



# TEBRIX

## TEBRIX WATER TECHNOLOGY

The company Tebrix Water Technology focuses on the development of specialized equipment for water treatment and filtration. The systems treat water from any contaminated source for potable, commercial and operational use. The treatment processes take place without input water analysis.

Technology division:

- Stationary systems
- Mobile systems
- Water desalination



## Stacionary systems

Stationary systems represent permanently installed technical equipment in buildings. The purpose of these units is to ensure a continuous supply of high-quality drinking water in a wide range of building structures, including small-end large-capacity shelters, residential and apartment complexes, commercial complexes (such as hospitals, educational facilities, hotels, etc.) and public administrative buildings.

These systems are designed to ensure the supply of drinking water even in the event of a contaminated water source. Tebrix Water Technology uses two proven water treatment technologies – ozone and low or medium pressure UV systems. Our stationary water treatment plant effectively treats water from radionuclides, biological and chemical warfare agents, drug residues, microplastics, bacteria, viruses. Water that has been treated with a stationary unit can even be of a higher quality than baby water sold by regular suppliers. The water treatment plant further removes mechanical impurities, dissolved substances and microorganisms from the water through processes such as sedimentation, filtration, coagulation, flocculation, biological treatment and disinfection.

This ensures that the water is suitable for drinking, industrial purposes and other applications. The water treatment plant thus improves the quality and safety of the water we use. The devices can be supplemented with Remote Computer Supervision (RCS – Remote Computer Supervision.) for maximum convenience.

In smaller water treatment plants, these systems are designed to supply water to groups of 5 or more people. In contrast, larger stationary units in larger complexes have the capacity to provide drinking water for even thousands of people.

Stationary water treatment plants are essential for state infrastructure such as the Parliament, Government Office, Prague Castle, Embassies, Ministries etc., they fulfill the complex task of ensuring the continuity of water supply within strategic buildings. Their primary mission is to prevent potential terrorist threats, such as the targeted contamination of water supplies.





## Mobile (container) systems

This innovative mobile water treatment plant system is a transportable platform that can be easily transported by trucks or towed trailers. This type has wide possibilities of use in humanitarian projects such as refugee camps and field hospitals, in rescue operations in areas affected by ecological accidents, natural disasters and in infrastructure disruptions when sources of drinking water are contaminated.

The mobile system also finds its application in the context of conflict situations, where there is a risk of intentional contamination of water sources with biological or chemical warfare agents and radioactive fallout. The equipment is transported to the affected area and connected to a local source of contaminated water, from which clean and high-quality drinking water is subsequently produced. The application spectrum of the device therefore also extends to areas with limited access to clean water, where it is able to solve the lack of drinking water for large populations in a short period of time. The system enables the purification and recycling of wastewater and is also intended for hospitals and laboratories with specific requirements for water purity.

The equipment is designed in 20- or 40foot containers and trailers.

The mobile water treatment plant represents a highly sophisticated technological system that demonstrates the ability to achieve water quality at a comparable level as its stationary counterpart. This unit integrates a wide range of physical, chemical and biological processes that are designed to correlate with technological standards in the field of water treatment. They ensure the consistent elimination of unwanted contaminants, turbidity, dissolved substances and the microbial spectrum. Thanks to this, it is able to generate a water product with a high degree of quality, which contributes to maintaining the safety of drinking water and ensuring compliance with normative parameters of health and hygiene suitability.



## Desalination systems

Desalination of seawater is a valuable tool for overcoming the problems of lack of quality drinking water, especially in areas that are threatened by this lack. However, it is important to implement this technology with sustainability and long-term positive consequences for regions and the environment in mind.

Water from boreholes (salty, sweet and brackish) is filtered to the level of drinking and utility water. Drinking water is piped to all connecting devices (washbasin, sink, shower, bathtub, swimming pool, dishwasher, kitchen, laundry, pools, whirlpools, etc.). Drinking water can be bottled and served under a private label in the given hotel resort.

Raw water is filtered and purified on physical principles, without the use of chemicals, including ozone sterilization. Comprehensive delivery incl. biological wastewater treatment plants enable the purification of this water and its recycling for further use.

For example, in a hotel resort in Zanzibar, the daily treatment of salt water for drinking is 150 m<sup>3</sup> of water, but we provide the amount of treated water according to the customer's wishes. In addition to hotel resorts, it can be used for manufacturing, industrial and food industries.

Treatment rooms can be located in the technical room, or they are delivered to order in modified containers. Each modification is approached individually, and claims are calculated separately for each modification shop, technical support and warranty and post-warranty service are a matter of course.

