

Quality and Reliability

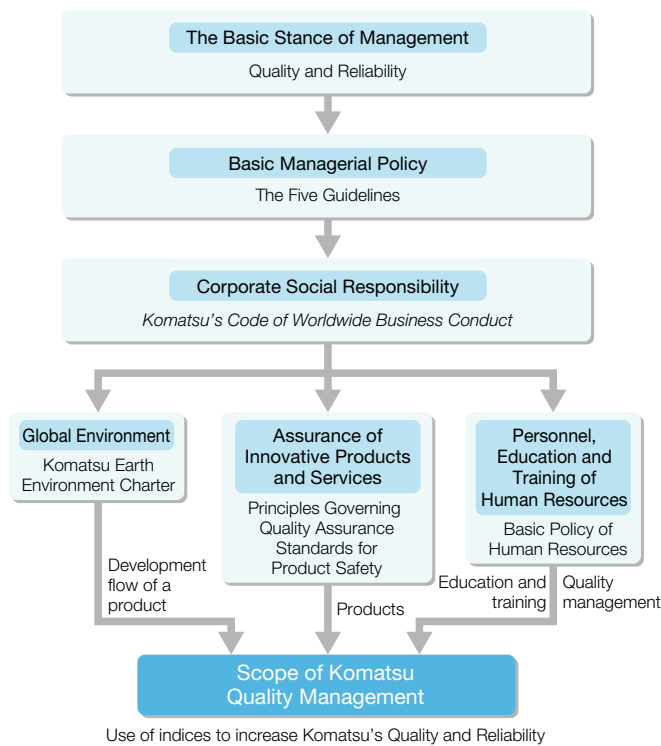
To pursue Quality and Reliability, Komatsu has established a system for providing high-quality products and services that are innovative and safe, taking to heart the opinions of customers.

Fundamental Approach to Pursuing Quality Management

The fundamental principle of *Monozukuri* (manufacturing) lies in Komatsu's commitment to Quality and Reliability in order to provide products—both hardware and software—that customers are happy to own (see P. 30).

To achieve this, Komatsu puts the customer first as one of its Basic Managerial Policies, with the pursuit of maximum customer satisfaction at the foundation. The company carries out a continuous process of reform and refinement with all divisions responsible for putting this policy into practice, whether in development, manufacturing, sales, after-sales service, or management.

Scope of Komatsu Quality Management



In practical implications, Komatsu considers the scope of its quality management as indicated in the chart on the left and uses indices to promote such management.

Komatsu's Principles Governing Quality Assurance

Komatsu has established the following principles on quality in its products and services, which all subsidiaries and employees are responsible for putting into practice.

Principles that Increase Quality and Reliability

Provide products, services, and systems that are environment-friendly, safe, and innovative from the perspective of the customer.

Definition of Quality Assurance

The company has a responsibility to take actions that will ensure it is able to provide products and services that the customer can purchase and use with a sense of assurance and satisfaction and use for many years to come.

Principles Governing Quality Assurance

- (1) Putting customers first, being receptive to the views of the customer, and responding appropriately to the customer, thereby earning the customer's satisfaction, are fundamental to the job of every employee and constitute the responsibility of every employee.
- (2) Complying with international standards and the legal requirements particular to individual countries as a matter of course, and providing products and services that, from the perspective of the customer, have incorporated proper regard for safety and a sense of assurance and that do not easily malfunction, are fundamental to the job of every employee and constitute the responsibility of every employee.
- (3) Providing products and services that incorporate proper regard for global environmental conservation is fundamental to the job of every employee and constitute the responsibility of every employee.
- (4) Providing products and services that are creative and provide benefits to the customer is fundamental to the job of every employee and constitute the responsibility of every employee.
- (5) Giving the customer a sense of safety, assurance, satisfaction, and the ability to use the product for many years to come is a source of happiness for every employee.

