

Portable Water Reuse System

WOTA BOX + Outdoor Shower Kit



Showers for all shelters

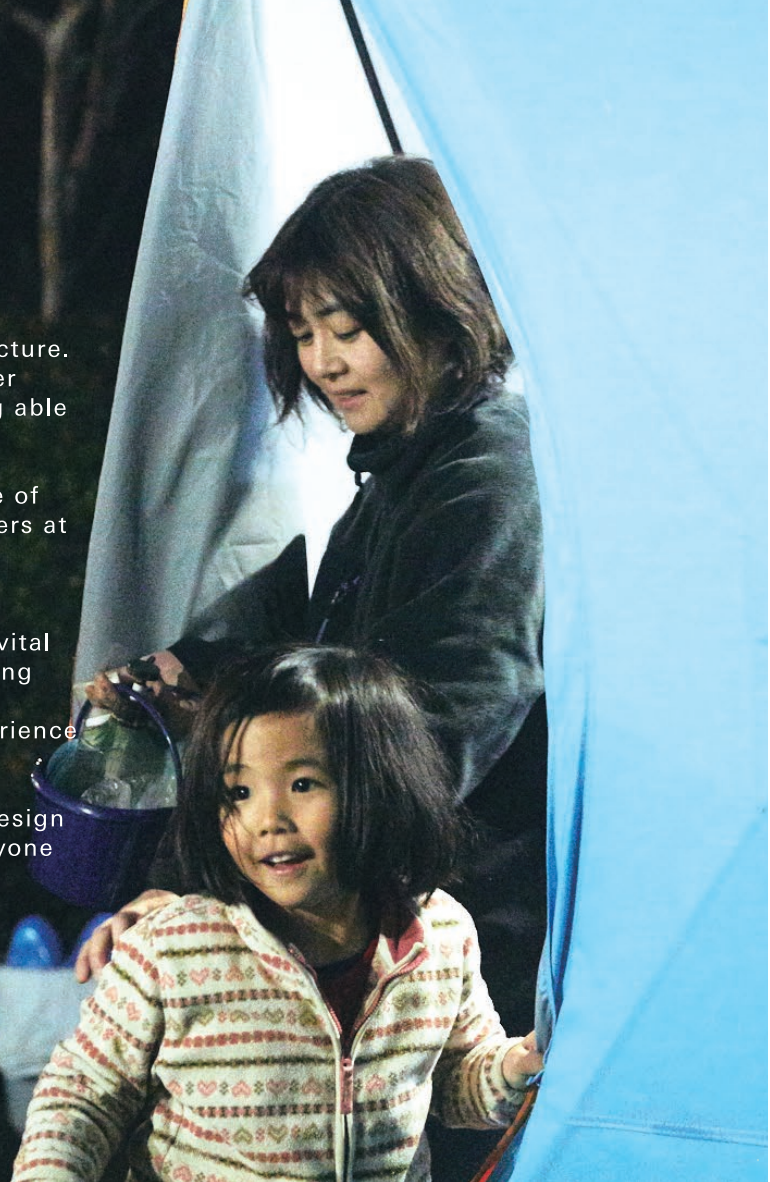
July, 2018. At Mabicho, Kurashiki city in Okayama prefecture. In spite of the summer's intense heatwave, many disaster victims and evacuees were ending the day without being able to wash off the sweat from their body.

Even though Japan is known for the frequent occurrence of natural disasters, people are not even able to take showers at many of the shelters.

The availability of showers should be like using a power generator or a mobile communication device to recover vital lifelines during a natural disaster. We thought that offering people a nice shower, even if the water supply and the sewage is shut down, would make their evacuation experience a lot less stressful.

Our goal is to create a future where we can utilize our design and technology and provide access to clean water to anyone and anywhere, even during a natural disaster.

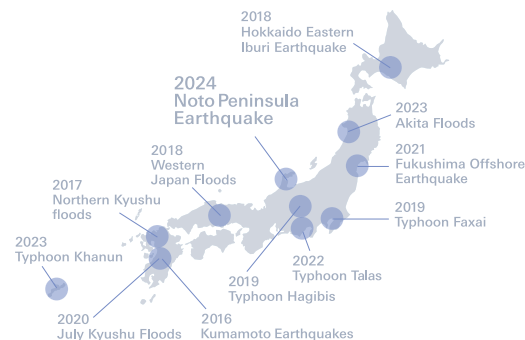
WOTA BOX is the first step to make our mission, "Water Freedom for Everyone, Everywhere" come to reality.



16 municipalities, 27 shelters
and 20,000+ people used WOTA BOX.

※ As of the end of December 2023

The water outage during natural disasters prohibits people from using water for hygienic purposes such as washing hands and taking a bath. At shelters and office buildings where workers are unable to return home, the hygienic environment worsens three days after the disaster due to the inability to wash hands and take baths. This leads to the spread of infectious diseases.



Case of infection prevention measures

From 2018 Western Japan flood

During the heatwave, there was a water outage, prohibiting more than 200 people to take a shower for over a week. This led to the hygienic environment becoming worse.

We set up two booths near the entrance and called out to the people coming back to the site to wash their hands and take a shower. We set up a system where the environment of the site can be kept clean at all times.



Case of a natural disaster

From 2019 Typhoon Hagibis at Nagano city



Floors of many houses were soaked because of the flood, and over 1000 people were forced into a long-term evacuation of more than a month.



