Aiming for Sustainable Medical Endoscope Business

Strengthening of medical endoscope production/supply systems and implementation of CSR activities

Between October 2015 and April 2016, new facilities were completed in succession at each of the three sites—Shirakawa, Aizu and Aomori—responsible for the development and manufacture of Olympus medical endoscopes and related devices.

Amid expected expansion in global demand, Olympus will fulfill its worldwide product supply responsibilities by expanding the scale of its manufacturing sites and business continuity plan (BCP) measures. The Company will also aim to realize a sustainable medical endoscope business by promoting the creation of pleasant and rewarding workplace environments at the same time as encouraging consideration for the environment.





To Continue to Fulfill Worldwide Supply Responsibilities Amid Expanding Global Demand

Having started with gastrointestinal endoscopes, Olympus Corporation's Medical Business has contributed to the early diagnosis of illnesses such as cancer and to minimally invasive therapy that is less invasive on the body through its endotherapy devices that are regarded as examination and treatment instruments as well as through its surgical endoscopes and energy devices that are used in surgery.

Recently, endoscopic tests have been recommended for gastric cancer screening in Japan, and expansion in demand is expected in the years to come due to increased screening of large bowel cancer using endoscopy in the United States and Europe as well as due to growing needs for screening in emerging countries, including in Asia. In addition, accompanying the more widespread utilization of endoscopes, the market for single-use endotherapy devices is continuing to grow year by year.

Based on these developments, under its five-year Corporate Strategic Plan (16CSP) that started in April 2016, the Company announced that it would be prioritizing the allocation of management resources to the Medical Business and expanding its business scope focused on early diagnosis and minimally invasive therapy.

The new buildings completed in succession between October 2015 and April 2016 for the three sites of Aizu,

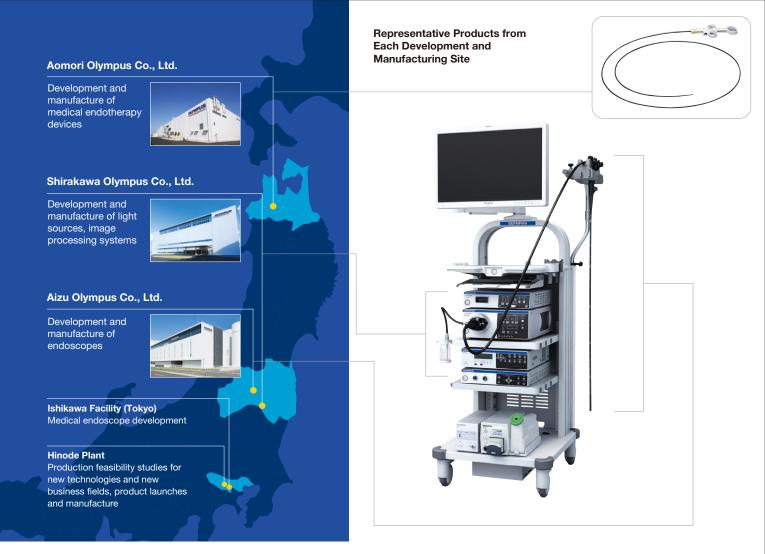
Shirakawa and Aomori represent the essential business foundation for executing the Plan. At the same time, they are sites that will continue to fulfill worldwide supply responsibilities.

Drafting Large-Scale Facility Investment Plans to Recognize Market Changes in 10, 20 Years' Time as Growth Opportunities

Aizu Olympus has been manufacturing endoscopes for more than 45 years, the Shirakawa plant is responsible for the manufacture of endoscope imaging processing systems and light sources as well as being responsible for procurement and repairs, while Aomori Olympus manufactures endoscopic endotherapy devices and surgical-use energy devices.

Leveraging the manufacturing capabilities of these three sites, the Company has been supporting the growth of its medical endoscope business.

To make this growth sustainable, under the previous Corporate Strategic Plan announced in 2012 the Medical Business set an annual average sales growth target of 10%. It was then established that, if the scale of the manufacturing sites remained as it was at that time, the manufacturing capabilities would not keep up with capacity in terms of either space or manpower. Thus a large-scale facility investment plan was launched to further strengthen the gastrointestinal endoscope business, in other words the three manufacturing sites, in anticipation



of a supply system for 10 or 20 years hence.

