

# Doing All We Can to Maintain and Improve Quality

## Quality is a Key Management Issue

► Fig 1 ► Fig 2

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

At Toyota Industries, the basis of our activities is "product quality", which is embodied in the durability, safety, and eco-friendliness of our products. However, our entire workforce is committed to maintaining and improving the quality of all of the company's activities, including "marketing quality" in sales and service and "total quality" in our corporate image and brand strength.

► Fig 1 Types of Quality Sought by Toyota Industries



### Establishing Day to Day Quality Assurance Systems

To develop and supply products from the customer's viewpoint – this philosophy summarizes Toyota Industries' comprehensive "market-in" approach.

In all processes, predetermined procedures must be carried out according to instructions in order to ensure that no defective items proceed to the next stage. In this way we are aiming to achieve manufacturing with own-process completion. This is vital for ensuring that the company only manufactures high quality products.

Whenever any of Toyota Industries' business divisions develops a new product, it uses a design review (DR) system to evaluate quality at all stages until customer satisfaction is achieved. This ensures that no product progresses to the next stage 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 of any problems in subsequent models.

While everything is done in the production process to prevent defective products from 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.

In 2006, we started a new "Thank-you-for-finding-the-problem award" at Toyota Industries to honor associates who sensed something unusual or different in their work and thereby detected a defect in the early stages, as well as to honor their superiors who took the necessary actions to help solve the problem.

### Reflecting Customers' Opinions Directly in Quality Improvements

In manufacturing, Toyota Industries devotes enormous efforts to the research and development of new functions and other features, endeavoring to develop products that are ahead of the curve. Using the design review (DR) system, General Managers of divisions evaluate every step of the production process, from product planning to design, production preparations, production, initial quality, and customer satisfaction levels.

For example, in the textile machinery business, when we deliver new machines to textile manufacturers in various parts of the world, we ask them to evaluate the product for us. These comments not

#### Case Study

### "International Best Factory Award" Cesab (Italy)

On December 18th, 2006, CESAB was awarded the 2006 "International Best Factory Award (IBFA)" in recognition of the excellent performance of their factory in the Italian city of Bologna that produces industrial vehicles. The award is sponsored by the prestigious Bocconi University Business School, "SDA Bocconi", which is a world authority in economics and management, and the leading Italian business newspaper, "Sole 24 Ore". CESAB's extraordinary flexibility, quality, innovation, and exceptionally efficient supply chain, were evaluated highly overall.

