

Quality

The KOBELCO Group is undertaking initiatives to strengthen quality management and improve the quality management process in line with its foremost priority of advancing measures to prevent recurrence of the quality misconduct.

While striving to instill the Quality Charter of the Six Pledges of KOBELCO Men and Women in all employees, from the standpoint of customers and business partners, the Company aims to deliver quality that is trusted by and satisfies the expectations of its customers and all other stakeholders.

Quality Charter

The KOBELCO Group will comply with all laws, public standards, and customer specifications, and make continuous efforts to improve quality, with the goal of providing Trusted Quality in our products and services.

Quality Management Committee

The Quality Management Committee, which comprises three external experts and two internal directors, was established in April 2019 as an advisory body to the Board of Directors. The committee constantly monitors the progress of measures to prevent recurrence of the quality misconduct in the Group and of activities to

strengthen quality management across the Group and provides advice regarding these activities. In fiscal 2019, this committee met a total of four times, at the Tokyo Head Office and at manufacturing sites. The committee is scheduled to meet around four times in fiscal 2020.

Companywide Quality Management Review Meeting

In December 2019, Kobe Steel held its first Companywide Quality Management Review Meeting for senior management, business division heads, and quality assurance managers. At this meeting, the participants reviewed the progress of measures to prevent

recurrence of the quality misconduct and other quality-related activities and discussed future measures to form consensus. We plan to hold another such meeting in fiscal 2020.

Rotation and Development of Quality Assurance Personnel / In-House Education Programs on Quality

Rotation and Development of Quality Assurance Personnel

Rotation of Quality Assurance Personnel

As the first step for our new personnel rotation practices encompassing Kobe Steel's head offices, business divisions and locations, and Group companies, the Company relocated staff from the Quality Management Department to each business division effective May 2019. These practices are ongoing.

Development of Quality Assurance Personnel

In fiscal 2018, we defined the skills required for quality assurance staff throughout the Company, established evaluation frameworks for related skill levels, and systematized quality-related education, including specifying qualifications. The applicability of these frameworks was expanded to include non-quality assurance staff in fiscal 2019, and we have since been revising and systematizing general and quality education programs from the perspective of human resource development and reflecting the results in training and education programs.

Also in fiscal 2019, we held the Quality Exchange Meeting for personnel in charge of quality assurance at affiliates in China, and we began exchanging information related to quality education and

the initiatives of specific companies based on themes that will be selected for each fiscal year.

As for quality risk management and preventive measures in fiscal 2019, we launched a training program on failure mode and effects analysis (FMEA), fault tree analysis (FTA), and design review (DR). In fiscal 2020, we plan to deploy training programs designed to promote total quality management activities.

In-House Education Programs on Quality

In fiscal 2018, line managers (about 600 people) at Kobe Steel and domestic Group companies received quality and compliance training. This training is also being developed for overseas Group companies.

A "Quality" page was opened on the KOBELCO Group's intranet in September 2018, on which progress reports on the Project for Restoring Trust are shared periodically.

Education on quality is offered via e-learning each year, and relevant information is circulated via internal newsletters.

A video message from the Director in charge of quality is produced and shown to employees of Kobe Steel and domestic and overseas Group companies during Quality Month each November.

Quality Control Circle Activities

We proactively promote on-site quality control circle activities. In particular, we hold the KOBELCO Quality Control Circle Conference once a year to promote cross-functional information sharing and education on a Groupwide basis to improve the level of activities. As the basis for its manufacturing capabilities, the KOBELCO Group considers 5S* activities to be of utmost importance and is working to strengthen such activities at all manufacturing workplaces.

* 5S stands for *seiri* (sort, classify), *seiton* (set in order, straighten up), *seiso* (shine, clean), *seiketsu* (standardize cleanups), and *shitsuke* (sustain discipline). 5S activities stress the importance of improving the work environment on the manufacturing floor.



KOBELCO QC Circle Conference

Audits by the Quality Audit Section of the Quality Management Department

Audit Item	Schedule
i) Review of compliance status (audit focused on actual data/records)	On-site audits at all 117 locations, which were subject to quality audits, completed in fiscal 2018; on-site audits at 81 sites completed in fiscal 2019; and on-site audits at 62 sites planned in fiscal 2020 despite the impact of the COVID-19 pandemic
ii) Review of quality management systems from the perspective of preventing misconduct	
iii) Assessment of compliance awareness	
iv) Review of progress and implementation status of preventive measures	

Quality Caravan Team

The Quality Caravan Team comprises Head Office departments, such as the MONODZUKURI (Production System Innovation) Planning and Promotion Department, the IT Planning Department, and the Technical Development Group, and is tasked to provide consultation to business divisions on issues faced.

The team visited 60 locations in fiscal 2019 and proposed solutions to various challenges and issues. The team will continue its activities in fiscal 2020, aiming to follow up on existing inquiries and identify new issues, such as the visualization/improvement of process capabilities, through efforts to help each business location overcome various challenges.

Elimination of Improper Handling Opportunities and Unification of Shipping Standards / Monitoring and Utilization of Process Capabilities

Elimination of Improper Handling Opportunities in Tests/Inspections and Unification of Shipping Standards

Automation of Test/Inspection Recording and Elimination of Manual Data Entry by Individuals

As of April 30, 2020, only about 60% of the automation plan for the period spanning fiscal 2018 to fiscal 2020 had been completed following delays to system launches and the impact of the COVID-19 pandemic in fiscal 2019. However, construction in general is steadily advancing on schedule, and we expect to complete 100% of the plan by March 31, 2021.

We are continuing to conduct extra measures, such as the confirmation of work logs and the double-check process for tests and inspections not yet automated.

Adjustment of the Shipping Standards

We are in the process of eliminating opportunities for any improper conduct caused by the existence of double standards

(customer specifications and internal standards).

>>Under the new rules, customer specifications are used as the default standard for shipment approval in lieu of Kobe Steel's internal standards. (Internal standards are used for the objective of stabilizing quality management.)

Monitoring and Utilization of Process Capabilities (in materials businesses)

Application and Utilization of Process Capability Index

Monitoring the Process Capability Index: Understand how quality properties deviate from the required standards in manufacturing processes for each category (i.e., production lines, product types, tests/inspections, and customers).

Utilizing the Process Capability Index: The degree of deviation found in the quality properties of manufacturing processes will be used for deciding whether to accept or reject orders.

Review of Approval Process / Promotion of Quality Risk Assessment

Review of Approval Processes for New Orders and Changes in Manufacturing Process

Review of Approval Process for New Orders

In addition to tracking process capabilities for each product, we have completed the adoption and restructuring of DR (design review as defined by the JIS and ISO 9000), and have promoted its implementation.

Review of Approval Process for Changes in Manufacturing Process

We will prevent potential defects by assessing beforehand the effect on quality when the 4Ms (man, machine, material, method)

are changed and ensuring conformity with customer specifications. Specifically, we will assess risks and clarify the authorization process when changing the 4Ms in the manufacturing process.

Promotion of Quality Risk Assessment in Capital Investments

Some plants and offices have begun considering quality-related capital investment by evaluating quality risks from quantitative factors, such as impact, frequency, and detection rate. The Company started utilizing the quality assessments in decisions for key capital investments in fiscal 2019.