

Product Responsibility

Quality Assurance

Basic Approach and Policy

Olympus has formulated the Olympus Group Quality Policy based on its Corporate Philosophy and the Olympus Group Corporate Conduct Charter.

Olympus Group Quality Policy

The Olympus Group will listen to the voices of our customers based on our “Social IN” corporate philosophy, which provides the basis for all corporate activities, and will constantly pursue true value to continue to provide customers with high-quality products and services.

1. We will take actions always from the viewpoint of our customers.
2. We will listen to the requests from our customers and look for their true needs and provide them with high-quality products that are useful for society.
3. We will comply with the related laws, regulations, social norms, and the in-house criteria to ensure the safety and security of our products and services for our customers.
4. We will establish a quality management system to pursue higher quality in all our business processes and make continual improvements, thereby winning more trust of our customers and increasing their satisfaction.
5. We will provide information about the quality and safety of our products and services to our customers in a prompt and appropriate manner.

The Olympus Group listens to the voices of its customers based on its “Social IN” corporate philosophy, which provides the basis for all corporate activities, and constantly pursues true values to continue to provide customers with high-quality products and services.

The fiscal 2016 was the initial year of our medium-term management plan, and we reorganized the quality assurance management system to build the structures necessary to ensure quality control and legal compliance with product-related laws suitable for a global corporation. The focuses of the second year of the medium-term management plan in fiscal 2017, which will span all our business, are reinforcement of the compliance system, and enhancement of our control systems over global product quality and legal compliance.

■ Quality Management System

Each business unit and group company in the Olympus Group actively seek certification under an international quality control standard—either ISO 9001 or ISO13485. They also build individual quality management systems that comply with the legal requirements in each country, while accurately understanding the quality demands of our markets, maintaining and improving the quality of existing products, and aiming to enhance customer satisfaction toward further global business expansion.

■ Quality Improvement Activities

Our medical, scientific solutions, and imaging business units are improving their quality management system across the globe. They gather data concerning customer inquiries and quality-related issues and utilize the data analysis results in making quality improvements.

The Olympus Group also vigorously invests in human resource development through quality management seminars focused on ISO9001, ISO13485, and the relevant laws and regulations of each country, as well as utilization of an e-learning system. We also utilize external consultants aiming at better quality management through their assessments and reviews.

■ Improvement in Product Usability and Safe Usage

The Olympus Group manages risks concerning product safety, providing information for customers on using our products safely and effectively through instruction manuals and product labeling, in conformance with the laws and regulations of each country. We also have our own medical product usage training centers in Tokyo, Germany, China (Shanghai, Beijing, and Guangzhou), and Thailand. These provide training on endoscope knowledge and handling for medical staff so that they can use our medical equipment safely. The training center in Thailand commenced operations in July 2016 to contribute to reinforcing the medical platform in Southeast Asian countries through offering medical equipment training for medical staff across the entire region.

Example of Quality Evaluation at the Development Stage

Olympus places particular importance on quality evaluation at the development stage, which is the starting point for manufacturing. Conducted at the in-house Test and Analysis Center (an organization that performs tests that have been quality system-audited by a third-party accreditation body), the measures that form part of quality evaluation at this stage include calibration, EMC and safety testing, usability assessment, mechanical and environmental testing, and materials analysis.

■ Calibration

Calibration is a process used to maintain the accuracy of measuring instruments by ensuring that all components are functioning correctly. The precision of measuring instruments can vary from day to day in response to changes in environmental conditions. Olympus is accredited as an ILAC-MRA^{*1} member and carefully monitors errors caused by these changes and applies approved calibration methods to its measuring equipments.

■ Electromagnetic Compatibility (EMC)

Electromagnetic compatibility (EMC) testing is carried out to ensure that electrical and electronic equipment will not emit electromagnetic noise that exceeds acceptable levels and could affect other equipment, and that it will not malfunction when exposed to such emissions. The significance of EMC is being recognized more widely in recent years, and related regulations were enforced in various countries. We test our products in a 10 m anechoic chamber^{*2} and an electromagnetic field immunity test chamber^{*3}.

■ Product Safety Testing

For medical equipment, it is particularly important to conduct product safety tests. Olympus conducts safety tests, including a conformity assessment test (compliant with IEC 60601-1), as a third-party testing laboratory.

■ Mechanical and Environmental Testing

Taking account of various conditions of usage, storage, and transportation, mechanical tests assess product strength and life expectancy. Tests include a vibration test, drop test, and environmental tests, including operational humidity and temperature, to confirm that products will maintain their performance and have sufficient strength and life.

■ Materials Analysis

Olympus not only analyzes and assesses parts and materials, but also uses various analytical systems to identify defects and other issues through detailed analyses carried out after products have been brought to market. Findings from these analyses are used to eliminate the causes of problems and prevent recurrences.

