

Ensuring Thorough Management of Quality and Safety

Hitachi's Approach

Meeting the quality standards our customers expect and providing products and services they can use with confidence are the management themes cited at the beginning of the Hitachi Group Codes of Conduct that each employee is expected to fulfill as a promise to society. We are establishing thorough quality assurance measures from the design and production stages through after-sales service, as well as working to ensure a quick response and proper information disclosure in the event a problem emerges. In addition, as production and other operations increasingly take place outside of Japan, we are giving importance to quality assurance in our global human resource development activities, and we are working to expand our current programs.

These efforts are important in enabling Hitachi to grow together with society. They must also be actively and comprehensively pursued in the light of the impact of our products and services on society in case of an emergency. Hitachi not only complies with laws and regulations and adheres to accepted standards but also formulates and abides by stringent Group-wide criteria in response to economic, social, and technological demands.

Quality Assurance Activities

About Our Activities

Based on the Corporate Credo of contributing to society through the development of superior, original technology and products, Hitachi is engaged in the *monozukuri* craftsmanship with quality and reliability as top priority. An integral aspect of this is *ochibo hiroi*, Hitachi's traditional approach meaning "gleaning" in English, through which we learn from failure and further develop our technologies. In practice, when an accident occurs, we not only investigate the technical cause of the accident but also have an executive officer in charge and relevant staff members thoroughly discuss the process, framework, and psychological factors of the incident in order to improve our product reliability and customer satisfaction. To ensure that quality and reliability are maintained, we enhance our quality assurance activities from the perspectives of organization and management, technology, and human resources in every process—from planning and development to design, manufacturing, delivery, and maintenance.

From fiscal 2010 to 2015 we promoted Group-wide measures to ensure product safety, compliance with laws and regulations, human resource development, and quality improvements. To realize our fiscal 2018 Mid-term Management Plan, from fiscal 2016 onward we are steadily working to improve the quality of services and the reliability of our products for quality, as well as to promote the reduction of loss costs with better quality management.

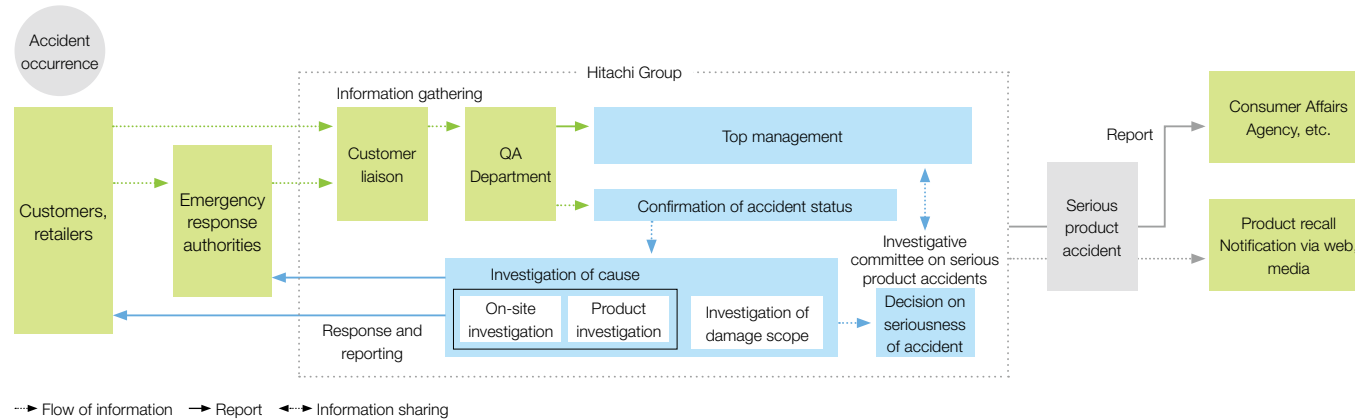
▶ Intensive Risk Assessment

Hitachi is committed to the delivery of safe products and services by combining expertise and technologies in such varied areas as planning, research, design, manufacturing, quality assurance, and maintenance. The safety of our customers' life, health, and property is the top priority in product development. Therefore, we verify safety at every step, from development and production to sales and maintenance, and conduct risk assessments from a wide perspective in collaboration with related business units and research laboratories. In responding to these risks, we apply the safety principles of ISO/IEC Guide 51 in accordance with the product safety handbook for business operators published by Japan's Ministry of Economy, Trade, and Industry, ensuring safety by means of the mitigation measures of risk reduction through design (fundamental safety design), risk reduction through protective measures (safeguards), and risk reduction through usage information (product manuals), in order of priority.

▶ Complying with Technical Laws

To supply our customers with products that they can use with confidence, we comply with all product safety and technical laws, including those covering environmental consciousness and safety labels. We distribute information on product regulations worldwide, along with amendment trends and enforcement dates, among Hitachi Group companies. We have also created guidelines for assessment of technical laws and quality assurance systems, sharing them throughout the Group. The guidelines focus on clarifying product-specific laws

Response Flow in the Event of Product Accident



(the product-specific laws map); on regulatory compliance activities and continuous improvement of processes, based on our compliance management system; and on compliance education, as well as raising compliance awareness.

Handling Product Accidents

When a product accident occurs, the division responsible acts swiftly to resolve the problem from the customer's perspective. For an especially severe accident, we report to government agencies in line with legal requirements and publish the incident information on our website and through other channels. At the same time, we promptly submit a status report to top management, ensuring fast and appropriate action at all companies across the Group.

