GF Piping Systems

Flowise

Potable Water Solutions

From source to tap

Flowise is a comprehensive drinking water solution, offering high-quality, cost-efficient products supported by experienced and trusted experts. These professionals assist water network specialists in delivering safe and clean water.

GF's extensive expertise and knowledge in manufacturing potable water products and solutions have resulted in a wide range of offerings for water networks. The potable water range includes tailor-made and standard-compliant solutions designed to support long-lasting investment projects.

Certified for potable water

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Robust solutions built on Weholite

- Weholite is a durable pipe design built to last with a life span of more than 100 years
- GF is a global leader in Weholite design and production, with over 40 years of experience. We provide customer-specific dimensions of up to 3500mm in inner diameter
- The Wehopanel bottom ensures that chambers are protected against uplifting caused by high groundwater without requiring any additional anchoring
- Weholite is delivered with a white inner layer to facilitate easy inspection and provide a safe and efficient working environment.
- The Weholite pipe system is certified by Nordic Poly Mark for dimensions up to 3000mm (SN4/SN8)
- The double-layer construction provides double protection against leaks. All watertight products are tested to ensure the construction is 100% leak-proof.

Accessories/ Components

A wide range of accessories can be installed to meet the customer's specific needs. Below is an example of the components that can be selected for tanks and chambers.

- **Ladder**
- **Ventilation**
- **Radiator**
- **Light**
- **Sink**
- **Selection of covers for green areas and road installation**
- **Drainage**

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Products for water preparation

Products designed for groundwater preparation are ideal for their purpose. The use of polyethylene Weholite tanks ensures a very long lifespan, protects process equipment, and reduces maintenance requirements.

Alkalization tank

Low alkalinity can increase corrosion in the network by causing iron to dissolve from the network's materials. Filtration of water through crushed limestone increases both pH and alkalinity. This is a safe process, as overdosing is not possible. The alkalization process is cost-effective and requires only a minimal amount of energy.

The alkalization tank ensures

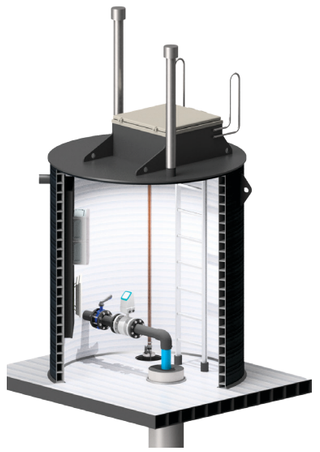
- A safe and clean process for increasing the alkalinity of water
- The use of limestone, eliminating the risk of overdosing
- A patented solution to enhance carbon dioxide removal as part of the alkalization process

Borehole protection chamber

A borehole protection chamber includes a groundwater pumping station, which lifts water from the groundwater source to a level above ground for treatment or distribution.

Our protection chamber offers:

- A robust and watertight design
- Underground construction, remaining out of sight from the public
- Equipment tailored to customer specifications

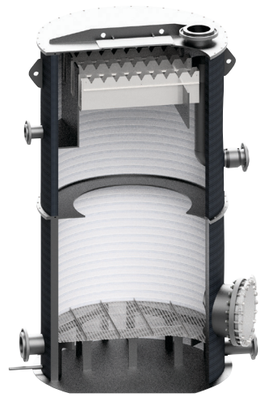


Aeration tank

One of the most common methods for removing iron and manganese from water involves aeration followed by filtration and diligent backwashing.

The Aeration Tank

- Reduces carbon dioxide and odors
- Precipitates iron, manganese, and other substances
- Increases pH prior to a potential alkalization step
- Features a patented solution to enhance carbon dioxide removal



Products for water storage

Water storage products can be delivered as a single unit, ready for installation, with capacities of up to 200m^3. This minimizes installation time on-site. Larger tanks are assembled on-site by GF's welding experts, ensuring the entire construction is seamless and free of joints.