*1 ILAC-MRA International Laboratory Accreditation Cooperation—Mutual Recognition Agreement

*2 10 m anechoic chamber

Olympus's 10 m anechoic chamber is one of the most advanced facilities of its type in the world and has been certified for use in electromagnetic testing under the National Voluntary Laboratory Accreditation Program (NVLAP) of the United States.

*3 Electromagnetic field immunity test chamber

This chamber is used to confirm that electrical and electronic devices do not malfunction by exposing them to specific electromagnetic fields.

With the dissemination of wireless communication devices, action is underway to expand the test frequency range and upgrade testing levels. The chamber at Olympus is capable of testing at frequency ranges of 80 MHz–6 GHz and a maximum test level of 30 V/m.

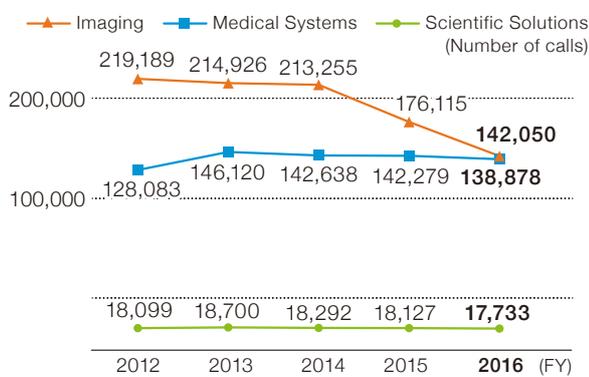
Improvement of Sales/After-Sales Service Quality (Responses to Inquiries/Repairs)

Olympus has systems in place to respond to customer inquiries and repairs in Japan and overseas for different product fields and in different regions. As regards points of contact for inquiries, information relating to after-sales services in general is provided via a Customer Support link on our website. Important information concerning safety or consumer protection is made known via Important Announcements for Customers on our website.

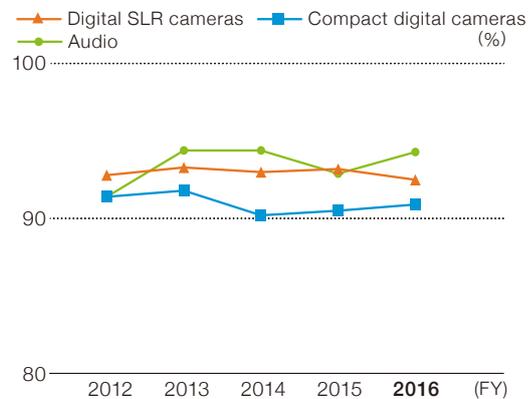
We have developed a repair service network to meet user needs in each region and product category.

Outlines of customer response activities in each business field and of the efforts of the repair service network are set out below.

◎ Calls Received at Customer Support Centers (in Japan)



◎ Percentage of Repairs Completed within the Allotted Time (in Japan)



◎ Customer Response Structures in Each Business

Business Field	Outline of Activities
Medical Systems	<p>[Japan]</p> <ul style="list-style-type: none"> ● Olympus has developed service systems designed to ensure the safety and reliability of healthcare environment. <ul style="list-style-type: none"> ● Establishment of Medical Customer Information Center, a call center dedicated to providing an information service for medical specialists. ● Formation of a team for specialist services offering information on how to handle medical treatment devices, troubleshooting, etc. ● Immediate response system based on coordination and interaction among call centers and Olympus sales/service personnel or authorized vendors in various regions. ● Medical Town, a special website that offers up-to-date information on medical endoscopes and related medical treatment for medical specialists. <p>[Overseas]</p> <ul style="list-style-type: none"> ● Olympus has established call centers in major cities. <ul style="list-style-type: none"> ● Call centers have also been set up in major cities in the USA, China, and Europe for localized and extensive services.
Scientific Solutions	<p>[Japan]</p> <ul style="list-style-type: none"> ● Customer satisfaction improvement activities at customer support centers <ul style="list-style-type: none"> ● At customer support centers, assisted customer problem-solving covering all products from the Scientific Solutions field. ● Customer inquiries are fed back to all divisions to provide the best solutions to customers. ● Improving quality of responses through regular customer satisfaction surveys ● Set up help desks to assist retailers Technical assistance ● Technical assistance <ul style="list-style-type: none"> ● Held “Olympus Microscope Classroom” seminars for customers to learn the proper and effective ways to use microscopes. Held on-site classroom courses in response to customer requests <p>[USA]</p> <ul style="list-style-type: none"> ● TAC customer service <ul style="list-style-type: none"> ● Assigned to local subsidiaries, TACs (Technical Assistance Specialists for microscopes) respond to customer inquiries via telephone. ● Technical assistance <ul style="list-style-type: none"> ● As sponsor, Olympus supports microscope training courses held at the world-renowned Woods Hole Marine Biological Laboratory and Cold Spring Harbor Laboratory. <p>[Europe]</p> <ul style="list-style-type: none"> ● Olympus Academy activities <ul style="list-style-type: none"> ● Manned by specialist staff, the Olympus Academy provides training in products and applications for subsidiaries and sales agents in various countries. Product and application seminars are then held for customers by the subsidiaries and sales agents that have undergone such training themselves.
Imaging	<p>[Japan]</p> <ul style="list-style-type: none"> ● Call center staffed seven days a week, including national holidays (Note: Excluding system maintenance days and year-end/New Year holidays) ● Enhanced telephone and e-mail support per product category ● Enhancing responses at call center <ul style="list-style-type: none"> ● Enhancing the quality of telephone responses by various means, including improving the communication skills and product knowledge of call center staff members, through “mystery shopper” surveys undertaken by external organizations and by e-mailing customer questionnaires ● From August 2015, lines into the call center changed to a nationwide call-handling service ● Q&A and other information made public via our website ● Supervision and management of global response results <p>[Overseas]</p> <ul style="list-style-type: none"> ● Olympus has established call centers in major cities. <ul style="list-style-type: none"> ● Call centers have also been set up in major cities in the USA, China, and Europe to provide detailed responses tailored to the areas they cover.

