MOBILE, PORTABLE CONTAINER-TYPE
DRINKING WATER FILTRATION SYSTEM WATEX MWTP

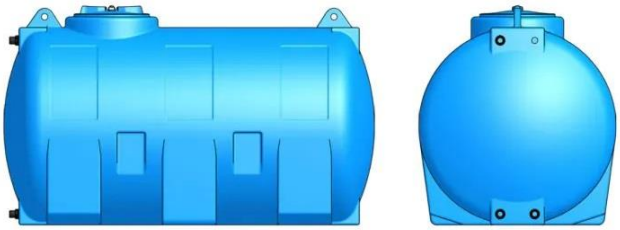
Main quality and technical indicators of the water filtration system:

- Filtration system purify dirty, polluted, unknown quality brackish water to clean water suitable for drinking and food use.
- MWTP made as much as simple for users. Plug and play system. All is automatic. Just merge tube into the water start engine and go.
- Water filtration system capacity: 2000 liters per hour.
- Water storage volume: 5000 liters.
- Water supply capacity: 3000 liters per hour.
- Multi-stage filtration system for long-term operation.
- The water filtration system is movable from site to site using a cargo truck and a manipulator for transporting 20' containers.
- Autonomous power supply from a petrol generator for station operation.

Description:

Mobile, portable container-type drinking water filtration system with water intake, purification, storage, and dispensing or refilling equipment.
The device purifies 98% of pollution present in water thanks to a multi-stage filtration system. The water filtration system operates autonomously and does not require connection to a central power grid. A multi-stage purification system is used in the water filtration system – sediment filtration through 90-micron filters, sand filter columns for purification up to 1 micron, activated carbon filtration for adsorption of organic substances, petroleum products, odors, etc., reverse osmosis membrane filtration, which removes the finest pollutants in water to a molecular level, both chemical and microbiological, including heavy metals and radioactive contamination.
The system includes an petrol power generator that provides all the power supply for the station.
Polluted brackish water from ponds, lakes, rivers, and canals can be used for water purification. The filtration system is prepared ready for operation before delivery to the customer, assembled, filters filled with filter media and tested.
The installation of water filtration system pipelines is carried out using PE or PVC pipes, flowmeters, sampling points, brackets, flow control, and regulation equipment.
The water filtration system comes with a user manual in English and spare parts, replaceable and additional reagents, Waters bags with volume 5 liters to fill with pure water and distrubute to consumers.
The service life of the water filtration system is more than 10 years if operated according to the manufacturer's instructions.
Technical personnel with engineering knowledge is required for the operation of the equipment, capable of monitoring station operation and controlling the quality, normal water, and electricity supply. Periodically, the station requires replacement of activated carbon filtration material and ultraviolet lamps, replenishment of antiscalant, and refueling of fuel in the generator.

Description of components:

	A new 20-foot sea container with dimensions: length 6.06 meters, width 2.44 meters, and height 2.40 meters. The water filtration system is placed inside the new sea container for easy transportation both by waterways and roadways. The sea container is insulated from the inside. Anti-slip aluminum plates are laid on the floor. Electrical installation is installed in the container – lighting, sockets, ventilation. The entire filtration system is mounted on frames to prevent tipping and splitting during transportation.
	A clean water reservoir made of Polyethylene with a capacity of 5000 liters, non-pressurized, with inspection hatches, inlet and outlet connections, and overflow lines. Equipped with visual water level control.
	Petrol generator for supplying electricity to the water filtration system – for lighting, pumps, meters, control systems, ventilation. 3-phase. 6 kW. Generator power can be adjusted.
	Raw water petrol motor pump with a vacuum suction function for water extraction from any water reservoir not less than 5 meters deep. The pump is placed close to the water source and delivers water to the filtration system through an above-ground pipeline.
	ATLAS HYDRA RAH M sediment DUAL filter set with flushing function and purification level up to 90 microns, for coarse sand, living organisms, humus filtration. Stainless steel sieve. Equipped with pressure gauges for pressure loss control.

	WATEX QC sand pressure filters for filtering the finest sediment particles up to 1 micron level. Flushed with a manual control system. Two columns in parallel to divide the flow and the possibility to filter water with one column while flushing the other column simultaneously.
	WATEX MC activated carbon filter columns, 2 pieces, for adsorption of organic substances, petroleum products, odors, etc. Flushed with a manual control system. Provides additional pre-filtration for the reverse membranes
	WATEX WRO2000 reverse osmosis system with a production capacity of 2000 liters per hour for high-purity water extraction. Thanks to the fine pore membrane, water is purified to a molecular level from both chemical and microbiological contaminants. The equipment is made of stainless steel frame, WILO high-pressure pump, stainless steel and PVC pipes, control units. ONLINE water quality measurement and alarm indication for dirty water.
	WATEX UVS45 After the clean water reservoir, an Ultraviolet Radiation Sterilization device is installed, ensuring microbiological safety for water supply.
	The second stage pump Grundfos ensures the supply of clean drinking water from the reservoir for filling.