

3.2 Quality Management

Kaori has developed its own quality management system in accordance with ISO 9001 Quality Management System, and implemented a series of management procedures and operational guidelines to guide quality management practices throughout the Company. Furthermore, Kaori has open communication channels in place to gather customers' opinions, quality feedback, audit findings, etc., for ongoing improvements. The Company will continue listening to customers' voices and adopting total quality management to satisfy customers' needs.

All product business departments of the Company are committed to obtaining and maintaining certification for international quality management systems for all products developed and produced. The Fuel Cell Business passed certification for AS9100D:2016, the latest quality management system standards for the aerospace industry, in February 2022, whereas other business departments all passed certification for ISO 9001:2015, the latest international quality management system standards, in 2020. At Kaori, we make persistent improvements to provide customers with the best quality and most trusted products and services. Kaori remains committed to its customer-centric service philosophy and refrains from all actions that compromise product quality or endanger customers' safety. By making quality a part of our corporate culture and employees' conviction, we strive to become customers' trusted partner and work with customers and suppliers toward sustainability. The Company encountered no product recalls due to safety concerns or otherwise in 2022 and suffered no financial losses from lawsuits concerning product safety.

Quality Policy



Quality excellence at reduced costs.



Timely delivery and satisfied customers.

The Ultimate Guiding Principles on Quality

- Offer safe and reliable products and services in conformity with customers' needs and the requirements of applicable laws.
- Establish preventive controls from a risk perspective to minimize adverse impacts.
- Adopt a process-oriented approach toward improving the effectiveness and efficiency of processes across departments.

Quality Management Procedures

To ensure the quality of products and services offered, Kaori adopts the process-oriented approach of the International Organization for Standardization (ISO) as a way to improve the quality performance of various departments. By implementing the Plan, Do, Check, and Act (PDCA) cycle and setting improvement targets, the Company continues to optimize its processes and enforce preventive control with a risk focus.

- Process-oriented approach:
From order taking, production, inspection to shipment, Kaori applies standardized procedures and persistently delivers products and services to customers' satisfaction.
- PDCA:
Ensure that every process is supported with adequate resources and is properly managed and improved upon on an ongoing basis.
- Risk perspective:
Adapt to changes in the internal and external environments, minimize probability of decision errors, and prevent possible losses; aim for total anticipation of opportunities and risks, and perform effective damage control after the occurrence of risk events for business continuity.

Promotion of Quality Awareness

Quality awareness is defined as how the employees, leaders, and managers of a business perceive and act in relation to the quality of their offerings. It is a common language that employees use to communicate in daily work activities, a value that inspires our behavior to the outside world, and a standard by which we measure our performance. By changing how employees perceive the work they do from within, we help them develop proper habits, which in turn contributes to the further strengthening of the quality culture.

Quality is key to the continuity of a business. It requires contribution from all employees and takes persistence in making improvements in order to satisfy customers' needs and accomplish corporate targets. There are also many aspects to quality, and under-performance in any aspect will compromise customer satisfaction and threaten business survival.

The Company holds the conviction that workforce competence is critical to the quality of products and services offered. Through education and training, the Company aims to develop strong quality awareness and consistent quality goals across employees. Kaori organizes a variety of training courses to improve the quality of products and services provided; progress for 2022 is summarized below:


- 100% of new recruits passed general knowledge training
- 100% of employees completed training for ISO 9001, AS 9100, and ISO 14001 quality systems
- 100% of employees completed specialist training; training courses were organized to educate employees on instrument calibration, ionizing radiation protection, legal requirements, etc., and to qualify those that require professional certification.

Quality Assurance

To bring traceability into the products manufactured, Kaori has adopted an enterprise resource planning (ERP) system and a manufacturing execution system (MES) that digitally integrate all processes from material purchase, storage, production, and quality management to financial management. These systems record the details of every production stage and ensure that accurate data can be generated quickly to support Kaori's commitment to quality assurance.

Site Management

- Safety management
 1. Zero hazard activities: safety rules, safety education, and safety inspection standards have been outlined.
 2. 5S management:

				
SEIRI	SEITON	SEISO	SEIKETSU	SHITSUKE
Separate useful items from useless items, and dispose of useless items.	Place useful items neatly and in the appropriate quantity, and label clearly.	Clean the workplace and prevent pollution.	Implement standards and rules for the 3S above, and enforce accordingly to deliver results.	All members of the organization shall follow rules and develop proper habits.

