



Quality Is the Lifeline of Toyota Industries

Maintaining and Enhancing Quality Is Our Most Important Responsibility to the Customer ▶Chart 1

Quality Is a Key Management Issue

Toyota Industries' founder Sakichi Toyoda once said that "A product should never be sold until it has been carefully manufactured and tested thoroughly and satisfactorily". Adhering faithfully to his teachings, Toyota Industries believes quality is our lifeline and a key management issue.

Maintaining and enhancing quality is our most important responsibility to our customers, and forms the basis of our social responsibilities.

Toyota Industries' Approach to Quality

All Toyota Industries employees are engaged in comprehensive corporate activities aimed at maintaining and enhancing "quality" in its broadest sense. The basis of our activities is "product quality", as embodied in product durability, reliability, safety and eco-friendliness, but we also adhere to "marketing quality", in sales and service, and "total quality," in corporate image and brand.

The following diagram depicts this approach. We believe that it is an important responsibility of all employees to participate in creating levels of "quality" that meet the expectations of our customers.

Chart 1 Types of Quality Sought by Toyota Industries



Providing Even Better Products

Develop and provide products from the customer's viewpoint. This summarizes Toyota Industries' comprehensive "market-in" approach.

In manufacturing, Toyota Industries devotes enormous efforts to research and development of new functions and other features, endeavoring to develop products that are always ahead of the times. It also uses a design reviews (DR) system to evaluate product planning based on customer needs and to ensure product reliability and post-sales customer satisfaction.

In the area of sales and service, everything possible is done to ensure that at all times, customers can use our products in excellent condition and free of material defects. Distributors and dealers work together to optimize their response to customers while Toyota Industries has established customer consultation desks that enable it to interface with customers directly. The company also carries out questionnaires in relation to products and visits customers to conduct fact-finding surveys of actual usage.

As a result of these activities, we are able to provide even better products that meet our customers' expectations.

Working to Improve "Marketing Quality"

To ensure that customers can use our products with confidence at all times, it is very important to maintain and improve "marketing quality" by strengthening the capabilities of distributors and dealers that directly respond to customers. The company actively provides dealers in Japan and overseas distributors with support in reinforcing management practices, developing staff and securing the next generation of human resources.

In addition to dealers in Japan, Toyota Industries has also established distributors overseas to strengthen dealerships in key regions such as North America, Europe, Australia and Asia.

Case Study Dealer Survey of Satisfaction Levels

— BT Europe [Sweden]

BT Industries manufactures and sells warehouse trucks and other equipment. Since 2000, the Product Support Department of BT Europe, European operational business of BT Industries, has conducted annual satisfaction surveys of BT Europe's dealerships to ascertain whether they believe sales support and product information from the head office are adequate.

By the time of the 2005 survey, the nine questions included in the first survey conducted in 2000 had increased to 60 questions in 17 areas, including support for marketing and sales, and service training. Dealers were asked to rate each item according to one of four rankings. The results of these surveys are sent to individual dealers and are also reflected in BT Europe's action plan and announced at a meeting with dealers held every October.

Quality Is the Lifeline of Toyota Industries

System of Quality Assurance and Quality Control Day-To-Day Control ▶Chart 2

In all processes, predetermined procedures must be carried out according to instructions to ensure no defective items proceed to the next stage. This is vital for ensuring that the company only manufactures high quality products. Adopting a “market-in” approach, Toyota Industries’ business divisions develop new products based on customer needs. As mentioned above, the integrity of the overall system is assured through a design review (DR) system to assess quality, whereby general managers of divisions inspect every step of the production process, from product planning and design to production preparations, production, initial quality and customer satisfaction levels. This ensures that no product progresses to the next stage of the production process unless established target levels have been achieved.

