JFE STEEL

# Passing the Torch to the Next Generation

A company's technical prowess is underpinned by the high aspirations and passions of its employees. Having recruited talented young personnel since its founding, JFE Steel is reliably passing down its DNA from person to person through close communication.



### JFE STEEL

# The Next Story Begins Here

JFE Steel will upgrade and broaden the functional capabilities of major facilities for upstream processes during the current medium term.

As global conditions continue to evolve, JFE is prioritizing the further stabilization and cost efficiency of its world-class manufacturing bases in the emerging new era for steel business.



JFE ENGINEERING

## Bridge for Tohoku's Reconstruction

With the large-block erection of the Oshima Bridge, one of the longest arch bridges in East Japan, Oshima Island is now connected to Kesennuma in Miyagi Prefecture. As the Tohoku Region's first bridge serving a large remote island, this has been a long-cherished dream of local residents, who previously had to rely on boats to travel to the mainland. It also is a symbol of reconstruction efforts taking place since

the disastrous earthquake and tsunami in 2011.



JFE ENGINEERING

# Changing the Future with Renewable Energy

A biomass power plant constructed on the idle site of a former cement factory in Saiki, Oita Prefecture started operating in November 2016.

This plant's maximum generating capacity of 50 MWe, one of the largest in Japan, is mainly fed with palm kernel shells (PKS). JFE Engineering's renewable energy technology contributes to low-carbon societies.



JFE ENGINEERING

### Enormous 600-ton Jetty Jacket Crossing Osaka Port

A huge jetty jacket constructed at Tsu Works was installed in Osaka Port. As a strategic international container port, Osaka Port is expanding its container terminals to handle increasingly large container ships.

Ports across Japan are strengthening their international competitiveness with support from JFE Engineering.



#### JFE SHOJI TRADE

# Local Employees Contribute to Our Global Operations

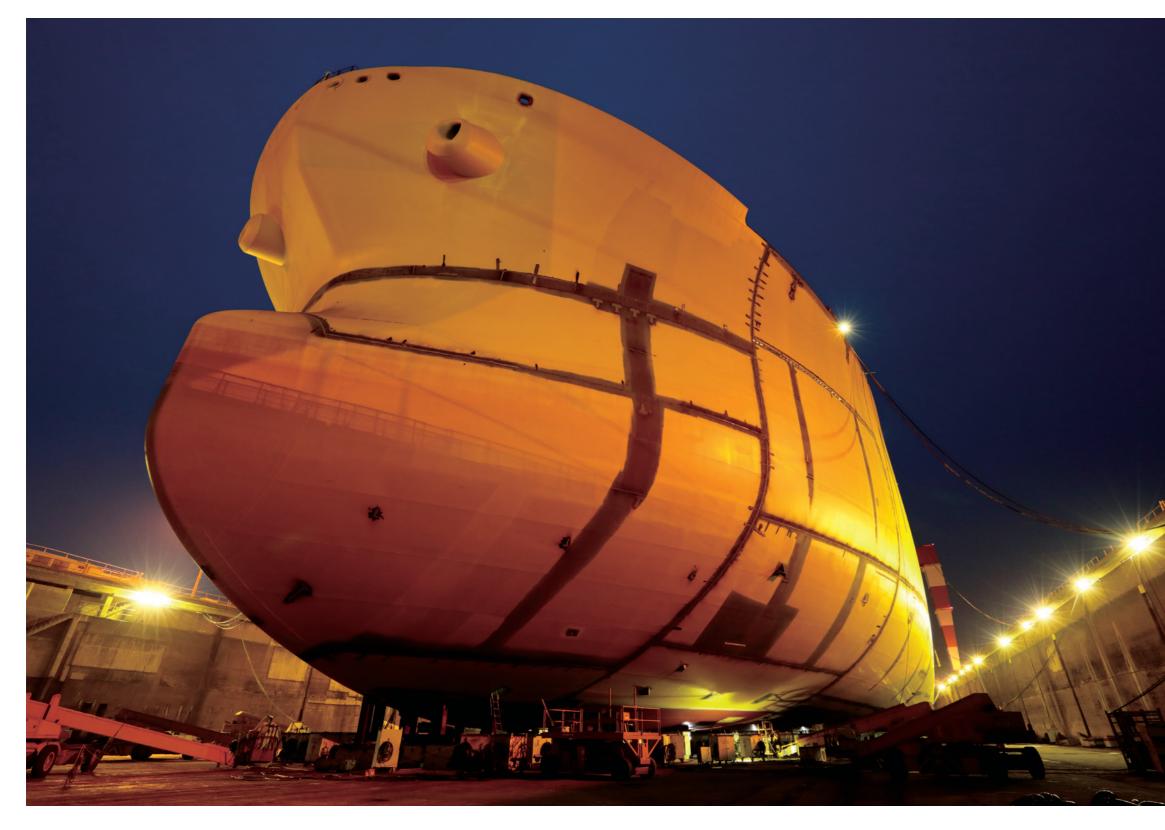
The demand for steel is dramatically increasing in the fast-growing ASEAN region. Working on the frontlines, JFE Shoji's global supply chain responds to customers' needs for timely deliveries of steel products.

Local employees contribute to make this possible by playing vital roles in markets around the world, serving as a driving force that enables JFE Shoji Trade to steadily develop its global business.



JAPAN MARINE UNITED

### Delivering Next-generation Energy-saving VLCCs



Japan Marine United (JMU) delivered its first next-generation energy-saving VLCC (very large crude oil carrier), constructed at Ariake Shipyard, to an overseas ship owner in June 2016.

This first next-generation energy-saving G-Series VLCC has inherited the legacy of JMU's 35 previous VLCCs with two-million-barrel capacities of cargo oil tank for spot trading. The new VLCC meets the very latest shipbuilding standards while achieves significant improvements in fuel efficiency. Though compact for a VLCC, it maximizes its deadweight at shallow draft to handle east-west trade passing through the Straits of Malacca.

The vessel is equipped with advanced energysaving ducts and fins incorporating proprietary technologies and it employs a special bow shape for improved seagoing performance. Its fuel-efficient MAN-G engine and highly efficient, large-diameter propeller significantly improve performance compared to conventional vessels. Furthermore, its ballast water management system adds to the vessel's environmentally friendliness.

#### Overview

Dimensions: length 330 m x beam 60 m x depth 29.35 m x draft 21.58 m Deadweight capacity: 302,652 t Gross tonnage: 156,501 t Sea speed: 15.8 knots