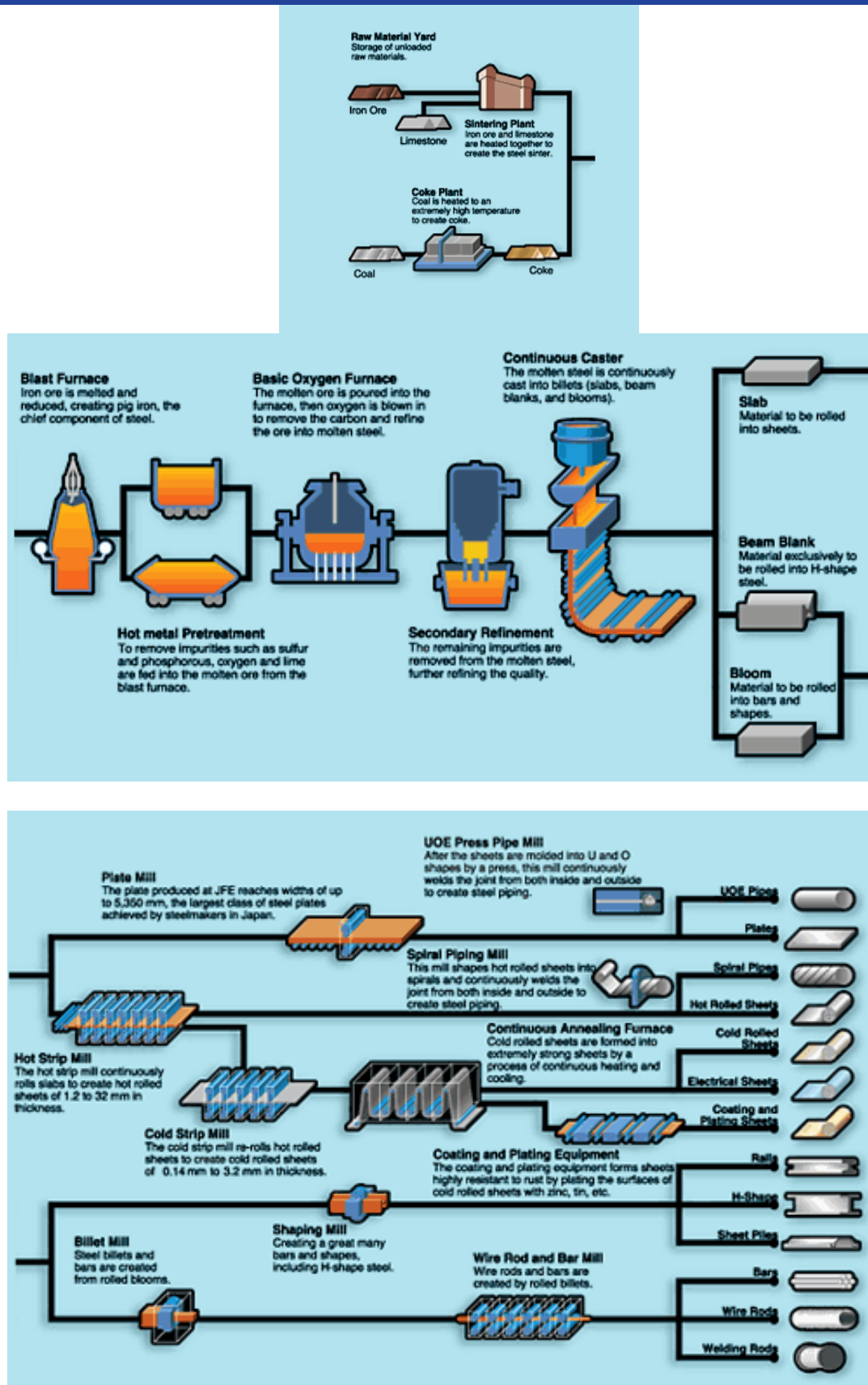


High-Quality Products and a Dynamic Steel Production Line Powered by the World's Best Technology.

Main Equipment and Production Processes



Raw Materials and the Manufacture of Steel

The blast furnace turns the iron ore into pig iron, the chief ingredient used to make the steel. Inside the blast furnace, coke and iron ore are alternately poured in from above, while air heated to 1,000-1,200 degrees Celsius is blown in from below. The iron ore melts and reduces to give pig iron, which is then conveyed to the next process by a torpedo car or molten iron ladle.



Unloader



Raw material yard



Blast furnace



Coke oven



Torpedo car

The Steelmaking Process

The molten pig iron is treated by preparative equipment to separate impurities such as sulfur and phosphorous, then further refined by removing carbon with the use of a steel converter. Once the impurities are removed by these methods, the viscous substance remaining is known as "steel." Next, the molten steel is transported to the continuous caster and cast into billets (slabs, beam blanks, and blooms) that can be easily rolled.



