



Social Quality Initiatives

Basic Stance

The EKK Group regards product quality problems as an existential threat because they lead to defective products in the hands of customers or end-users and, in turn, loss of stakeholders' trust.

The Group has vowed to never allow even a single defective product to be shipped. Under the slogan "Eternal Zero," it has been unremittingly striving since 2016 to improve quality with the aim of maintaining a level of product quality that customers can rely on and guaranteeing the same quality level all over the world.

Quality Management Regime

To continuously provide products which satisfy customers, the EKK Group strives to maintain and improve quality, and has built and makes use of an ISO 9001-based quality management system.



Companies/Divisions Certified as Compliant with International Quality Standards

Company/division name	Industry	Standard	Month certified
AI/CI Division, Eagle Industry Co., Ltd.	Automobile/construction machinery	ISO 9001	May 1999
	Nuclear power generation	IATF 16949	March 2018
Marine Division, Eagle Industry Co., Ltd.	Marine	ISO 9001	March 1994
Aerospace Division, Eagle Industry Co., Ltd.	Aerospace	JIS Q 9100 (including ISO 9001)	April 2004
EAGLE INDUSTRY CO., LTD. ESM Company	Semiconductors	ISO 9001	June 2020
SI Division, Eagle Industry Co., Ltd.	Semiconductors	ISO 9001	March 2023
Niigata Plant, EagleBurgmann Japan Co., Ltd.	General machinery	ISO 9001	March 1999
Valcom Co., Ltd.	Measurement instruments	ISO 17025 (accreditation of testing and calibration laboratories)	December 2021



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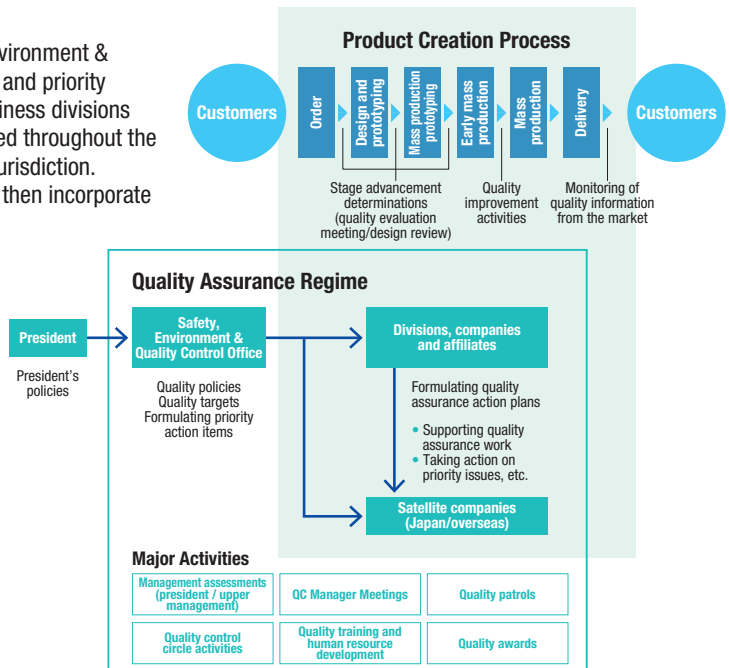
Quality Assurance Regime

Each year in response to the president's policies, the Safety, Environment & Quality Control Office formulates quality policies, quality targets and priority matters which are then deployed by the EKK Group. In turn, business divisions formulate quality assurance action plans which are then deployed throughout the business divisions as well as to global subsidiaries under their jurisdiction.

The individual business division components and subsidiaries then incorporate concrete action plans for achieving the directed quality targets into their quality assurance activities, with all components and subsidiaries engaging in activities to improve quality.

As part of deploying our quality policies, business division quality control (QC) managers regularly convene at QC Manager Meetings, held by the Safety, Environment & Quality Control Office, to align and deepen their understanding of policy and other content. At QC Manager Meetings, quality managers review the state of implementation of quality assurance action plans as well as policy deployment. In addition, they also strive to ensure a uniform quality level across the entire EKK Group and to implement bottom-up management.

Each year, the president and upper management conduct on-site management assessments of business divisions and overseas production subsidiaries, and the Safety, Environment & Quality Control Office conducts quality patrols. The purpose is to check and review quality assurance activities and promote effective and continuous improvement.



Quality Improvement Initiatives

EKK implements its own quality improvement initiatives for all of the processes spanning from order reception to delivery.

Monitoring of Quality Information from the Market

EKK constantly monitors for signs of possible serious quality problems, actively commissioning product studies and gathering and analyzing customer complaints and other product quality information from the market.

The information gathered from these studies and analyses are not only provided to internal organizations but also conveyed back to customers when needed, aiding in the improvement of product quality.