Fire Water Tank

Fire water tanks can be requested for both commercial and residential properties when municipal distribution capacity is limited.

- Fire water tanks store water to ensure sufficient local capacity for firefighting
- Designed to meet individual needs
- A pumping station can be included in the design

Individually designed for specific use cases

Reservoir Tank

Reservoir tanks are used to store drinking water both at water treatment facilities and throughout the mains network.

A reservoir tank:

- Increases capacity by balancing daily variations
- Is individually designed to meet specific use cases
- Can be equipped with or without a pressure boosting station
- Offers versions suitable for agricultural or industrial purposes
- Is easy to inspect

Products for water distribution

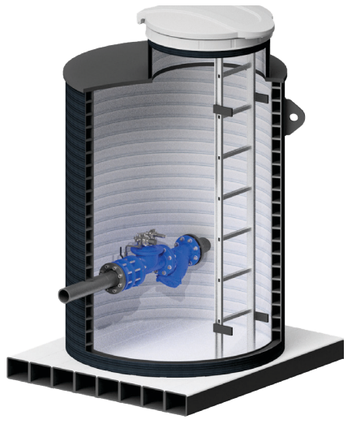
Technical chambers are customized to meet the customer's specific needs. Equipment is selectively chosen in collaboration, following the component policy. Pre-installed chambers ensure high quality and minimize installation time on-site.

Pressure reducing chamber

A water distribution system is designed to ensure that pressure remains within defined limits to serve all users effectively. Topographical differences within the area often necessitate dividing the system into different pressure zones. Excessive pressure increases the risk of pipe leaks and water loss.

Pressure reducing chamber

- Contains equipment to limit pressure to a desired level, reducing the risk of pipe bursts
- Is typically installed in lowland areas to prevent overpressure
- May include sensors for pressure monitoring and other functions



Pressure boosting station

A pressure boosting station increases the pressure in a water pipeline when the pressure from the water tower is insufficient to supply water to consumers. This is commonly needed in areas located on high ground, far from the water tower, or in regions without a water tower in the water system.

Pressure boosting station

- Can be delivered as a standalone unit or integrated into a reservoir tank
- Can be customized based on the customer's specific needs and requirements

Products for Water Distribution

Valve chamber

Valves are used to control the flow of water within a section of the network. In a water distribution system, which often includes redundant paths, valves are typically used to direct flows in the desired direction. Sections of the network may need to be closed for maintenance or in response to leakages.

Benefits

- Extends the lifetime of the equipment
- Reduces maintenance needs and associated costs
- Can be equipped with an anchoring bracket for the valve package, molded into a reinforced concrete slab, to mitigate pressure surges

Air release chamber

Air release valves are used in pipelines to eliminate unwanted air and maintain optimal system performance.

Benefits

- Enables air to be released from the media pipe
- Allows air to enter if the pipe is emptied from water
- Can be designed for in-line or off-line installation

Prefabricated products ensure high quality and fast installation

Pigging chamber

Over time, deposits and sediment can accumulate in potable water pipe networks. Pipe bursts can also result in debris building up inside the pipes. Pigging is a method used to scrape off deposits and remove them from the pipe walls. While pigging is a relatively straightforward process, it often requires significant preparation time and excavation to access the pipe.

Benefits

- Provides easy access to the media pipe for flushing or cleaning
- Can serve as an entry or exit point, depending on the design
- Reduces preparation time by eliminating the need for excavation or pipe cutting

Measuring chamber

A measuring chamber is a protective unit hosting various types of measuring equipment. The most common are mechanical
consumption meters or digital flow meters connected to an automation system. Typical monitored parameters are flow, pressure and temperature. A measuring chamber is ideal when designing district metering areas (DMAs).

GF Piping Systems

Local support around the world

Visit our webpage to get in touch with your local specialist:
www.gfps.com/our-locations

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