Basic oxygen furnace (Converter)



Secondary refinement



Continuous caster

Rolling

Rolling is the process by which billets are converted into sheets with thicknesses ranging from less than 1 mm to 400 mm. New rolling technology is a product of long-running research and development. Rather than simply "rolling" the steel, the process actually changes the crystal structure of the metal, allowing Owner to determine the strength, flexibility, and other properties of the final product.



Hot strip mill



Continuous annealing furnace

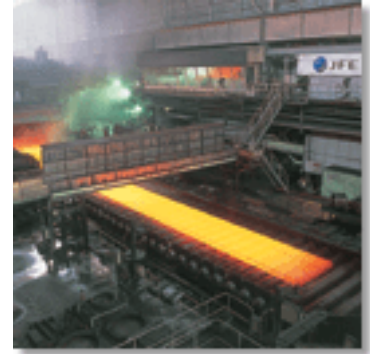


Plate mill



Shape mill



UOE press pipe mill



Wire rod mill

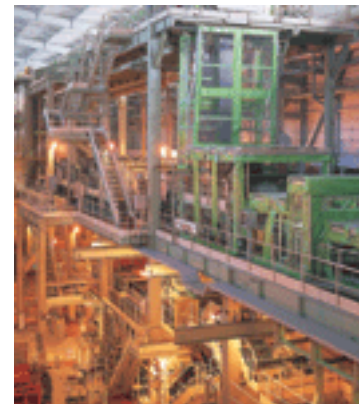
Coating and Plating

Steel sheets with a beautiful sheen and high rust resistance can be manufactured by applying different platings to the surfaces of cold rolled sheets.

The production line at the West Japan Works is equipped with facilities for all kinds of plating, including continuous galvanizing electrolytic galvanizing, lacquering, paint plating for a variety of purposes, and tin plating (as well as a tin-free steel line).



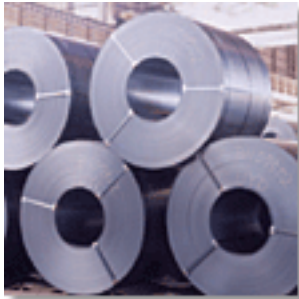
Continuous galvanizing line



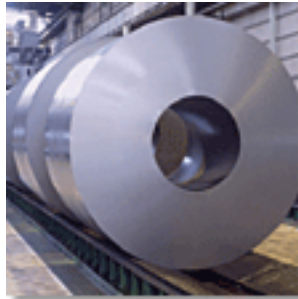
Electrolytic galvanizing line

Product Range

Strict quality control and the use of cutting-edge technologies ensure the creation of products perfectly suited for a wide range of purposes in everyday life.



Hot rolled sheets
(used in automobile chassis, railings, etc.)



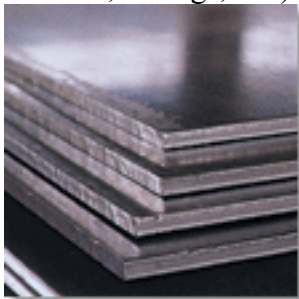
Cold rolled sheets
(used in cars, electrical appliances, etc.)



Coated sheets
(used in cars, electrical appliances, cans, etc.)



Electrical sheets
(used in transformers, motors, etc.)



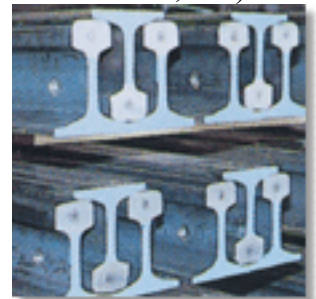
Plates
(used in shipbuilding, bridge construction, etc.)



Sheet piles
(used in land reclamation, landscaping, etc.)



H-shape
(used in the construction industry, etc.)



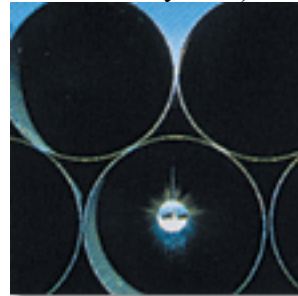
Rails
(used in railways)



Bars
(used in cars, gears, screws, etc.)



Wire rods
(used in wiring, bearings, etc.)



UOE pipes
(used in line piping, high-pressure containers, etc.)



Construction steel bar

Shipping

Products are transported both domestically and internationally by ship. A new, highly efficient logistics infrastructure is now in place to support express delivery system.

