# **Our Business Domains**

The JSW Group comprises 49 subsidiaries (of which 32 are consolidated) and three affiliates (of which one is an equity-method affiliate). Our operating domains are the Steel and Energy Products Business, the Industrial Machinery Products Business, and the Real Estate and Other Businesses.

We maintain the Muroran, Hiroshima, and Yokohama plants. Our integrated lineup ranges from steel manufacturing to machinery.

# **Steel and Energy Products Business**

# Business Lines

Production and sale of products for power generation industries, steelmaking, nuclear power-related equipment, die materials, and other areas

Composition

## **Steel Products**



At the Muroran Plant, which manufactures steel in electric furnaces, we produce a broad range of cast products and steel ingots for forged products. In ingots for forgings, we have one of the world's largest production capacities, of 670 tons. Our range of presses and hammers of various types and sizes, including two 14,000-ton hydraulic presses, ensures that we can deliver forgings in any needed shape. After undergoing heat treatment, machining and finishing, the cast, and forged steel products are used in the electric power generation industry (fossil fuel, hydroelectric and nuclear) as well as for steel-making, oil refinery, and industrial machinery and facilities. In addition to being a leading global supplier of numerous extra-large cast and forged steel products, our plants produce a wide range of high-quality small and medium-sized steel cast and forged products.

## **Steel Plates and Structures**



At the Muroran Plant, which has one of Japan's largest 4-thick plate reversing rolling mills, we can roll high-quality, extremely thick, wide, and long steel plates (maximum thickness: 350 millimeters, maximum width: 4.8 meters, maximum length: 20 meters). Using advanced manufacturing technology we now mainly produce high-quality clad steel plates and clad steel pipes using clad steel plates. All of our products are used in a wide range of industrial applications in Japan and overseas, giving this business a unique profile. In addition, the Muroran Plant integrates the various forged steel products it manufactures and leverages the Company's state-of-the-art welding technologies and facilities to produce very large welded structures, such as pressure vessels for oil refineries and petrochemical plants, in an integrated process extending from raw materials to finished products. As a result, we are meeting demand both in Japan and overseas.

#### **Business Lines**

Production and sale of products for oil refining, petrochemical, general chemical, and chemical machinery, as well as a wide range of pressure vessels, clad steel plates, clad steel pipes, extra-thick steel plates, and other areas

#### **Wind Turbines**



The JSW Group entered the wind turbine system business in 2000. Leveraging state-of-the-art technologies, including permanent magnet synchronous generators, we make low-noise wind turbine system equipment that excels in terms of function, performance, and reliability and is also environment-friendly. Going forward, we will provide high-quality services in an effort to increase customers' capacity utilization rates.

#### **Business Lines**

Production, sale and maintenance of wind turbine system equipment

Production encompasses steel casting and forging products (Muroran), steel plate and steel structures (Muroran), wind turbines (Muroran), plastics machinery (Hiroshima and Yokohama), and other machinery (Muroran, Hiroshima, and Yokohama). We have responded to changes in the industrial structure by diversifying our businesses and launching environmental businesses.

# **Industrial Machinery Products Business**



### **Plastics Machinery**



At the Hiroshima Plant, we produce injection molding machines, pelletizers, twin-screw extruders, and film and sheet manufacturing equipment. At the Yokohama Plant, we produce blow molding machines and spinning extruders. In injection molding machines, we offer a lineup of electrically driven machines, all of which feature both improved productivity and energy-saving standards along with enhanced basic performance and molding precision. In addition to conventional power regeneration technology, the new ADS Series delivers even better energy savings thanks to a revamp of its servo control. To respond to diversifying needs in these product markets, we have established a Technology Development Center within the Hiroshima Plant and engage in wide-ranging consultation with product users, enabling us to put in place an integrated development system to cope with changing demand, from plastic manufacturing to processing machinery.

#### **Business Lines**

Production and sale of plastic injection molding machines, plastic production and processing machinery (including pelletizers, compound extruders, film and sheet manufacturing equipment, etc.), and blow molding machines

## **Other Machinery**



Supported by proprietary technologies and facilities at the Hiroshima, Yokohama, and Muroran plants, JSW produces industrial machinery for a wide range of demand, including defense equipment, power plant equipment, magnesium alloy injection molding machines, laser annealing systems, rolling stock parts, and environmental facilities.

#### **Business Lines**

Production, sale and maintenance of compressors, hydraulic machines, machinery for the production of electronic components and displays (laser annealing systems, thin-film coating machines, etc.), magnesium alloy injection molding machines, tightlock couplers and dampers, and defense equipment

#### "Improving customer satisfaction: Our services business"

Drawing on its global network, the Company is advancing its wide-ranging service-related businesses, which include the maintenance and supply of components. In fiscal 2016, our service-related businesses accounted for around 10% of consolidated net sales. To meet ever-increasing demand, we will continue upgrading our domestic and overseas service bases and expanding our operations.

We also value communication with customers. By reflecting their valuable feedback in the form of improved services, we enable customers to use our products with peace of mind, thus providing them with confidence and satisfaction.