The Great East Japan Earthquake that occurred in 2011 also had an effect on the investment plan. When the earthquake struck, part of the facility at the Shirakawa Plant in Fukushima Prefecture was damaged, and the decision taken to suspend production for nearly a month. Stability of quality as well as of the supply system and repairs are essential for medical equipment manufacturers. In the case of medical endoscopes, however, in addition to the technologies for high-precision machine processing and the assembly of delicate parts, there are products that fuse optical and electronics technologies. As it takes a long time to master the manufacturing skills, we are not able to immediately set up bases in other regions.

In light of these circumstances, in December 2012, while fulfilling our corporate responsibility of supplying products in a stable manner throughout the world, we announced a plan to implement large-scale facility expansion, including a BCP, at all three sites to continue our growth. Also factored into the plan were responses in the form of the strengthening of human resource recruitment and training as well as reducing environmental loads.

While Focusing on Global Markets, Three Business Bases Collaborate to Strengthen Market Competitiveness

While extending the operational capabilities possessed by each of the three bases with the newly completed facilities

and anticipating a global market for medical endoscopes, they also have a responsibility to support further growth.

Combining the procurement, manufacturing and repair functions within one site, the Shirakawa plant will also play a major role in the years to come not only on the base but also in improving productivity and quality across the Company's entire medical endoscope business. In addition, as Aizu Olympus has had its production capabilities raised approximately 1.6 times, that base will be fulfilling its responsibility to meet global demand for medical endoscopes. At Aomori Olympus, there are plans to establish development and production technologies geared toward strengthening its competitiveness in developed countries, where there is a burgeoning need for single-use devices. The Aomori plant will also work to enhance its capabilities as the mother plant for the Company's operations in Vietnam, which is positioned as a volume production plant.

As efforts common to the three bases, the Company will further strengthen collaboration with the Technical Development Center in Hachioji (Tokyo), which is responsible for R&D, and look ahead 10, 20 years to examine global optimal production, including overseas procurement, manufacture and repair bases.

By steadily carrying out these measures, the Company will certainly be supporting sustainable medical endoscope business from the standpoints of product supply and repair services.

Message from

Aiming for Sustainable Medical Endoscope Business

Strengthening of medical endoscope production/supply systems and implementation of CSR activities

THREE PERSPECTIVES FOR A SUSTAINABLE MEDICAL ENDOSCOPE BUSINESS

The new building construction projects of the three sites responsible for development and manufacturing toward the realization of a sustainable medical endoscope business. In addition to working to strengthen their production supply systems, the three sites are putting into effect CSR activities based on three perspectives: business continuity plan (BCP), human resources and consideration for the global environment.

PERSPECTIVE 1 **Response to BCP**

Promoting BCP under Basic Philosophy of Helping to Ensure "Continuity of Medical Front Line"

During the Great East Japan Earthquake that occurred in 2011, a temblor registering 6.0 upper on the Japanese scale of seismic intensity was recorded in the Shirakawa district of Fukushima Prefecture, and the resultant power supply outage lasted for three days. In addition to the effects of part of its building having sustained damage and the operations at suppliers and its own procurement activities having been brought to a standstill, the Shirakawa plant was forced to suspend manufacturing and repair operations. Meanwhile, the medical front line operates around the clock every day of the year, so were the suspension of production and repair operations to be prolonged, the effects could extend to placing people's lives at risk. Especially for Olympus, which enjoys a high share of the gastrointestinal endoscope market, business continuity is a social responsibility of paramount importance. As it is also difficult for the production facilities responsible for the ultra-precise machining of minute, delicate parts to find alternatives, maintaining that accuracy is an important issue at the business sites with responsibility for manufacturing.

Recognizing this situation, for its new building construction projects the Company worked on BCP measures to enable the provision of support from the standpoint of providing sustainability for the Medical Business. For all the new buildings at the three sites, the Company had seismic isolation structures introduced of the type that had been installed and performance-verified at Aizu Olympus prior to the Great East Japan Earthquake. At the Shirakawa business site's Procurement Division, certain parts are always stockpiled inside the seismically isolated building, and the Company has devised measures so that there will be no shortage of parts even in the event of another major disaster. Both the Aizu and Shirakawa business sites are implementing BCP measures in cooperation with their local regions, such as by collaborating on the Reconstruction Plan advocated by Fukushima Prefecture and with the hazard mapping initiatives of the local governments in their respective areas.