Quality and Reliability Education

We conduct technical lectures for engineers engaged in *monozukuri* craftsmanship at a range of levels from beginner

to expert. Hitachi's distinct approach to *monozukuri*, including our Founding Spirit and lessons learned from past accidents, is a core part of our identity, and as part of our efforts to ensure that it is practiced throughout the Group, in November 2014 we initiated training on reliability improvement to foster instructors. To date, we have trained over 200 instructors who are passing on Hitachi's *monozukuri* to the next generation of engineers.

Each business unit also conducts specialized technical courses regarding manufacturing, quality assurance, and maintenance at their quality assurance training centers.

Ensuring Home Appliance Safety

We are reducing consumer appliance accidents to near zero levels in line with Hitachi's Customer Satisfaction Management Guidelines, which set avoidance of all accidents as the baseline. To this end, we conduct product safety risk assessment as well as testing worst-case scenarios—for example, deliberately setting a fire inside a product to confirm that the fire will

not spread outside it. Furthermore, along with each product's full manual, we include a quick start guide summarizing key features and operations, and make step-by-step how-to videos available on our corporate website as well.

Additionally, to improve sharing of on-site investigative procedures and ensure the safety of the customers who use our products, we are enhancing our efforts to communicate on risk factors with the relevant emergency response authorities. From July 2011 to the end of fiscal 2016, we held 17 briefings at fire departments around the country, sharing information on investigative procedures for fire sites and explaining the measures taken to ensure the safety of new products. These endeavors saw Hitachi Appliances awarded a letter of recognition by the Fukuoka City Fire Department for the contribution our staff have made toward increased fire safety awareness and our advocacy work on public fire prevention policies.

We will continue to make all our consumer appliances even safer, using our own voluntary action plan for product safety, so that customers can use our products with confidence.

Training Global QA Personnel in Asia

As local production has been growing in Asia, we are carrying out training to ensure that products from the region meet Hitachi's global quality standards. For example, we host conferences for QA managers in China and Thailand, where we have a large number of manufacturing sites, to raise quality awareness with regard to Hitachi's *monozukuri* craftsmanship and to share information and best practices.

Additionally, to help employees in quality assurance become global players and improve their level of quality management, we provide three levels of training courses in Beijing, Shanghai, and Guangzhou in China and in Bangkok, Thailand: the Basic

Reliability Course,*1 Intermediate Reliability Course,*2 and Advanced Reliability Course. In the Advanced Reliability Course, managers and senior managers hold group discussions on past product accidents to investigate the causes, including process-related, organizational, and psychological factors, and these discussions help them enhance their ability to identify issues and craft solutions.

*1 Basic Reliability Course: Deepens understanding of Hitachi's *monozukuri* craftsmanship, quality management, and labor safety.

*2 Intermediate Reliability Course: Improves understanding of more practical issues, including Hitachi's *monozukuri* craftsmanship, ISO 9001 certification, defect elimination, design for reliability, and purchase management.

Rigorous Information Management

Communicating with Customers on the Web and Social Media

Hitachi places great importance on digital tools, including our corporate website and social media, for promoting our activities and deepening customer understanding as part of developing our Social Innovation Business globally. Effective risk management is required when using these digital tools on online platforms to protect our brand and avoid violating the rights of others, including human rights. To this end, we have established the Hitachi Disclosure Policy, the Global Information Security Administration Rules, and the Social Media Communication Guidelines as guidance instruments, sharing them with Group companies worldwide.

Also, Hi-CRM, Hitachi's customer relations management system, has been applied to 189 Group companies to collect and accurately manage customer information Group-wide, in addition to serving as a marketing tool. Hi-CRM covers more

than 80% of the orders received across the whole Group, with the database enabling us to formulate more effective sales strategies and offer collaborative solutions by multiple businesses. We are currently considering rolling out the system more aggressively across the Group.

Protecting Personal Information

We established a personal information protection management system based on our Personal Information Protection Policy. Through the rollout of this system, as well as the safe handling of personal information, e-learning programs for all employees, and periodic audits, we are ensuring protection of personal information throughout the company.

We are also establishing a management system and defining internal regulations in line with legal requirements to appropriately manage information related to Japan's My Number taxpayer identification system, which the government introduced in January 2016.

During fiscal 2016, no grievances concerning breach of customer privacy or loss of data were recorded in the system that aggregates all such reports from Group companies.

▶ Privacy Mark*1 Certification

Hitachi, Ltd. first received Privacy Mark certification in March 2007. We have maintained the high level of privacy protection needed to renew this certification five subsequent times, most recently in March 2017.

The entire Hitachi Group is committed to personal information protection, with 47 Hitachi Group companies  in Japan having received the Privacy Mark as of May 2017. In July 2009, the Corporate Hospital Group in Japan also gained Privacy Mark certification. This group is working hard to protect and carefully

handle the personal information of its patients and others.

Hitachi also strives to safeguard personal information globally at Group companies outside Japan based on the Personal Information Protection Policy and by complying with all applicable laws and regulations as well as the expectations of society at large.

Hitachi experienced two known leaks of personal information during fiscal 2016.

*1 Privacy Mark: A third-party certification established in April 1998 that is granted by the assessment body Japan Information Processing Development Corporation to businesses that have taken appropriate security management and protection measures related to personal information.



Personal Information Protection Policy