- Preamble
- 1 Sustainability and development
- 2 Honor and integrity
- 3 Innovation and quality
- 4 Responsibility and care
- 5 Environmental protection and inclusion

- Operations management
 1. Standardized operations: standard operating procedures.
 2. Skill training: skill training and evaluation; skill evaluation standards, skill development program, and skill training standards.
 3. Improvements: A suggestion system has been implemented to encourage improvement plans for accomplishing business goals.
- Quality management
 1. Management during normal circumstances: Quality assurance standards have been implemented for operational staff and managers.
 2. Responses in the event of abnormal occurrences (whether discovered internally or externally): The Company has standard responses in place to respond to abnormal occurrences of which all employees have been made aware.
- Equipment management

Total productive maintenance (TPM): includes equipment inspection standards, inspection charts, inspection cycles, responses to equipment malfunction, and training materials for operators (work commencement checks, inspection standards, training data, etc.).

On-Site Education and Training

- On-site education: Kaori highlights and discusses abnormal issues in daily morning meetings and takes improvement measures and follows up on progress afterwards
- Special-purpose training: abnormal occurrences are analyzed and shared internally as case studies
- Specialist training: instrument calibration, internal audit, pre-brazing preparations, post-brazing test, incoming quality control (IQC), final quality control (FQC), etc.



 Quality Improvement Highlights for 2022

Kaori encourages all employees to participate in making persistent improvements and promotes quality awareness as a way to unite and motivate employees. An incentive program called “Quality Improvement Proposal” has been implemented to guide and encourage employees toward innovative thinking. The program invites all employees to contribute new ideas on ways to improve quality and business management, whether in terms of processes, products, or the organization, so that the organization can strive toward excellence and ensure continuity. A total of 28 improvements were proposed in 2022.

Plate Heat Exchanger Business

1. Document digitalization toward the paperless goal

As the businesses grow, the organization finds itself having to handle increasing volumes of trade documents and internal correspondence, which has led to nuisances such as delays in interdepartmental sign-off and business trip approval, build-up of physical documents, time-consuming searching during retrieval, and so on, thereby making document management a pressing matter across all departments. This was why the Plate Heat Exchanger Business made the first attempt to adopt digitalized management of documents, correspondence, and files, and took steps toward accomplishing the paperless goal.

2. Persistent improvement to production procedures and lowering costs

For small, standardized products, Kaori introduced new production procedures that eliminate the need for screws after the products have been pressurized in the vacuum furnace. This reduces the weight load and space previously taken up by screw molds, thereby allowing more products to be put into the furnace at one time, shortening the operating hours of the vacuum furnace, reducing costs, and increasing production capacity.

Fuel Cell Business

Ceramic fiber paper cutter 3.0: a show of insistence on improvements and quality production

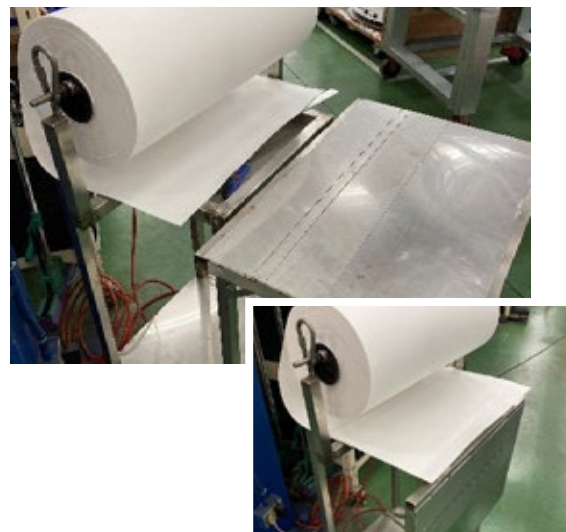
Before improvement

When cutting ceramic fiber paper, it was difficult to keep the roll and the work bench still and aligned throughout the process, and workers were at risk of cutting fingers



After improvement

1. Adopted a foldable workbench design to save space
2. The new workbench has a groove, and workers can simply slide the blade along the groove to cut the material
3. The length of the cut stays consistent



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