PERSPECTIVE 2

Response to Ability to Secure and Train Human Resources

Promoting Creation of Pleasant and Rewarding Workplace Environments to Secure and Train Highly Productive Human Resources

Increasing production capacity requires not only the expansion and enhancement of facilities and production equipment but also the securing and training of highly productive human resources. Especially as medical endoscopes are products with precision surface finishes that require the integration of mechanical technologies (such as precision machining and technologies for the assembly of precision parts) and electronics technologies (optical technologies as well as image processing and electronic systems), how to continue hiring and developing skilled engineers in each field from a long-term perspective is being called into question.

Based on these business characteristics, the Olympus manufacturing sites in Japan are operating human resource management systems and training programs to bring about improvements in professional ability. These are based on a system of qualifications centered around the hiring of human resources on the premise of long-term employment. One such system is called the Skill Dojo (Skill School), at which Advanced Technicians instruct new recruits or reassigned personnel in the skills required at each site on a one-to-one basis. This system is helping personnel to adapt quickly to the development front line and to production lines. In addition, employee motivation and retention rates are also important issues. On these points, Olympus conducted employee surveys and interviews in association with the new building construction projects. As a result, the new buildings are equipped with refreshment rooms, which enable employees involved in many precise tasks to relax, and with private rooms that child-rearing employees can use for feeding their babies. Utilizing the feedback from the women who occupy the production front line in large numbers, the Company increased the size of the clean and spacious washrooms and changing facilities and undertook the renovation of the on-site cafeteria that provide healthy menus.

PERSPECTIVE 3

Response to Global Environmental Protection Concerns

Installation of State-of-the-Art, Environment-Friendly Facilities Appropriate to Each Business Site

Hand in hand with the expansion and enhancement of production capacity, the new building construction projects were expected to bring with them increases in the amounts of raw materials and energy used as well as in the amount of waste generated. If left unchecked, it was assumed that these increases would lead to a deterioration in the local and global environments. Based on these concerns and specifically for these projects, the Company conducted environmental assessments of the surrounding areas while responding to environmental protection concerns by, for example, installing state-of-the-art, environment-friendly facilities and equipment appropriate to each business site.

- Installation of solar panels, cold water thermal storage tanks (Shirakawa, Aizu)
 - Besides installing solar panels on the roofs, the Company installed cold water thermal storage tanks that, using nighttime power, store the water that is utilized for cooling during the day. (Shirakawa: 1,100t/Aizu: 2,000t [A total of 4,000t at Aizu when its existing facility is included.])
- Utilization of heat in the ground (Aizu)
 The adoption of a cooling/heating trench that utilizes the heat in the ground contributes to the saving of energy for air conditioners, etc.
- Adoption of LEDs for lighting (Aomori)
 LEDs are used for all lighting.
- Adoption of free cooling system (Aomori)
 Installed a free cooling system that utilizes the cooling tower to produce cold water in the in-between periods and in the winter season. As refrigerators are not used, helps in saving energy.



Aiming for Sustainable Medical Endoscope Business

Strengthening of medical endoscope production/supply systems and implementation of CSR activities

Aizu Olympus

From its newly constructed factory building Aizu Olympus serves as the backbone of the Company's endoscope business that will meet its heightened expectations long into the future.

Aizu Olympus Co., Ltd.

Established 1970

Business Activities

Development and manufacture of medical endoscopes and related products

Number of Employees 1,735 (April 2016)

International Standard Certifications

ISO 13485 (International standard for quality management systems for medical devices)

ISO 14001 (International standard for environmental management)





Since our establishment in 1970, we at Aizu Olympus have been growing as a main base for medical endoscope production as a part of the Olympus Group, which developed the world's first practical gastrocamera, the forerunner of the world's first endoscope.

Positioning advanced, high-precision processing technology, craftsmanship (the skills of outstanding people) and information systems (advanced IT) as three areas on which to focus our strengthening efforts, we are supporting the development and evolution of the endoscope. Becoming the doctor's eyes and hands to enable movement at will inside the body and also so that examinations and treatments can be conducted that reduce the demands placed on the patient's body, parts with many complex shapes and parts made from a wide variety of materials are used in endoscopes. Their processing and manufacturing also require skilled techniques. It is my belief that the soil of monozukuri (craftsmanship), which is represented in colorful traditional crafts, and the diligent and tenacious human qualities of the local people run deep in the Aizu region. As a company that has assumed the mantle of that genealogy, Aizu Olympus focuses its efforts to the maximum extent on human resource development and on the creation of pleasant and rewarding workplace environments while keeping its roots firmly

embedded in the region. The technological assets that are the driving force behind training, such as imbuing the corporate philosophy and working to foster a sense of the responsibilities involved in medicine through training, represent the core competencies at Aizu Olympus.