Quality Evaluation Meeting Inspections Conducted before Product Mass Production

EKK holds Quality Evaluation Meetings for newly developed products, products with design changes, products with process changes and others. The goals of these meetings are to meet customer requirements and to prevent quality issues in the products we deliver to our customers.

Whether a Quality Evaluation Meeting will be held or not is determined according to risks assessed in consideration of the intended use of, novelty of and changes to the product in question. The meetings are held at the designated stages of conceptual design, design and prototyping, process design and transition to mass production.

Decisions at each stage and whether or not to move to mass production are made by the General Manager of the Safety, Environment & Quality Control Office.

Activities to Reduce In-Process Defective Products

EKK actively engages in activities to reduce the occurrence of defective products in its production processes with the aim of preventing complaints.

Business divisions and subsidiaries conduct activities based on various annual themes. In recent years, an activity focusing on production floor-led initiatives has produced particularly great results.

This activity originated at one of our customers. In our adapted version, we display defective products on the production floor and use the actual product on-site to explore countermeasures for reducing the number of defective products.

For each defect event, the unit where the defective product occurred plays a central role (with the participation of other units as well), so that all employees can work together to pursue the root cause and formulate fundamental measures to prevent recurrence.

In addition to contributing to the realization of the Group's "Eternal Zero" vision, this activity results in the belief that quality is something created at the process level permeating down to the individual production worker. In turn, this contributes significantly to individual workers seeking to proactively resolve problems which occur in their respective processes.



Quality Education for Human Resource Development

EKK provides level-specific quality education.

In order to cultivate the next generation of quality control personnel with the aim of perpetual quality maintenance and improvement, it particularly focuses on introductory education to young employees to increase their knowledge of quality, and on intermediate education for mid-level employees to increase their problem-solving capabilities.

The Group has created more than 10 courses, covering everything from the seven basic quality control tools to courses which teach how to utilize various statistical methods such as why-why analysis and MSA.* Some courses also incorporate group exercise-based skills acquisition.

Due to the movement restrictions imposed by the COVID-19 pandemic since FY2020, the Group has introduced quality education leveraging online courses, the content of which is steadily being improved even as they are conducted.

From FY2017 to FY2022, 890 employees received introductory education. From FY2019, when we began providing it, to FY2022, 306 employees received intermediate education.

* Measurement system analysis. A method for quantifying and evaluating the validity of a measurement system.



Introductory	Intermediate	Advanced
<ul style="list-style-type: none"> • TQC*¹ and TQM*² • QC story • 7 QC tools, etc. 	<ul style="list-style-type: none"> • Why-why analysis • Basic statistics • Control charts, etc. 	<ul style="list-style-type: none"> • Multiple regression analysis • Experiment design • MSA, etc.

*¹ Total quality control *² Total quality management

Quality Handbook to Increase Quality Consciousness

Developing human resources highly conscious of quality is integral to maintaining high quality. In FY2019, EKK published Eternal Zero (the EKK Quality Handbook). The handbook is distributed to all employees to elevate employee quality consciousness, and to be used as a collection of knowledge employees can quickly check when having difficulty.

It has been translated into English, Korean, Indonesian, Thai, Chinese (in both traditional and simplified characters) and French. Distributed to overseas companies as well, it is helping to increase quality consciousness on a global level.



Quality Control Circle Activities

The EKK Group conducts employee-led, small-group quality control circle activities with the aim of improving quality.

These small-group circles are formed per workplace, and choose issues and other themes relevant to them, which are resolved by all of the circle's members. This makes the circles an important activity for improving member capabilities and energizing workplaces.

Business divisions conduct annual presentations of their activities and business divisions and domestic and overseas subsidiaries each select a circle group to represent them at the EKK QC Circle Tournament.

In FY2022, seven circle groups from Japan and two from overseas were selected to present the results of their activities at the 17th EKK QC Circle Tournament. In consideration of the state of the pandemic, the FY2022 tournament was held in a hybrid format, with face-to-face presentations by a limited number of participants and a remote presentation by only one overseas company. The event was livestreamed to all our locations via the internet.



Quality Awards System

The EKK Group has introduced an internal quality awards system with the aim of stimulating quality improvement activities and increasing motivation.

In order to enhance the quality consciousness of EKK Group employees in Japan, we encourage employees to nominate outstanding quality improvement activities on an organizational level and about activities relevant to the employees themselves. Among these nominated quality improvement activities, we annually award organizations that have achieved outstanding quality improvement results.

Promotion of Quality DX

The EKK Group is working to establish a database of information concerning quality, and is gathering quality information to this end.

The Group is promoting going paperless by digitalizing existing documents, increasing the speed with which information is disseminated by digitalizing existing workflows, enhancing work efficiency and automating the smooth collection and dissemination of information.

Accumulated quality information is linked with production data, design data, customer information and other information for effective utilization in a variety of situations, such as design and development.