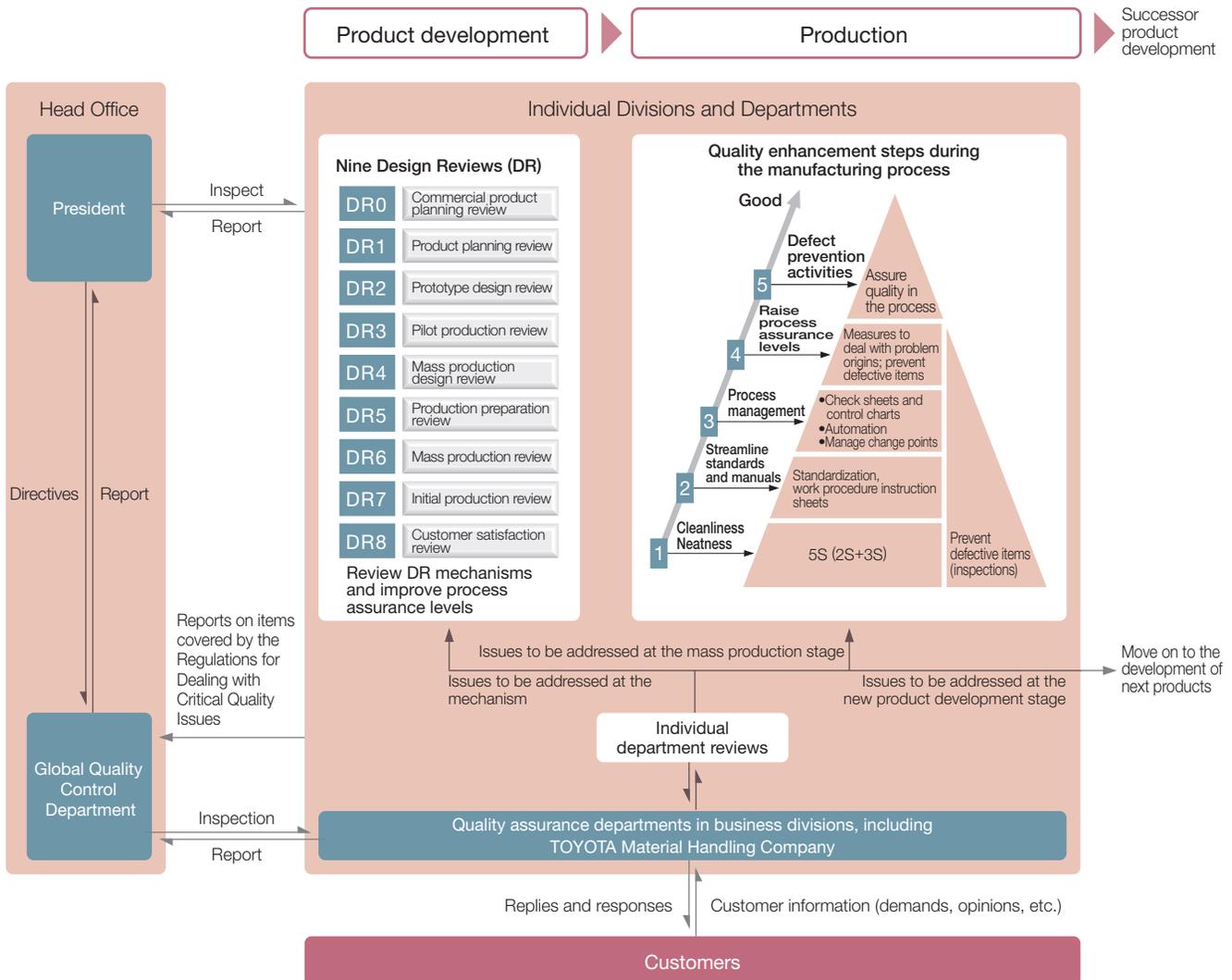
Once new products are launched and important customer information

reaches the quality assurance department of each division, it is fed back to the responsible department (such as design and manufacturing) and countermeasures are quickly developed. At the same time, the DR system is reviewed to prevent a recurrence in subsequent models.

While everything is done in the production process to prevent defective products proceeding to the next stage of the production process or leaving the factory, we also proactively tackle quality improvements on five levels, including cleanliness and neatness.