We are also proud of the height of our organizational capabilities, such as cooperation between superiors and subordinates and that transcends departments. Under the QC circle activities that address improvements in any problem areas—such as quality, cost, scheduling and quantity—on the manufacturing front line, we address workplace improvements while demonstrating teamwork in teams of several people and compete in the Nationwide QC Circle Conference organized by the Union of Japanese Scientists and Engineers every year. Always finishing in the top rank at the skills competitions held by the Olympus Group manufacturing sites as a whole, the technological and organizational skills that are nurtured through these events are handed down to other team members every year.

As a world-class product manufacturing site is being continuously produced from this kind of environment, we will be supporting the Olympus Group's endoscope business and contributing to society in the years to come.

Representative Lineup of Aizu Olympus Products



Gastrointestinal Videoscope



Bronchoscope



Colonvideoscope



Working to Create Workplace Environments That Are Even More Pleasant and Rewarding for Women Employees

At a factory that has been supporting the manufacture of gastrointestinal endoscopes for the longest time, Aizu Olympus' women leaders are being nurtured. There are many women who have become workplace leaders, including those who won the excellence award at the Japan Management Association-hosted Innovative Team's Conference 2007 and are currently training members as team leaders. Women account for more than half of the employees at Aizu Olympus, and a manufacturing process does not start without the active participation of women. So that the company would benefit from long-serving women employees working in comfortable surroundings, when having its new factory building constructed, the company created a workplace environment for everyone, including washrooms and changing rooms, a refreshment room and a company cafeteria, while referring to the opinions of women employees.



Company cafeteria

EMPLOYEE FEEDBACK

Precisely because it's an environment in which you can relax, you are able to concentrate on your work.

I am responsible for lens manufacturing processes. My work involves cleaning the lenses, which are about the size of a pen nib and mounted in the ends of endoscopes, and final inspections. As it's exacting work, at times other than when concentrating on my job, I spend time relaxing on a regular basis, such as by chatting with my coworkers. For me personally, the new factory building is comfortable in a variety of ways and, compared with the previous building, has made the work so much easier. For example, in the morning you can increase your motivation before starting work by stopping by the refreshment room. In addition, the corridors and washrooms are brightly lit, wide, and probably because the ceilings are so high you can feel a sense of release. Working in that kind of atmosphere increases communications with managers, superiors and colleagues who are high spirited by nature, and I get the feeling that the new building has resulted in an increase in positive views. At the workplace there are also many superiors who are taking leave to take care of their children. There are many club activities and workplace trips, so private lives have also been enhanced. I think I would like to continue working in such a comfortable workplace from this point on.



Kaori Sawada 1st Manufacturing Department

Message from
the President Society Environment

Aiming for Sustainable Medical Endoscope Business

Strengthening of medical endoscope production/supply systems and implementation of CSR activities

Shirakawa Olympus

Toward further quality improvements on the basis of the One Shirakawa system in which various technicians interact



Shirakawa Olympus Co., Ltd.

Established

1978 (commenced operations 1979)

Business Activities

Development and manufacture of medical endoscope systems

Number of Employees 808 (April 2016)

International Standard Certifications

ISO 13485 (International standard for quality management systems for medical devices)

ISO 14001 (International standard for environmental management)



Shirakawa Olympus is mainly responsible for the development and manufacture of image processing and light source equipment, which due to their shape are known as "boxed item products." The manufacture of these devices requires the accurate assembly of a large number of electronic components and precision parts.

The presence of employees who have a strong sense of responsibility and diligently accomplish their tasks without giving up is extremely important. There are many people with that sort of temperament in Fukushima Prefecture, where the company is located, and many of the employees are Fukushima born and bred. Furthermore, Fukushima Prefecture ranked third in Japan in terms of the amount of medical instruments produced in 2014, medical-related production is clustered here, and Shirakawa Olympus is playing its part in that alongside Aizu Olympus.

