribution networks that it is expanding in partnership with other leading steelmakers. JFE Steel also remains committed to providing solutions to social needs such as environmental protection.

President & CEO Koji Kakigi



Overview

Two Major Steelworks Equipped with Large-scale Blast Furnaces

The Chiba District of the JFE Steel East Japan Works was the country's first integrated coastal steelworks constructed after World War II. The East Japan Works also includes the Keihin District, a complex of facilities situated on Ohqishima, a 5.5-million-m² manmade island along the shores of Tokyo Bay.

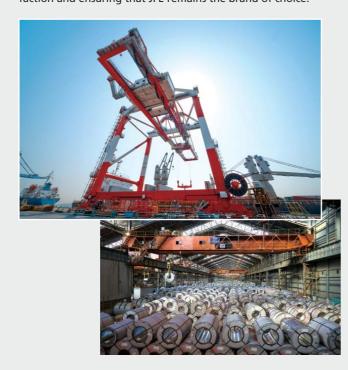
The West Japan Works includes the Kurashiki District and Fukuyama District, both of which boast advantageous locations due to their proximity to deep harbors. Together, they occupy a total area equivalent to 540 times that covered by the Tokyo Dome. The East and West Japan works, which feature large, world-class blast furnaces, are part of an extensive, highly efficient production structure.

JFE Steel's production network also includes the Chita Works located in the Chukyo Industrial Zone. This facility boasts world-leading production capabilities, including for specialty steel pipes and tubes such as tubular goods for the oil industry and line pipes.



Enhancing Customer Satisfaction and Brand Strength

JFE Steel is strengthening its integrated service and technology support system, which encompasses everything from planning and product design, manufacturing and delivery to quality assurance, thereby securing greater customer satisfaction and ensuring that JFE remains the brand of choice.



■ JFE Steel Manufacturing Bases **East Japan Works** West Japan Works ---------Chiba District Fukuyama District Keihin District ______ Kurashiki District **Chita Works**

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Overview

Developing Manufacturing Platforms in Japan

With the aims of ensuring stable operations and achieving greater cost competitiveness for its manufacturing bases in Japan, JFE Steel is tackling immediate priorities such as enhancing its manufacturing platforms in terms of both facilities and human resources. This includes repairs and upgrades, mainly to raise the operational efficiency of aging facilities for greater competitiveness. Recent upgrades have included coke ovens and facilities for raw material loading, unloading and distribution, all of which received extensive

repairs. With regard to human resources, JFE Steel has introduced a unique training system by appointing a group of dedicated trainers to pass on knowledge in the face of mass retirements by baby boomers. The trainers, who have been selected from among veteran employees and rehired retirees, are now dispatched to every manufacturing site to impart skills to younger employees, with a particular emphasis on know-how for troubleshooting and other technical matters.



Securing Footholds in Burgeoning Markets Worldwide

With an eye on the global steel market, which is poised for growth, JFE Steel is reinforcing its ability to respond to rising demand, including through increased exports from Japan. For emerging markets such as China, India and Southeast Asia, high-end steel production and distribution networks have been established with local partners to supply automotive steel sheets.

In China, a cold-rolling mill and a hot-dip galvanizing line are operated by Guangzhou JFE Steel Sheet Co., Ltd., a 50-50 joint venture, while in Thailand, JFE Steel Galvanizing (Thailand) Ltd., a wholly owned subsidiary, runs a hot-dip galvanizing line. These facilities are enjoying stable operations. In India, strategic partner JSW Steel Ltd. began operating a second cold-rolling mill at its Vijayanagar Works, which licenses automotive steel sheet production technologies from JFE Steel. In Indonesia, PT. JFE Steel

