There’s a good chance you’ve seen the TOTO brand in a restroom at some point in your life. The company, based here in Kitakyushu, has supplied toilets, sinks, tableware (tableware production ended in 1970) and more throughout the world since 1917. TOTO has multiple factories churning out their many products, but one of these production facilities is wholly unique. SUNAQUA TOTO, located in Kokuraminami ward, was designed and built with the objective of providing a workplace that is better suited for people with disabilities. Beginning operation in July 1994, SUNAQUA TOTO has functioned with three major concepts at its core: “independence,” “trust,” and “taking part in planning.” Alongside these three concepts is “normalization” which refers to creating a society where people with disabilities can function and participate just like anyone else.

There are many examples of this mentality that are apparent in the design of the work spaces at SUNAQUA TOTO and the building itself. Foremost, and possibly most interesting, are the work spaces on the factory floor itself. Unlike the large automated machinery and assembly lines that are often associated with factories, each worker has their own uniquely designed workbench, tailored to their needs and job. This is because, at SUNAQUA TOTO, workers are provided the tools and resources needed to fashion and customize their own work benches using PVC piping and boards for surfaces. This allows the work spaces to meet the varied needs of each individual and their disability.

The architecture of the factory itself also has many accessible features such as:
- Extra door handles lower to the ground as well as sliding doors for people in wheelchairs.
- A row of sinks at multiple heights in front of the cafeteria to accommodate as many people as possible.
- A heightened tatami area in the changing room for people who need to lie down to change clothes.
- Covered parking for people who need extra time to get in and out of their cars.
- A very high ceiling in the main corridor of the building designed to allow smoke to rise up and away, giving the workers the extra time they may need to evacuate in case of fire.

TOTO is working hard to promote equality and understanding in the workplace and, in doing so, is making Kitakyushu an even better place to live. SUNAQUA TOTO is among the 54 factories and museums that can be toured and is currently being promoted as part of the city’s industrial tourism efforts (see pages 1 and 2).
Kitakyushu is a city that grew in large part due to its industry. As would be expected, this industry has created a large concentration of factories and plants. Now, many of these factories have changed from being purely centers of manufacturing to also being locations for tourism by providing tours and inviting people to view the factories lit up at night. There are many people who are drawn to learning about how things are manufactured or are attracted to the aesthetic of factories. In recent years there has been an increase in efforts to promote and facilitate this form of tourism and thus “industrial tourism” was born.

There are a total of 54 factories and museums that provide tours and are being actively promoted. These factories cover a wide gamut, from soap (Shabon담가 Soap) to steel manufacturing (Nippon Steel & Sumitomo Metal), and from dairy products (Nishiraku) to robots (Yaskawa Electric Corporation). It’s possible to do about one or two tours in a single day, so there are enough tours available to keep people coming back for a good while.

Currently, around 250,000 to 260,000 people visit Kitakyushu each year for industrial tourism. However, only about 10% of the 10 million tourists in total that visit Kitakyushu stay the night. Overnight stays provide significantly more income as people stay in hotels and eat at restaurants. So, naturally, an effort was made to motivate people to stay the night as well. In 2010, night views of factories began being actively promoted.

Night views allow people to enjoy the unique aesthetic of industrial factories. The factories are lit with the same lighting that is used every night for their own business purposes and are often viewed from boats in the Dokai Bay. Organizations working to promote industrial tourism started by asking citizens what locations were the most interesting to view at night. JTB (a Japanese travel agency) was brought in to organize the first tour plan that included night views of factories. Now, Kannon Kisen also provides cruises through the Dokai Bay. Some hotels, such as Rhiga Royal, have also been promoting certain rooms as having an especially good view of the factories at night.

Many of the people who come to Kitakyushu for industrial tourism go on a factory tour during the day and a cruise to view factories at night. By combining these two activities, people are able to enjoy a full day in Kitakyushu. Lunch is often provided, as well as stops at other popular tourist destinations inside of Kitakyushu and environmentally themed locations such as Eco Town and the Environment Museum.

**Industrial Tourism Center:**

In July 2014, the City of Kitakyushu, the Kitakyushu Chamber of Commerce & Industry and the Kitakyushu City Tourist Association interconnected their tourism-related offices to better provide information about and plan tours for industrial tourism. The organization that they formed was given a new name, the Kitakyushu Industrial Tourism Center. The center was awarded a gold medal from the Japan Travel and Tourism Association for the “industrial tourism city planning award”.

You can visit the site they’ve made by using the following link (Japanese only): http://sangyokanko.com/

**Factory Tours:**

**Yaskawa Electric**, established in 1915, has a long history of building motors and robots. As part of the tour, you will get to see robots building robot, piece by piece in the production line. Also, in the Robot Plaza you can see many specially designed robots performing tasks such as neatly and efficiently packing luggage, or you can test your hand-eye coordination by trying to sort objects faster than a sorting robot!