Mechanisms for Quality Assurance

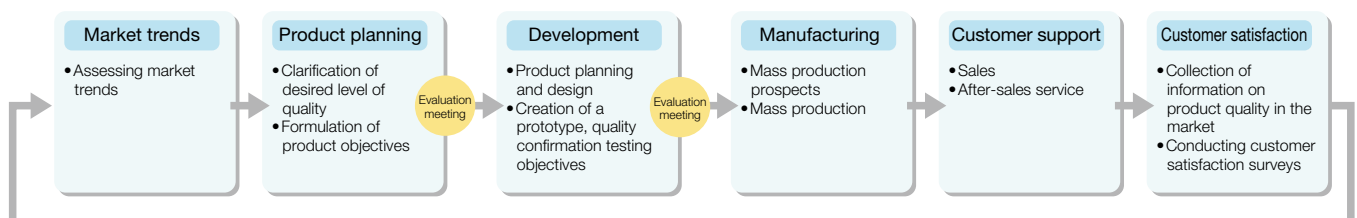
At Komatsu, all employees in each division, from product planning to development, production, sales, and after-sales service, share a sense of working as a single unit to manufacture products that are safe, innovative, and of high quality. Through a strengthening of Komatsu's unique *Monozukuri* system, the company is able to introduce competitive DANTOTSU products to the market and provide services and systems with substantial features.

At each step of the development and production system, meetings are held to consider and evaluate the product. Activities are then

launched to have the product's suitability assessed and enhanced until the ultimate goal is attained. In this way, the company conducts quality assurance activities that firmly ensure Quality and Reliability.

Through such activities the company is able to strengthen safety assurance and satisfaction for its customers while simultaneously providing products and services that take the global environment into account and comply with both international specifications and the regulatory requirements of individual countries.

Komatsu's Mechanisms for Quality Assurance



Structure for Quality Assurance

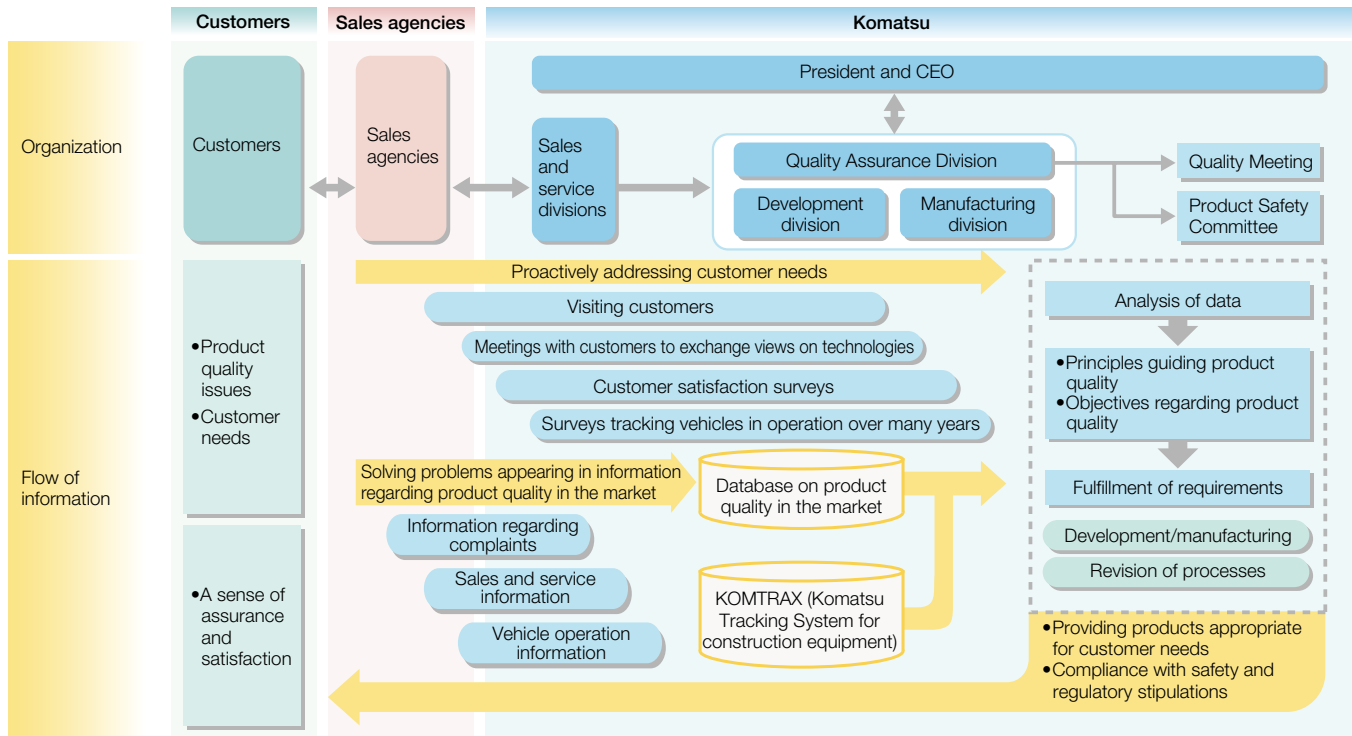
The majority of Komatsu's products—construction and mining equipment, presses, and forklifts—are used as manufacturing equipment at customers' sites of operation. These products are expected to contribute to customers through a higher rate of utilization and productivity over long hours every day.