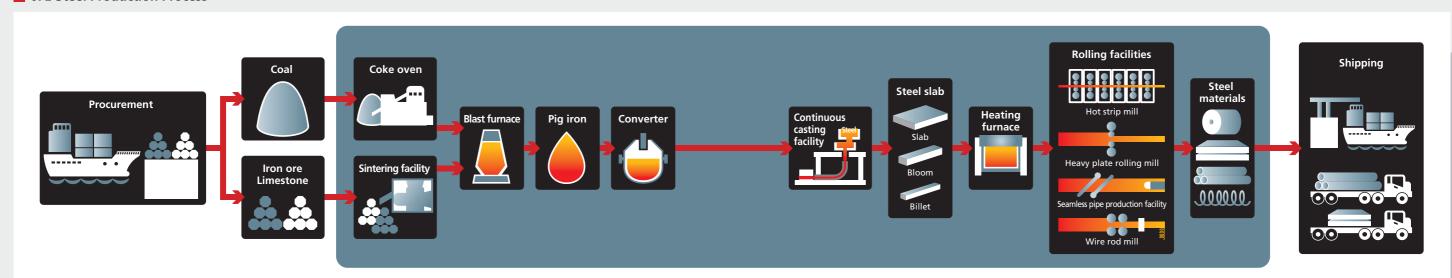
Galvanizing Indonesia, a wholly owned subsidiary, is constructing a hot-dip galvanizing line.

Also, efforts are under way to establish a supply structure for steel pipe to accommodate expected growth in energy-infrastructure demand over the medium to long term. The U.S.-based 50-50 joint venture California Steel Industries, Inc. has completed its No. 2 electrical resistance welded pipe mill, which began operating in October 2014. In the Middle and Near East, where abundant reserves yield world-leading crude oil and natural gas production, JFE Steel established a joint venture in the UAE capital of Abu Dhabi for the manufacture and sale of large-diameter welded steel pipes for the energy industry. The JV was undertaken in tandem with Marubeni-Itochu Steel Inc. and SENAAT, a general holding company that is wholly owned by the Emirate of Abu Dhabi.

Main Capital and Alliance Partners



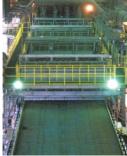
■ JFE Steel Production Process



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Highlights in 2014





Super-SINTER® Wins Two Prizes

JFE Steel was chosen to receive the Prize of the Minister of Economy, Trade and Industry under the National Commendation for Invention 2015 award program, and also the Okochi Memorial Technology Prize, both in recognition of Super-SINTER®, a novel technology that utilizes a gaseous fuel to produce steelmaking raw materials and thereby helps to reduce CO₂ emissions. Super-SINTER® enables manufacturers to partially replace powder coke with a widely available hydrocarbon utility gas to produce sintered ore, a main blast furnace feed. The result is superior energy efficiency and reduced CO₂ emissions. Notably, this is the sixth consecutive year in which JFE Steel has received an Okochi Memorial Prize.



Fukuyama District Brings Third Converter Online at No. 3 Steel Mill

The Fukuyama District of the West Japan Works began operating a third converter at its No. 3 steel mill. The cutting-edge converter, which is used for the preliminary treatment of molten pig iron, has raised efficiency in terms of both resource and energy consumption.

Customers' Center Fukuyama Opens at Steel Research Lab.

The Fukuyama District of the West Japan Works opened a Customers' Center, a place to provide customers with opportunities to take a close look at the JFE Group's material development activities and technologies. This move is

intended to enable the Group to reach a broader domestic customer base in its initiatives aimed at facilitating "Early Vendor Involvement" by encouraging collaboration between customers and the Group in tackling technological challenges and undertaking joint R&D projects.







Outstanding Performances by Company Sports Teams

The JFE East and West Japan baseball teams participated in an intercity tournament and the Japan Amateur Baseball Championship. A group of enthusiastic JFE fans joined local residents in rooting for the teams. With regard to individual records, at the latter game the JFE West Japan baseball team member Takuya Hashimoto shone as the leading hitter. In addition, Tsukasa Kohmatsu from the JFE East Japan baseball team was commended by both Chiba and Saga prefectural governments for his outstanding performance. Also, in running sports, loud cheering from roadside supporters inspired strong performances in a number of competitions. JFE Steel employee Charles Ndirangu won two races during the year.

CSI Launches No. 2 Electrical Resistance Welded Pipe Mill

California Steel Industries, Inc. (CSI), a U.S.-based steelmaking joint venture in which JFE Steel has a 50% equity interest, brought its No. 2 electrical resistance welded pipe mill online to accommodate growing demand for high-end steel pipes in the energy field. The launch of this facility boosted CSI's electrical resistance welded pipe production capacity 2.6 times while enabling it to begin manufacturing pipes with larger diameters, thicker walls and greater strength.





