

MOBILE WATER TREATMENT SYSTEMS

*Operate Anywhere with WatMan Plug-and-Play
Containerized Water System*



Safe Drinking Water

Reliable Source of Process Water



WatMan

Plug-and-play water in any environment

WatMan Engineering, later WatMan, has two decades of experience in designing and fabricating portable water treatment systems built inside ISO cargo shipping containers.

The basic concept of our containerized treatment plants is the ready-to-operate installation of the plant inside a container, to allow the fastest possible installation on site. Plants in one or several 20 and 40 foot containers are available – also in insulated construction with additional heating for arctic regions or ventilated and chilled for hot areas.



WatMan technology enables mobile water purification from virtually any water source

WatMan has designed, manufactured and executed several dozens of automated water purification systems that are proven to perform with feedwater supplied from wells, lakes, rivers, or the open sea.

All individual products in our range of water purification systems are capable of producing any amount of potable water or process water between 1 and 2000 m³/day. The containers can be easily stacked together or installed in parallel.

Fields of application

WatMan offers a variety of mobile water treatment systems for supplemental or temporary requirements. Our mobile system solutions are available in a full range of applications such as Flotation, Softening & Filtration, Reverse Osmosis, Seawater Desalination, Ultraviolet Disinfection and more.

Our flotation, filtration and/or membrane based technology can remove suspended solids, colour, bacteria, cysts, viruses, dissolved components and other contaminants to provide pure, clean and safe drinking water, process water and/or all water utility purposes.



Power plant in Cape Verde

Mobile water from drinking water bottling to power plants

Easy to start up

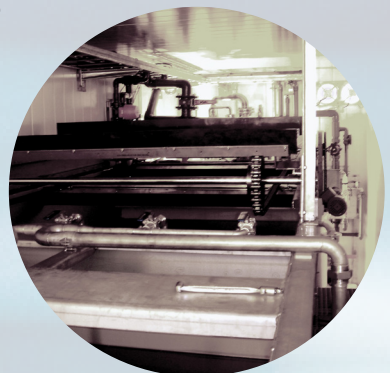
Our systems are completely pre-fabricated in our production facility in Lahti, Finland. After intense testing the plants are packed for road and/or sea transport. Fast coupling systems and the supplied perfectly fitting installation material like pipes, hoses and cables allow a fast setup and immediate service after positioning the containers at their place of operation. Our 20 & 40 foot, even high-cube, containers include insulation, air conditioning, heating, lighting for comfortable working environment, flooring and fine internal and external finishing details.

In a process sense WatMan Systems can include and are not limited to the following:

- Booster Pump Stations (with variable frequency drives)
- Flotation
- Media Filters including Activated Carbon
- Chemical Injection
- Ultrafiltration
- Nanofiltration or Reverse Osmosis (RO) with Energy Recovery
- Ion Exchange or Electrodeionisation (CDI, EDI)
- Ultraviolet Disinfection (UV)
- PLC Controller with Color Touch Screen



Reverse Osmosis



Flotation

Benefits

ROBUST *though sophisticated*

Containerized plants have many advantages over built-in plant room installations:

- Plug-and-play unit - ISO containerized system
- Lower capital cost
- Quick installation – lower installation cost
- Limited civil work (only container foundation) with a small footprint
- Easy transportation – mobile flexibility, easy maneuverability
- Turnkey delivery including integrated process and mechanical equipment, piping, electrification and automation
- Mounting brackets throughout the container for securing equipment
- Central connection point(s) for all piping and electrical connections
- Lighting system, ventilation, air cooling and heating equipment, passage door with a lock
- Water corrosion resistant flooring system with non-slippery painting
- Heavy-duty water resistant and nonflammable insulation throughout the interior



Electrodeionisation



Siemens and Omron components

Key elements of WatMan mobile systems

- **Tailor-made systems to meet any product quality from virtually any natural water source**
- **Fully automatic plug-and-play water system**
- **Precise engineering design for trouble free operation**
- **Use of high quality components and materials**
- **Minimum operator attention for maintenance and service**
- **All equipment assembled in an externally robust, though internally sophisticated shipping container to supply water within 24 hours from arrival at site**
- **Production capacity: 1-2000 m³/day**
- **Low energy consumption with minimal chemical consumption**
- **From Arctic to Sahara - environment temperature -40 .. +45 deg C**

Container dimensions



Size	Length (m)	Width (m)	Height (m)
20 ft	6,06	2,44	2,59
20 ft high cube	6,06	2,44	2,89
40 ft	12,2	2,44	2,59
40 ft high cube	12,2	2,44	2,89



WatMan Engineering Ltd Oy

Laatukatu 16

15680 LAHTI

FINLAND

www.watman.fi

info@watman.fi

tel. +358 20 7417 255

WatMan