In reflection of these product characteristics, sales and service staff at Komatsu visit customers to give detailed recommendations

on products and their usage and conduct maintenance activities. They then provide feedback to relevant divisions regarding customers' views and requirements for products. The company has created a system to increase customer satisfaction through rapid responses to such information (see chart below).

Moreover, Komatsu maintains a database on product quality so that the company can respond rapidly upon discovering a quality-related problem and have all the company's sales and service divisions able to access the information they need to help remedy the issue.

Komatsu's Structure for Quality Assurance



Increasing the Degree of Customer Satisfaction

Based on its Principles Governing Quality Assurance, Komatsu has piloted a variety of initiatives to increase customer satisfaction.

First, Komatsu believes it is extremely important to give serious consideration to customers' views and examine them on a continuous basis. Consequently the company conducts regular customer satisfaction surveys, including post-launch field surveys. Komatsu uses the results to improve both the products themselves and the structure promoting quality assurance. The surveys help furnish new value to customers as the company develops DANTOTSU products that anticipate customer needs in advance and delivers services with distinct features.

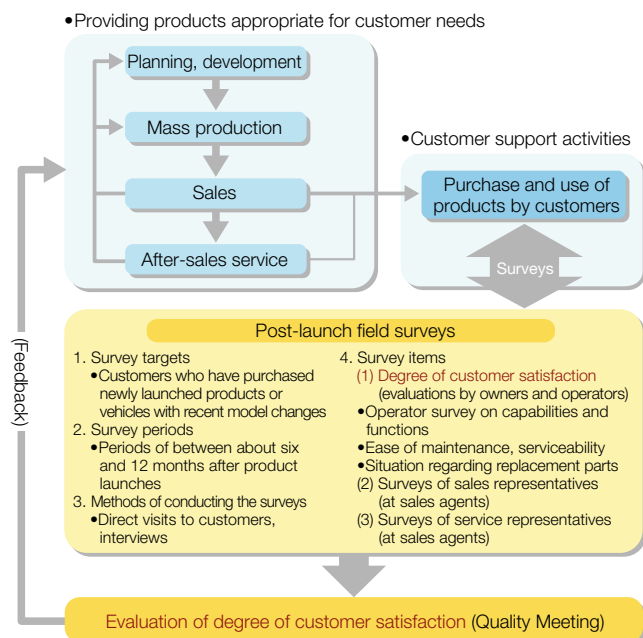
Komatsu is able to raise the level of customer satisfaction through these approaches.

Post-launch Field Surveys and Feedback of Results

As a part of its system for comprehensively assessing customers' degree of satisfaction, Komatsu is moving forward with a post-launch field survey. Company personnel visit customers who have purchased newly launched products and request that they evaluate them.

In concrete terms, these personnel listen to customers' feedback on a day-to-day basis regarding the degree of satisfaction towards the quality and reliability of its products. The company pays care-

System for Ascertaining the Degree of Customer Satisfaction



ful attention to the evaluations, views, and requests concerning its sales and after-sales service and replacement parts. Komatsu processes and analyzes the gathered data to decide upon objectives for improvement.

The resulting information is shared across the company, notably with top management, and provided as feedback to divisions at every step in the process, including development, manufacturing, and sales and after-sales service. With the means to improve upon problems and revise the quality assurance system, the company can deliver products and services that satisfy customers.

Surveys Tracking Vehicles in Operation for Extended Hours*

Komatsu pursues improvements in product durability and reliability through a system of surveys tracking vehicles in operation for extended hours. This allows the company to provide products satisfying the customer and consuming fewer resources.

Komatsu personnel conduct an observational study to investigate in durability, reliability, economic efficiency, capability, and functionality by physically breaking down vehicles that have been in operation for extended hours at customers' worksites. The company assesses whether or not the results satisfy customers' expectations and the degree to which their demands match product quality objectives at Komatsu. The company designs plans to rectify areas not meeting Komatsu's quality standards, later integrating these proposals into product revisions or the development of new products. This process increases product durability and reliability and thus extends product lifecycles, leading to greater customer satisfaction and less resource consumption and waste.