In addition to contributing to that kind of Fukushima Prefecture industry revitalization, I regard the project to construct a new factory building as being in preparation for the realization of the Olympus Group's sustainable growth. The symbol of that is the building of an organization responsible for each of the three separate functions—procurement, manufacture and repair—and bringing together those functions in the buildings on one site that has in place BCP measures such as seismically isolated structures. Previously on a separate site around 500 meters away, the Procurement Division moved to the same site with the

manufacturing and repair divisions, and the company thereby realized significant business streamlining in its function trifecta, such as the further advancement of cooperation. In addition, from the manufacturing standpoint, the company has expanded the site area in response to the expected need for a system of increased production in the years ahead. In the Domestic Repair Division, which is responsible for repairs in Hokkaido and eastern Japan, there is active contact with technicians in the adjoining Manufacturing Division, and this is bringing about improvements in repair techniques.

The company is also responsible for the manufacture of endoscopic ultrasound systems, which have recently been utilized, for example, in capsule endoscopes and for examinations of the pancreas, as well as for the 4K camera heads that form part of surgical endoscope systems. Having reached the stage where the company is involved not only in the "boxed item products" but also in the manufacture of the full gamut of endoscope systems, Shirakawa Olympus has geared up to create the environment in which to proactively incorporate endoscope technologies and know-how. Leveraging that environment in the years ahead, I would like to think that we will encourage cooperation and collaboration with other sites—such as with Aizu Olympus and the Technical Development Center in the city of Hachioji, Tokyo—that will lead to the creation of rewards and human resource development for employees as well as to the growth of the Olympus Group as a whole.

Representative Lineup of Shirakawa Olympus Products



Video system center



High-brightness light source



Ultrasound endoscope

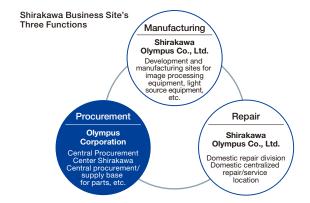


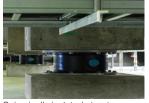
4K camera head



Establishment of BCP at "Centralized Procurement Center Shirakawa"

An Olympus Corporation organization, the Central Procurement Center Shirakawa procures in bulk the parts for the products manufactured at each of the Aizu, Shirakawa and Aomori sites from every corner of the world and thus, so to speak, functions as the heart of monozukuri (craftsmanship). As a maker of medical equipment, Olympus is aiming for this central procurement to function even in the event of the disruption caused by a natural disaster, and for the manufacture and repair of endoscopes and related equipment to continue uninterrupted to also ensure continuity on the world's medical front lines. For that reason, the Company adopted seismically isolated structures for its new buildings, including that housing the Central Procurement Center Shirakawa, and prepared its facilities to be able to withstand an earthquake of the magnitude of the Great East Japan Earthquake while stockpiling a certain amount of parts and making contingency plans for times of emergency.







Seismically isolated structure

Inspecting supplied machined parts

EMPLOYEE FEEDBACK

VOICE

The environment here is one in which you can engage in development while carefully confronting any quality issues.

The inspiring thing about Olympus was that the work drew on the electrical and mechanical system technologies that I had learned about at university. Also, for someone born and bred in Fukushima, Olympus gastrointestinal endoscopes hold a global market share of around 70%, so there was the added attraction of staying close to home while at a workplace that contributes to global medicine. As for me, I am now involved in the development of endoscope surgical integration systems as a part of the Technology Division. In the development, we are working on the making of better parts, such as by resolving technical problems through the Technical Development Center in Hachioji, Tokyo. Although facing up to challenges is important in the field of medical equipment, more than anything else you are asked questions about quality and safety. Generally, the work for which electrical systems engineers are responsible is at a fast pace, and the development time is short as it involves large numbers of new products. Dealing in medical instruments while looking into new technologies, Olympus engages in development while carefully facing quality aspects. In addition, as the Company has had new buildings constructed and increased inter-divisional communications by having brought together a diverse mix of technicians at one site, we have reached the point at which we are able to perform design changes remarkably smoothly. While building up my knowledge and experience as an engineer, I would like to play an active role as a development leader for a new item of medical equipment in the years to come.



Masataka Azuma Development 2G

Aiming for Sustainable Medical Endoscope Business

Strengthening of medical endoscope production/supply systems and implementation of CSR activities

Aomori Olympus

Facing a global market with inseparable quality control capabilities and ease of operation

Aomori Olympus Co., Ltd.