Joint Venture Established in UAE for Large-diameter Welded Steel Pipes

In tandem with Marubeni-Itochu Steel Inc. (MISI) and SENAAT, a general holding company wholly owned by the Emirate of Abu Dhabi, JFE Steel established a joint venture in Abu Dhabi for the manufacture and sale of large-diameter welded steel pipes for the energy industry and other fields. Demands for crude oil and natural gas development, as well as production infrastructure, are expected to remain strong in the UAE and surrounding region, which boasts the world's largest combined reserves of oil and natural gas. The new joint venture is positioned to satisfy related needs for high-quality steel pipes.

April 2014

- Received a Commendation for Science and Technology from the Minister of Education, Culture, Sports, Science and Technology for technologies to produce high-performance steel plate employing an innovative thermomechanical control process
- Received JSME Medal for New Technology from the Japan Society of Mechanical Engineers for a noncontacting actuator for the stabilization of strip vibration and shape with dual coil electromagnets
- Chita Works' cumulative output of seamless steel pipe surpasses
 15 million tons

May 2014

- Held spring festivals at Fukuyama District of West Japan Works and Keihin District of East Japan Works
- First-ever installation of new, highlycorrosion resistant steel plate in the cargo hold of a coal carrier
- Developed JIP Clean Mix® ZERO, an iron powder for sintered machine parts boasting superior weight and bulk stability during molding process

June 2014

 Won order for JFE-UHP®-17CR-110 tubular pipe casing for offshore oil development project in Brazil

July 2014

- Super-SINTER® received Prize of the Minister of Economy, Trade and Industry, part of the National Commendation for Invention 2015 award program
- JFE East and West Japan baseball teams participated in 85th intercity tournament
- Developed Super-SINTER® OXY for unprecedented combination of oxygen- and hydrogen-based gases as a sintering-machine feed

August 2014

 Released Kona Bijin®, a premix iron powder for coating seeds

September 2014

 Initiated operation of CSI's No. 2 electrical resistance welded pipe mill in the United States

October 2014

- Held autumn festival at Chiba District of East Japan Works
- Developed world's thickest high crackarresting steel plate with yield strength of 460MPa

- Developed high-tensile-strength alloyed hot-dip galvanized steel sheet with high extensibility and stretch flanging property for automotive frame components
- Opened Customer Center Fukuyama (CCF) at Steel Research Lab. in Fukuyama District of West Japan Works

November 2014

- Held autumn festivals at Kurashiki District of West Japan Works
- JFE East and West Japan baseball teams participated in 40th Japan Amateur Baseball Championship
- JFE-TF1, a resource-saving stainless steel with superior thermal resistance, received one of the 2014 R&D 100 Awards
- Agreed to merger of indirect subsidiary Nacional Minerios S.A. (NAMISA) and Brazilian iron-ore mining company
- TCR (Thailand) received Prime Minister's Industry Award on Environment Quality Preservation

December 2014

- JFE-HA980SB, a hot-rolled steel sheet with a high tensile strength of 980 MPa, adopted as material for truckbody collision protection
- Fukuyama District of West Japan Works begins operating third converter at No. 3 steel mill

January 2015

 Developed FE-EPMA, carbon-content analysis equipment boasting worldleading precision

February 2015

- Charles Ndirangu of JFE Steel running team won first place in both Chiba International Cross Country race and Japan Industrial Track & Field Association half marathon
- Super-CR, newly developed equipment for steel plate cooling, selected for Minister of Economy, Trade and Industry Prize under Promoting Machine Industry Awards program sponsored by the Japan Society for the Promotion of Machine Industry

March 2015

- 440MPa Class UNI HITEN®, a highstrength steel sheet for automotive outer panels, selected for Otani Art Museum Award
- Super-SINTER® selected for 61st Okochi Memorial Technology Award
- Decided to establish joint venture in Abu Dhabi to manufacture and sell large-diameter welded steel pipes (established in May 2015)

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