All businesses have taken a positive approach to ensure they comply with requirements of ISO9001 and TS16949 (an ISO technical specification for the automotive industry), which are international standards for quality management systems. In particular, Toyota Industries’ vehicle division has achieved ISO9001 certification and is now engaged in independent efforts aimed at establishing even higher quality assurance levels. It is also encouraging its main affiliates in Japan and overseas to achieve certification.

Chart 2 System of Quality Assurance and Quality Control



Quality Assurance of Supply Chain throughout the World

As a company that supplies products to the global market, the reliability in quality levels is synonymous with the Toyota Industries brand, and is considered to be a precious element of our corporate value that must be preserved. We therefore aim to implement quality assurance activities that cover our entire global supply chain, including affiliates and business partners in Japan and overseas.

Dealing with Critical Quality Issues

In cases where serious quality issues arises, such as “accidents due to quality that result in personal injury, or property damage”, the Quality Assurance Department of the responsible division must, in accordance with our Rules for Dealing with Critical Quality Issues, minimize trouble to customers by promptly devising countermeasures, while at the same time report the issue to the Global Quality Control Department at the Corporate Center using the “Critical Quality Issues Notification Form”. The details on the form are then reported to the President through the Director responsible for quality. This mechanism is also incorporated into our internal reporting system used for collecting information pertaining to compliance, and functions in conjunction with that system.

For critical quality issues that require recalls, the company is considering setting up Recall Preparation Conferences within divisions to devise countermeasures. After the Global Quality Control Department reports to the President via the Director responsible for quality, the President submits an application form to the relevant regulatory authority if required. The company also informs customers by direct mail, and carries out repairs and other measures free of charge as soon as possible. After confirming the actual progress of the recall, the President then submits a recall report and an implementation report to the relevant regulatory authority. The Audit Office at the Corporate Center also monitors whether these integrated mechanisms for dealing with market quality issues are functioning properly.

Quality Guidelines

The Global Quality Control Department at Toyota Industries’ Corporate Center periodically audits the quality assurance departments of divisions, and collects information relating to the critical quality issues referred to above, and reports the results to the President. Bearing these results in mind, once a year the President issues the President’s Guidelines (Quality Guidelines) to the entire company. The President himself confirms the implementation of the Guidelines through two special shop quality inspections held at all plants each year, and reflects the results in the President’s Guidelines for the coming fiscal year.

Initiatives during FY 2005 and Future Policies

▶Table 1

Focus on Preventing Product Defects

The slogan adopted for the FY 2005 Quality Guidelines was “Customer First” with the established aim of achieving “Zero Defects”. The company adopted two approaches based on these Guidelines – “Build quality into the original stages of design and production engineering”, and “Build quality into processes at individual manufacturing stages”.

Under the “Build quality into the original stages of design and production engineering” approach, the company used FMEA* for activities at the new product design stage to prevent the recurrence of problems that had arisen in the past, and problems that could be expected to occur from past experience. The company is now deploying this production technology methodology and is looking to adopt FMEA for the production planning stage.

Under the “Build quality into processes at individual manufacturing stages” approach, the company is working to increase the quality assurance levels of individual processes through measures to deal with problem origins and prevent the emergence of defective items.

As a result of these endeavors, claims arising in connection with newly launched products have fallen substantially. Toyota Industries will continue to utilize these measures to strengthen its quality assurance efforts. In addition to reinforcing the guidelines adopted in FY 2005 – “Customer First” and “Zero Defects” – the FY 2006 Quality Guidelines call for the “Creation of a Workplace that Continually Pursues Quality-first”. In doing so we must focus on fundamental quality principles and aspire to achieve higher quality awareness throughout the organization and among our personnel.