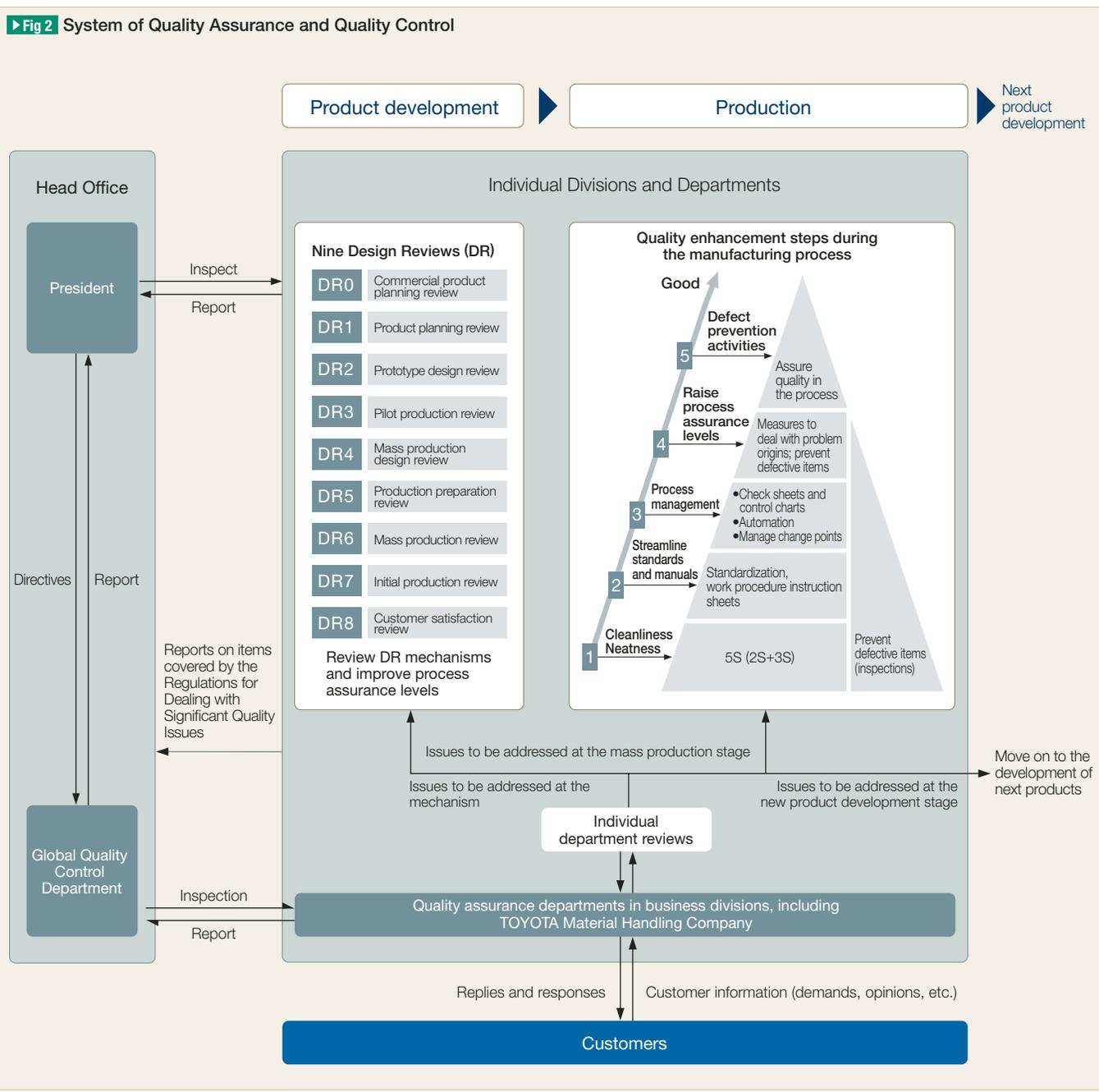


only help us in the development of new products, but also enable us to enhance our after-sales service.

In the materials handling equipment business, in which distributors and dealers handle sales and after-sales service, we attempt to ensure that customers can use our products in an excellent condition and that they are 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 us to interface with customers directly. The distributors, dealers, and Toyota Industries marketing staff also visit customers to conduct actual usage fact-finding surveys.

Individual comments and requests received from customers in this way are promptly fed back to the relevant section, such as design, and a response is then given to the customer through the dealers.

In addition to these day-to-day activities, since fiscal year 2006, TOYOTA Material Handling Company's Global Quality Assurance Department has acted as a secretariat for the distribution via product delivery trucks of customer questionnaires about our products and services, a scheme that is initially being limited to Japan. The secretariat collects the results of these surveys every three months and posts them on the company intranet.



### **Quality Assurance across the Entire Global Supply Chain**

As a company that supplies products to the global market, we believe that customer confidence in our quality is synonymous with the Toyota Industries brand, and is 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. (See the section on Responsibility to Our Business Partners on pages 25-26.)

All of Toyota Industries' plants are certified in international standards for quality management systems (ISO 9001, etc) and we are making efforts to encourage our affiliates to obtain similar certifications.

We see certification in international standards such as these as a springboard towards the establishment of our own more advanced systems. If, after certification is obtained, our own systems exceed an international standard, making renewal of that certification unnecessary, then we may decide not to renew it at that time.

### **Dealing with Significant Quality Issues**

In cases where serious quality issues arise, 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 Significant Quality Issues, minimize the trouble to customers by promptly devising countermeasures, while at the same time having the General Manager of the division report the issue to the President and the Executive Vice President in charge of quality. In addition, based on information provided to the Global Quality Control Department at the Corporate Center through the "Significant Quality Issues Notification Form", the Director in charge of quality will carry out quality audits as necessary to prevent recurrence of the problem and ensure deployment of countermeasures in similar areas. This mechanism is also incorporated into our report criteria system used for collecting information pertaining to compliance, and functions in conjunction with that system.

For significant quality issues that require recalls, the division sets up Recall Preparation Conferences within divisions to devise countermeasures. Once the General Manager of the division submits a report to the President and the Executive Vice President in charge of quality, a report is filed with the relevant regulatory authority. 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**

Bearing these results in mind, we confirm significant quality issues that reflect last year's quality problems and the President issues the President's Guidelines (Quality Guidelines) to the entire company at the beginning of each fiscal year. The Executive Vice President in charge of Quality confirms the implementation of the Guidelines through the Quality Functional Committee, including special shop quality inspections held at the divisions each year.

In fiscal year 2008, in order to achieve "zero inconvenience", every division and department will go back to the basics of "customer first", fulfill each role, promote own-process completion activities, and never allow the outflow of defects from their own process.

### **Toward "Zero Inconvenience" to Our Customers, Regarding Our Customers as the Next Step in the Production Process**

Production has continued to expand in fiscal year 2006 and fiscal year 2007, and the percentage of temporary workers, particularly seasonal contract workers, has also risen steadily. In response, "Customer First", "Zero Inconvenience" to our customers and, "Creation of a Workplace in which Every Worker Continually Pursues Quality First under Strong Leaders" were the slogans contained in the fiscal year 2008 Quality Guidelines.

Under this approach, it's necessary for every leader in all of our workplaces to display leadership and encourage everyone to be properly aware of their roles. Therefore, we promote QC circle activities in which everyone participates, including seasonal contract workers. In the past, permanent employees in the engineering departments (design and manufacturing) of all divisions and some indirect administrative departments in the Corporate Center have participated in these kinds of QC circle activities, but today, seasonal contract workers also participate in these QC circles as much as possible during their working hours.