Repair System per Business Field and Improvement Efforts

Business Field	Outline of Activities
Medical Systems	<p>Minimizing downtime of endoscope To minimize endoscope downtime during malfunction or repair work, both Shirakawa and Nagano service centers (Domestic Repair Division) collectively control and carry out repair operations as well as handling of loaners.</p> <p>Endoscope service networks Major repairs (Repairs in need of overhaul) Japan: Medical Equipment Service Operation Centers located in Shirakawa and Nagano Overseas: Service centers in the United States, Germany, France, Czech Republic, United Kingdom, China, India, etc. Simple repairs (to endoscopes and peripherals): Available through a worldwide network of approx. 200 repair bases</p>
Scientific Solutions	<p>Providing repair services to the same high level at service bases across the world The following services are provided at domestic and overseas manufacturing sites, sales subsidiaries and contracted agents</p> <ul style="list-style-type: none"> • Microscopes: Back-to-base repairs, on-site repair services, function inspections, precision calibration, service contracts, delivery installation • Industrial endoscopes: Back-to-base repairs, function inspections, service contracts • Non-destructive testing devices: Back-to-base repairs, on-site repair services, function inspections, precision calibration • X-ray analytical systems: Back-to-base repairs, function inspections <p>Back-to-base repair services Portable devices and those that may require extensive repairs are collected and repaired in an environment equivalent to the production line. Devices that are collected for repair are normally returned within one month of receipt.</p> <p>On-site repair services For installation-type products, technical staff is dispatched to provide on-site services, including repairs, calibration and maintenance inspections.</p> <p>Service contracts Depending on the product, Olympus offers a number of maintenance service contracts.</p>
Imaging	<p>Greater repair service convenience with a variety of services and schemes In Japan, the following services are provided by the Hachioji Repair Center, Olympus Plaza Tokyo, Olympus Plaza Osaka and the service stations in Sapporo and Fukuoka:</p> <ol style="list-style-type: none"> (1) Pickup service via website and telephone (2) On-line repair booking and estimating service Internet-based repair service offering applications for servicing and information on repair fees and repair status (3) Quick Repair Service (Applied to mirrorless SLR camera bodies and interchangeable lenses) Service for reducing repair time (4) Camera cleaning service (Applied to Olympus digital cameras and interchangeable lenses) (5) Digital Camera Maintenance Seminar Hands-on-style seminars for digital camera owners on cleaning their cameras and interchangeable lenses under instruction were held in Olympus Plaza in Tokyo and Osaka, and other service stations in Sapporo and Fukuoka. (6) Olympus Owners Care Plus (OOC+) The OOC+ service offers Olympus camera owners functional diagnoses and camera servicing, customization (e.g. changing colors of external parts), and rental lenses. A Maintenance Package service for our flagship model, the E-M1 Mark II, also started to coincide with the commencement of sales. <p>For worldwide overseas repairs Overseas, repair services tailored to the areas they cover are provided by repair bases in the USA, Portugal, Czech Republic, Russia, Australia, China, South Korea, Hong Kong, Singapore, Thailand and Malaysia.</p> <p>Improving the on-time rate for back-to-base repairs One of our target indicators for customer satisfaction is the on-time rate for back-to-base repairs, the achievement rate of which we verify on an annual basis.</p>