* FMEA (Failure Mode and Effect Analysis)

Table 1 Quality Guidelines for the Past Three Years

FY 2004	FY 2005	FY 2006
<ul style="list-style-type: none"> • Decide and Follow Through • Response to Change • Eliminate Repeated Defects 	<ul style="list-style-type: none"> • Customer First • Zero Defects 	<ul style="list-style-type: none"> • Customer First • Zero Defects • Creation of a Workplace that Continually Pursues Quality-first

Realizing the Creation of a Workplace that Continually Pursues Quality-First

The new slogan added for the FY 2006 Quality Guidelines – Creation of a Workplace that Continually Pursues Quality-first – is intended to encourage all employees involved in manufacturing to insist on rigorous quality standards established from the viewpoint of the customer. This approach is essential for ensuring quality and developing human resources at overseas production sites at a time when overseas production is expanding.

Quality Is the Lifeline of Toyota Industries

Raising quality awareness among workers is also indispensable as facilities become more sophisticated and the number of temporary workers is increasing, especially in terms of building in quality at production sites. Toyota Industries is striving to enhance quality even further by developing systems and strong human resources that can respond to changes in the various environmental conditions facing manufacturing, such as utilizing QC circles in which all employees participate.

Achieving Higher Quality throughout the Supply Chain

In FY 2005, the headquarters Global Quality Control Department played a central role in identifying the inspection situation (market claims, etc.) at subsidiaries in Japan and abroad. It also followed up on the quality guidelines of key individual business partners in Japan. Additionally, Toyota Industries jointly held a quality meeting with the BT Industries Group (see Topics below), and was involved in on-the-spot surveys of QC circle activities at two affiliates in North America and in providing support measures.

It has also conducted two-day internal/external education programs on quality on seven occasions to date. Quality training has been conducted for 450 employees responsible for quality education at internal production departments, quality managers at domestic affiliates and management and quality managers of business partners.

Case Study The "Proposals for Customer" System

— Toyota L&F Keiji [Japan]

Toyota L&F Keiji Co., Ltd. is involved in the sale and service of industrial vehicles. In FY 2002, it initiated "Responsive Sales"

activities to provide proposals to its customers as a logistics partner in an effort to raise customer satisfaction levels and trust in their products and services. From FY 2003, it strengthened these activities under the "Proposals for Customer" system.

All sales staff prepare two proposal letters for customers each month. In order to be able to draw up optimal proposals for each customer, the company have sharpened their interview, fact-finding and observation techniques and are preparing "Optimal Product Selection Sheets" and "Collections of Excellent Case Studies".

In FY 2005, Toyota industries launched an information system to simplify the preparation of proposal documents and increased the target number of proposal letters from two to four. In addition to introducing examples of excellence via the Intranet, each sales branch office holds monthly "Sales Study Meetings" to exchange know-how and information. Toyota Industries holds company-wide presentations of proposal examples once a year with a view to boosting the capabilities of individual sales staff.

Case Study "Direct Contact with Customer"

— Raymond Corporation [U.S.A.]

Raymond Corporation of the BT Industries Group offers end user customers the opportunity to contact Raymond without first contacting their Raymond Dealer in order to enhance customer satisfaction levels. This process facilitates direct identification of customer awareness of the Raymond brand, dealers and products, instead of through its dealers. Raymond also conduct surveys after new products have been launched, as well as every six months. Raymond shares and resolves issues with its dealers. It also deploys personnel to customer hotlines where it can listen directly to the opinions and requests from customers. Raymond is involved in dealer evaluations, and provided measures for DOD (Dealers of Distinction) and DOM (Dealers of Merit) in 2004.

Third Joint Quality Control Meeting (JQCM) Held in the United States (Materials Handling Equipment Business)

In March 2005, quality managers from nine production centers belonging to TOYOTA Material Handling Company and the BT Industries Group gathered at Toyota Industrial Equipment Manufacturing (TIEM) in the U.S. for the Third Joint Quality Control Meeting (JQCM).

In addition to evaluating quality by means of benchmarks shared by Toyota Industries and the BT Industries Group as a means of ascertaining the actual quality situation vis-à-vis achieving targets at each center, participants confirmed that they would promote quality enhancement through mutual exchanges. Going forward plans call for these meetings to be held at different venues three times a year.



JQCM