The development and implementation of the creative sensing and controlling systems distinguish JFE’s cutting-edge manufacturing processes and logistics planning, establishing the customer satisfaction with our products and services.

**Non-Destructive Evaluation**

Original internal flaw inspection technologies using ultrasonic or electromagnetic non-destructive testing method contribute to precise quality control and strict quality assurance of mechanical properties such as formability, toughness, strength and soundness of steel products.

**Optics & Image Processing**

Various surface inspection systems using leading edge technologies include optics, imaging, signal processing are developed to upgrade surface quality assurance of our products. Accurate thermometry sensor systems for hot materials (for example, more than 1000°C) are developed in order to optimize our product line.

**Process Control**

Novel control schemes are developed and implemented in various iron and steel processes by applying advanced control theory, modeling methodologies, on-line optimization techniques and statistical analyses to improve control accuracy of process variables such as temperatures, gauges and mechanical properties for higher product quality.

**Optimal Scheduling & Logistics**

Optimizing systems utilizing the latest search methods are developed to improve productivity and efficiency at various scenes of steel business such as determining production order in works, designing groups and routes in products delivery.