**TOTO** has a long history of ceramics, originally making tableware and fine china. The company now is best known for its toilets and sinks. During the factory tour you will learn about the history of the company and see many examples of the products that it has made over the years. Also, in the factory itself you will get to see how the ceramic toilets and sinks are formed, fired in a massive horizontal kiln, and then run through a battery of rigorous inspections. If there is even the smallest near-invisible defect the product won’t pass TOTO’s strict quality standards. TOTO is also currently building a new museum that is scheduled to open in autumn 2015.

**Night Views:**

The "Iron Tree" is a 205m tall smoke stack that is part of Nippon Steel & Sumitomo Metal’s Yawata Works in Kokurakita ward. Unlike other factory night view locations, it is specially illuminated for tourism and cycles through five different colors. It was set up with donations from the citizens of Kitakyushu and is maintained by Nippon Steel & Sumitomo Metal. Illuminating the smoke stack was another part of Kitakyushu’s 50th anniversary celebrations and the name “Iron Tree” was chosen after asking for suggestions from the citizens. It lights up every Friday, Saturday and Sunday after the sun goes down and until 10 p.m.

**Mitsubishi Chemical Corporation** is considered to be the brightest factory night view in Kitakyushu. Here the factory produces numerous cutting-edge chemicals used in CDs, DVDs, automobile components, water treatment, and in semiconductor manufacturing. The three red and white smoke stacks are a symbol of the Kurosaki area and the flare stacks and countless pipes really give the feeling of a futuristic city. The night view can be enjoyed from many angles such as from the sea, nearby mountains, or even from the highway bypass.
Introduction:
Hello, my name is Hideyuki Kitano and I work for the Kitakyushu Chamber of Commerce and Industry.

What is the Kitakyushu Chamber of Commerce and Industry and its main objective?
All countries in the world have a Chamber of Commerce. They help to invigorate regional economies. Cities in Japan have a Chamber of Commerce and Industry, and these organizations are all established following the Japanese laws regarding Chambers of Commerce and Industry.

When did you get involved with Industrial Tourism? How did it come to happen?
In April 2011, the Industrial Tourism Promotion Office was formed and I was selected as its first executive director. Our mission is to attract both domestic and international tourists to Kitakyushu and to promote the city as an industrial tourism destination.

What kind of work do you do at the Industrial Tourism Promotion Office?
At its peak in 1979, Kitakyushu had a population of 1,070,000 people but in the last 30 or so years has dropped to 690,000 people. So, we started thinking about what to do about this drop in population. Getting people to change the city they live in is extremely difficult, so we focus more on the ‘non-resident population’, which refers to the people who come to visit and stay for a bit before returning home. One of our primary goals is to turn things into tourism resources, such as the factories in Kitakyushu. In doing this, we create a brand that is entirely unique to Kitakyushu.

How are citizens involved?
There are many retired people in Kitakyushu. We have been looking for retired people who would like to volunteer to be guides for the industrial locations in Kitakyushu. So far we have 40 people who are registered to do this. Also, by doing so they are able to feel civic pride for helping promote the city that they live in.

Have you been working to attract international visitors?
Yes, Japan has about 10 to 13 million international visitors each year. The goal for 2020 is to have that number reach 20 million people. We hope to also attract a large number of these people to Kitakyushu to see the industrial sites.

What are some goals the Industrial Tourism Promotion Office is working toward or hoping to accomplish in the near future?
In 2012, there were 260,000 people coming to Kitakyushu for industrial tourism. We are aiming for this number to be 500,000 by 2015. We also want to make Kitakyushu a more bustling city.

What is the Kitakyushu Chamber of Commerce and Industry’s main objective?
The Kitakyushu Chamber of Commerce and Industry’s main objective is to promote the city as an industrial tourism destination.

How do you contribute to the Industrial Tourism Promotion Office?
I would like people to come and enjoy the industrial tourism of Kitakyushu. There’s no other city like Kitakyushu in the world.

Executive Director
Industrial Tourism Promotion Office
The Kitakyushu Chamber of Commerce and Industry
Hideyuki Kitano

Kitakyushu Profile
Kitakyushu is a city in Japan with a population of 690,000 people. It is located in the Fukuoka Prefecture and is known for its industrial heritage.

Kitakyushu: Advancing Water Purification Part 2
Clean potable water is a topic that is relevant to everyone on the planet. Lack of clean potable water is a problem that countless people struggle with every day. There are new technologies for purifying water being tested here in Kitakyushu that could help bring easily accessible potable water to people around the world.

At the Water Plaza, a Membrane Bio-Reactor System (MBR) is used to treat sewage water before it is mixed with sea water. MBR is a sewage treatment process that combines biological treatment (activated sludge process) with membrane filtration. Microorganisms remove and decompose some of the pollutants from the sewage then membranes are used to separate microbes and other particles from treated water. When compared to a conventional Activated Sludge Treatment System, the MBR combines the Biological Treatment Tank, Sedimentation tank, and Chlorine Contact tank into a single tank, greatly reducing the footprint of the system and resulting in high effluent quality.