*Defined as vehicles with an operating history of 5,000 hours or more

Using IT to Support Customers throughout the Product Life Cycle

Komatsu uses IT-based remote vehicle management systems known as the Komatsu Tracking System (KOMTRAX) for conventional construction equipment and the Vehicle Health Monitoring System (VHMS) for large mining equipment to indicate the current state of the vehicle's "health," its operating status, and other key information. Using this information to improve vehicle quality or assess customer needs for after-sales services, Komatsu provides customers support throughout the product lifecycle by increasing vehicles' rates of operation while decreasing their maintenance costs.

Quality Assurance Activities at the Global Level

Komatsu provides products of universal quality at every location throughout the world by fully implementing quality assurance activities globally. For this purpose, the company aims for uniform technical drawings, manufacturing systems, inspection methods, information collection, and quality management.

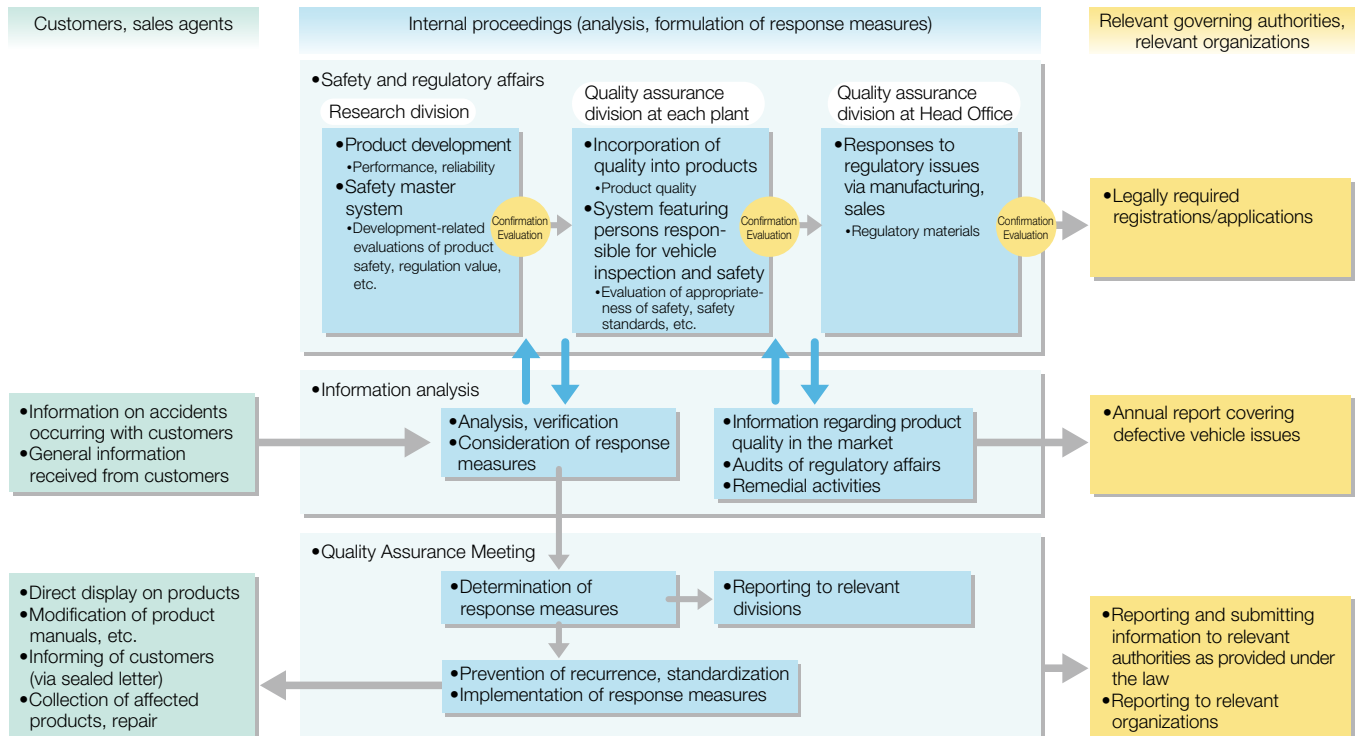
Komatsu labels as "mother plants" certain global manufacturing locations with product development capabilities. These plants serve at the center of global development and manufacturing activities, with their leading-edge technologies and techniques then transferred to other manufacturing locations around the world. This improves technology and enhances product quality, making them uniform around the globe.