We received request from the Cabinet Office and Nagano city, and set up 14 booths to the shelters sites in the city. This covered all of the bathing demands in the city.

Portable Water Reuse System

WOTA BOX



The “WOTA BOX” is a portable water reuse system designed to connect with various water sources, such as showers and handwashing stations. By efficiently recycling water, the WOTA BOX reduces waste, allowing just 50 liters of shower water to result in less than 1 liter of wastewater. This means that 100 liters of water can provide nearly 100 showers. The system requires no plumbing work and, with just a power source, can be quickly set up for comfortable water use. It is particularly useful in situations like natural disasters. Its autonomous water treatment technology ensures that users can always access safe water.

Clean Water Recycle

Recycle and reuse 98% of water

With our state-of-the-art water recycling technology, users can reuse more than 98% of water. During times when there is little water available, such as during a natural disaster, many people can use water many times.

Safe & Clean Water

Safe and clean water with autonomous water treatment technology

WOTA’s autonomous water treatment technology maintains water quality consistently above tap water standards. The system is designed with an autonomous control mechanism that prioritizes water safety and cleanliness.

When Showering with 100 liters of water

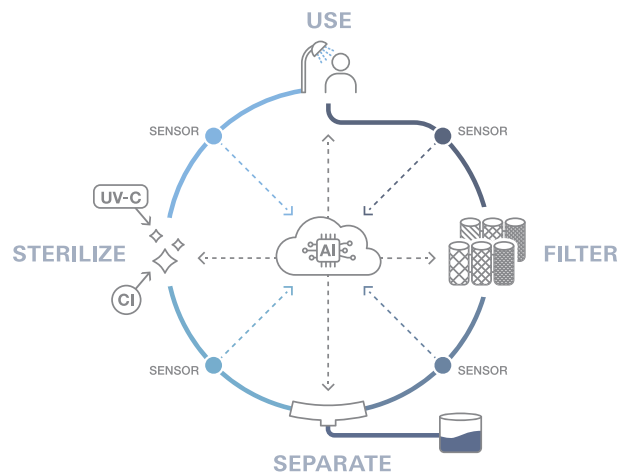
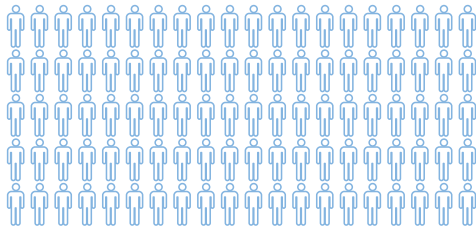
Regular Shower

With WOTA BOX

2
People



100
People



Product Specifications

Dimensions	Width 820mm × Depth 420mm × Height 933mm
Weight	82kg ^{※1}
Power	100V ~ 50/60Hz (Domestic use) ,500VA
Maintenance Frequency	Change filters every 50 showers ^{※2}
Use Environment	Outside temperature 5~40°C (No freezing) / Avoid direct sunlight (recommended) / Place on a flat surface

[※]Specifications and design may change without notice / ^{※1}In dry condition / ^{※2}Depends on the use conditions. For frequently changed filters. (Time required: approximately 5 min)

Product Performance

Water flow rate	4L / min
Purification flow rate	max 4L / min ^{※3}
Purified water quality	Conforms to the Japanese Water Quality Standards for Public Bathhouses ^{※4}
Water Temperature	37~50°C(with the use of a water heater)
Compatible water source	Tap water and any fresh water equivalent ^{※5}
Setup	Approximately 15 min, with 2 persons ^{※6}

^{※3}... depends on the raw water quality and the condition of the filter. / ^{※4}... "Guidelines for Water Quality Standards in Public Bathhouses" (December 15, 2000 launched 1811 edition Notification of the Director-General of the Lifestyle Health Bureau, Ministry of Health, Labour and Welfare, attachment 1) / ^{※5}... water from clear pool, fireproof water tank and wells, in addition to natural water such as rainwater and river water are also useable (not useable if it has soluble poison or hazardous substance in it). When using water other than tap water, the user needs to purify the water before use. The product is not for muddy water and seawater. / ^{※6}... numbers for reference

Major Use Cases



Nagano, Nagano Prefecture

A total of 14 units were delivered to shelters in Nagano City to cover the demand for bathing for a month and a half after the sewer system was damaged by Typhoon Hagibis 2019.



Noto Peninsula, Ishikawa Prefecture

Deployed 100 units in response to the 2024 Noto Peninsula Earthquake that cut off water supply to the entire peninsula. We have provided sustainable and speedy support to help people in evacuation centers operate our products in autonomous manner at all locations where we have deployed them.



Fujieda, Shizuoka Prefecture

Actively incorporating our products into the daily lives of citizens at soccer events, disaster drills, etc., so that they can use them without hesitation in times of emergency.



Futtsu, Chiba Prefecture

Met the bathing needs of the elderly and others with our WOTA BOX, which is maneuverable in an area where many narrow roads make it difficult for the Self-Defense Forces to enter to provide bathing assistance.



Nikko Shoji Co.

The new “nikko” pachinko hall was designed as a “disaster prevention-specific store” that can be used by local residents in the event of water outages or other emergencies, appealing to the company's contribution to the local community.