Established 1973

Business Activities

Development and manufacture of medical endoscope-related products (endotherapy devices)

Number of Employees 770 (April 2016)

International Standard Certifications

ISO 13485 (International standard for quality management systems for medical devices)

ISO 14001 (International standard for environmental management)





Aomori Olympus is the development and manufacturing base for the medical-use endotherapy device products that are indispensable in the examinations and treatments conducted by endoscopes. Divided depending on their use for examination or treatment, endotherapy devices enable operations such as grasping, resecting, collecting, cutting, crushing and hemostasis. The products the company handles number more than 2,300 types, including energy devices for surgical use that with one device make it possible to seal blood vessels, rapidly dissect tissue and perform peeling operations, and the company supplies these products all over the world. Among these products that are used in the human body, in the case of the single-use products there are those that come into direct contact with the body, and ensuring their safety (sterility) is of particular importance. Accordingly, under the new building construction project, in addition to realizing spaces that are cleaner than in the past, we made the latest factory design to be more certain of devising an integrated production system, from product processing to assembly, sterilization, inspection and shipment. For example, for the new building we adopted dual shutters for all of the doorways so that no insects can enter from outside and in the manufacturing areas made the exterior wall to be a windowless double structure as a measure against dust, insects and rats. In addition, to ensure consistent quality

across a wide variety of products not only new facilities but also the creation of an environment in which employees could concentrate and work were necessary. In addition to newly building a refreshment room, the company therefore showed consideration for the safety and comfort of its many women employees who work while standing up by, for example, laying thick mats under their feet at work stations.

Several times a month, doctors who use our equipment come from all over the world to inspect the company. Upon seeing the production line, many of them say "I was able to understand your attitude with regard to Olympus quality," and I feel immensely happy and proud that we are able to convince them, in addition to such visits being an opportunity to strengthen our sense of responsibility toward them.

Aomori Olympus also serves the function of mother factory for the Vietnam factory. The manufacture of single-use products is prohibitive on cost grounds, and after stabilizing production at the company here, we will transfer control of most of the production to the Vietnam factory. For technical guidance, we are accepting trainees and also sending many instructors to Vietnam. I am confident that the fully equipped new factory building is improving the ease with which such members work and that in turn they will become the driving force behind improvements in efficiency and product quality.

Representative Lineup of Aomori Olympus Products









Endotherapy device

Surgical energy device



Supporting Global Development as Mother Plant

As one of its growth strategies, Olympus has cited the expansion of its lineup of single-use products, such as its endotherapy devices for endoscopes and energy devices for surgical use, demand for which is growing in the United States and other developed countries in Europe. For that reason, in addition to having strengthened its new product development system by the recruitment of 120 technical employees in the past two years at Aomori Olympus, we are supporting that system strengthening as the mother factory for the Vietnam factory that is positioned as the volume production factory for the global market. In specific

terms, we are accepting technicians from the Vietnam factory and, in the same way as in Japan, have divided the levels of the skilled workers from the manufacturing front line into six stages and put into effect a training program to match their levels.

Also, locally in Vietnam, in addition to adopting a joint certification system with Japan with regard to basic techniques, such as bonding and brazing, instructors from Aomori Olympus are heading to Vietnam and set the certification examination. We are establishing the target tasks that they are capable of undertaking only for those who pass the examination.



Olympus Vietnam Co., Ltd. (Vietnam factory)



An Aomori Olympus employee is on hand to guide trainees accepted from the factory in Vietnam.



EMPLOYEE FEEDBACK

The people-friendly culture manifests itself everywhere in the new building

I was born and raised locally, but to be honest other than the cameras I knew nothing at all about Olympus products before I started job-hunting. Although it might be deemed presumptuous to say so, I feel very proud to be working for a medical equipment maker that is now making a major contribution to improving the quality of life of patients all over the world. Although my current work is in the General Affairs Department and thus only indirectly involved, I like the company slogan of "All for the Patient's Smile" very much and replace it with "All for the Employee's Smile" for use in my work duties. The systems here are very easy user-friendly, for example the ratio of women taking leave is 100%, there is a very people-friendly corporate culture, and that kind of corporate culture manifests itself in the newly constructed factory building. Clean and featuring sofa benches and vending machines, the newly completed refreshment room is used during break times as it is a place where you can relax. A passenger elevator has also been installed, and I have heard pregnant women and those with injuries say that it has become easier to work than before. They are in the process of renovating the existing building where I spend my time, and here they are planning a powder room. Since I wear little makeup when I'm working, I think that facility will make women who have plans after work happy. I am looking forward to seeing in what other ways Aomori Olympus will change in the years ahead.





Yumi Fujimoto General Affairs Group