Promoting Product Safety to Ensure Customer Safety and Assurance

Komatsu puts safety and assurance at the forefront in its quality assurance activities so that customers can use the company's products safely and with a sense of assurance. Komatsu has formulated

Standards for Product Safety and associated Principles and has all employees comply with them in order to deliver products that are safe, provide a sense of assurance, and can be used for many years.

The Komatsu Information System for Product Safety



Information System for Product Safety and Services

In seeking to get information on problems with product safety as early as possible, Komatsu has established an information system for product safety and promptly deals with issues. It continuously strives to make improvements so that the company, including top management, can respond quickly through coordinated actions, including (1) assessments of the cause of the incident and procedures to be taken, (2) contacting the relevant governing authorities, (3) deciding to take remedial measures such as conducting a recall of products still on the market.

Principles Governing Quality Assurance (Regarding product safety)

Complying with international standards and the legal requirements particular to individual countries as a matter of course, and providing products and services that, from the perspective of the customer, have incorporated proper regard for safety and a sense of assurance and that do not easily malfunction, are fundamental to the job of every employee and constitute the responsibility of every employee.

Standards for Product Safety

(1) Compliance

The provision of products and services that comply with international standards and the legal requirements particular to individual countries is fundamental to the job of every employee and constitutes the responsibility of every employee.

(2) Safety via prevention

The provision of products and services that are safe and provide a sense of assurance, and do no harm to the customer is fundamental to the job of every employee and constitutes the responsibility of every employee.

(3) Security regarding accidents

The provision of products and services that minimize any injury that might occur to a customer who has an accident is fundamental to the job of every employee and constitutes the responsibility of every employee.

(4) Transparency

The ongoing provision of advance safety warnings after receiving information from the customer and, in the case of a defect arising in a product or service, prompt response measures and the provision of information, are fundamental to the job of every employee and constitute the responsibility of every employee.

(5) Improvement of organizational climate

In order to create a corporate climate in which product safety is emphasized, the standardization of the safety management system and safety techniques as well as ongoing efforts to improve them are at all times fundamental to the job of every employee and constitute the responsibility of every employee.

■ Providing Product Safety Information to Customers

Komatsu meets all legal requirements for providing safety information directly on products or in user's manuals. The company supplements this by providing product safety information to customers, mainly using the methods listed below. The company seeks to address each particular situation, with, for example, engineers or top management visiting customers as the situation might require.

Methods for Provision of Product Safety Information to Customers

- (1) Direct indication on the product itself or in the user's manual
- (2) Direct explanations to customers by Komatsu sales and service employees and sales and service employees of sales agencies
- (3) Telephone consultations with the service division of each plant and the customer service representatives in quality assurance divisions

System for Dealing with Recalls

Customers have become more concerned about product safety in general and product recalls in particular. In response, Komatsu is reinforcing its organizational strength and its ability to generate comprehensive and rapid responses for ensuring safety in the marketplace.

Procedure Governing Recalls

- (1) Proposal for rectification of the situation based on information regarding the defect; decision regarding what measures the company will take towards the market
- (2) File notice with relevant authorities as provided under the law
- (3) Inform customers by appropriate means
- (4) Take appropriate corrective measures, including, for example, repair, replacement, or refund

Means for Preventing Recalls

- (1) Strengthening of system for collecting information on product quality in the market
- (2) Promotion of technical verification of the problem involved in the recall and timely decision-making
- (3) Strengthening of check system that features persons responsible for vehicle inspection and safety
- (4) Regular auditing of recall-related operations

■ Number of Incidents with Recall Notices Filed

Komatsu strictly oversees compliance with legal requirements. Should a defect somehow be found in its products or services, the company initiates rapid correction measures and moves forward with proactive information disclosure.

The number of incidents for construction equipment sold in Japan in which recall notices were filed (see graph below) shows an increase in FY2005, when Komatsu thoroughly investigated product quality information from the previous five years and decided voluntarily to file notices and take remedial action for ensuring the safety of vehicles for transporting goods by road. The company will continue to pursue safety to the greatest extent possible in the years to come.

Number of Incidents with Recall Notices Filed (for construction equipment sold in Japan)