The water is then mixed with sea water that has been pushed through an Ultrafiltration Membrane System (UF). UF uses hollow fiber membranes that have a pore size of 0.1μm and a membrane area of 72m² per unit. The membrane is made of chemical tolerant materials (PVDF) and has a dual layer structure that reduces fouling and clogging, allowing the filter to be used consistently for long periods of time. Finally, the water passes through a Reverse Osmosis membrane which has a pore size of 0.001μm that removes nano-level impurities such as salts and ions.

The resulting treated water is pure enough to drink, even exceeding most standard regulations, but currently is not being used as potable water. The treated water from the Water Plaza is sent to nearby Kyushu Electric Power where it is used for boiler feed water. Kyushu Electric Power has stated that cleaning the boiler used to be a difficult task, but as the water from Water Plaza is so clean it has become very easy.

The ultimate goal is to sell the technology abroad, especially to nations that are having troubles with fresh water. In the first three years of operation they had 5,000 visitors, 1,000 of which were from 70 different nations. The successful testing of technology at Water Plaza brings the world one step closer to having clean potable water for everyone.
The Kawachi Area

Tucked away in the hills in the middle of Yahatahigashi ward is the Kawachi area. In the Kawachi area, there is a large private garden that has recently become internationally popular, an onsen (Japanese hot spring), a historic and architecturally significant dam, as well as a great deal of cycling and hiking paths around the artificial lake created by the dam. It’s a place where you want to get away from the city and you just want to get away from the city for a little while.

The Wisteria Garden has grown in popularity lately, and more people have been traveling from around the world to see the wisteria. The garden was opened April 4th, 1977 and covers an area of 3,310 square meters. The garden itself is made up of two wisteria tunnels that visitors stroll underneath as they climb up to the terrace area, a historic and architecturally significant dam, as well as a great deal of cycling and hiking paths around the artificial lake created by the dam. It’s a place where you want to get away from the city and you just want to get away from the city for a little while.

During their visit they had many experiences that would not be possible in Japan, such as having a courtesy visit with the mayor of Norfolk and touring Washington D.C. Also, during the exchange events with American youths, the students from the Kitakyushu group taught them some examples of Japanese culture such as origami and Japanese calligraphy. They had a lot of fun watching dance performances, performing their own coordinated dance routine, and dancing together with the other dance groups. The group also participated in several social gatherings and parties, which allowed them to get to know many Americans.

During the majority of their two week visit the group members stayed with host families. They were able to experience first-hand some examples of daily life in America as well as the kindness of the host families that welcomed them into their homes. During this program the participants were able to gain personal experience with what America is like and make many new American friends.

On the day of their departure when saying their farewells at the airport, there were members of the group with tears streaming down their faces, as well as many of their newly made American friends. There is no question that their two weeks in America will become a once-in-a-lifetime memory for the participants.

The Tacoma Gardening Project Continues

Tacoma, which is in Washington state in the U.S.A., and Kokura city signed an agreement to become sister cities in 1959 (Kokura later merged with neighboring cities to form Kitakyushu), and since then there have been many formal and informal exchange including youth exchange programs, education, and technical guidance.

In 2012, as a part of the total renovation of the Japanese garden in Point Defiance Park, which is in Tacoma, Tacoma requested the aid of Kitakyushu and the Kitakyushu Greenery Association (KGA) to draw up plans and provide technical guidance. In the past, the KGA assisted with building the Japanese garden at the Tacoma Community College in 1982.

First, the people in charge of the Japanese garden at Point Defiance Park visited Kitakyushu and received technical guidance and other training by members of the KGA. In 2014, 55 years after the sister city agreement was signed, as one part of the commemorative projects, Mizuno Sadaaki and Yano Toshiyuki from the KGA as well as city employees from Kitakyushu visited the Japanese Garden at Point Defiance Park for on-site inspections and planning consultation. In Tacoma, most of the time was spent on the on-site survey such as taking measurements of Point Defiance Park as well as exchanging ideas regarding the plans that the KGA had made. In addition, they inspected the stones that would be used in the new garden as well as visited Tacoma City Hall, which included a courtesy visit with the mayor of Tacoma, Marilyn Strickland. Also, in November 2014, the KGA created a blueprint for the renovation of the Japanese garden and presented it to the mayor of Kitakyushu. The blueprint was also presented to the city of Kitakyushu as a part of the 55th anniversary celebration of their sister city relationship.

The torii gate and miniature Shinto shrine that are installed at the Point Defiance Park Japanese Garden were given to Tacoma in 1960 by Kokura, and have been served as the symbols of the Japanese garden for over 50 years and continue to be carefully maintained to this day.

In the future, when the Japanese garden is completed, it will hopefully be loved by the people of Tacoma as a place of relaxation and as a symbol of the connection between Tacoma and Kitakyushu. Through this, the link between Tacoma and Kitakyushu will be strengthened even further.