

Gravity Filters



WestTECH[®]

 **SWIRE WATER**

Gravity Filters



Gravity filters are used for municipal water, wastewater, and industrial applications. Gravity is used to move the water through a filter bed made up of various types of media including sand, anthracite, greensand, and/or granular activated carbon, depending on a plant's water treatment needs. When deciding between a pressure filter and gravity filter, consider that gravity filters are both easier to inspect and more economical. The hydraulic profile of the plant determines whether a pressure filter or gravity filter is better.

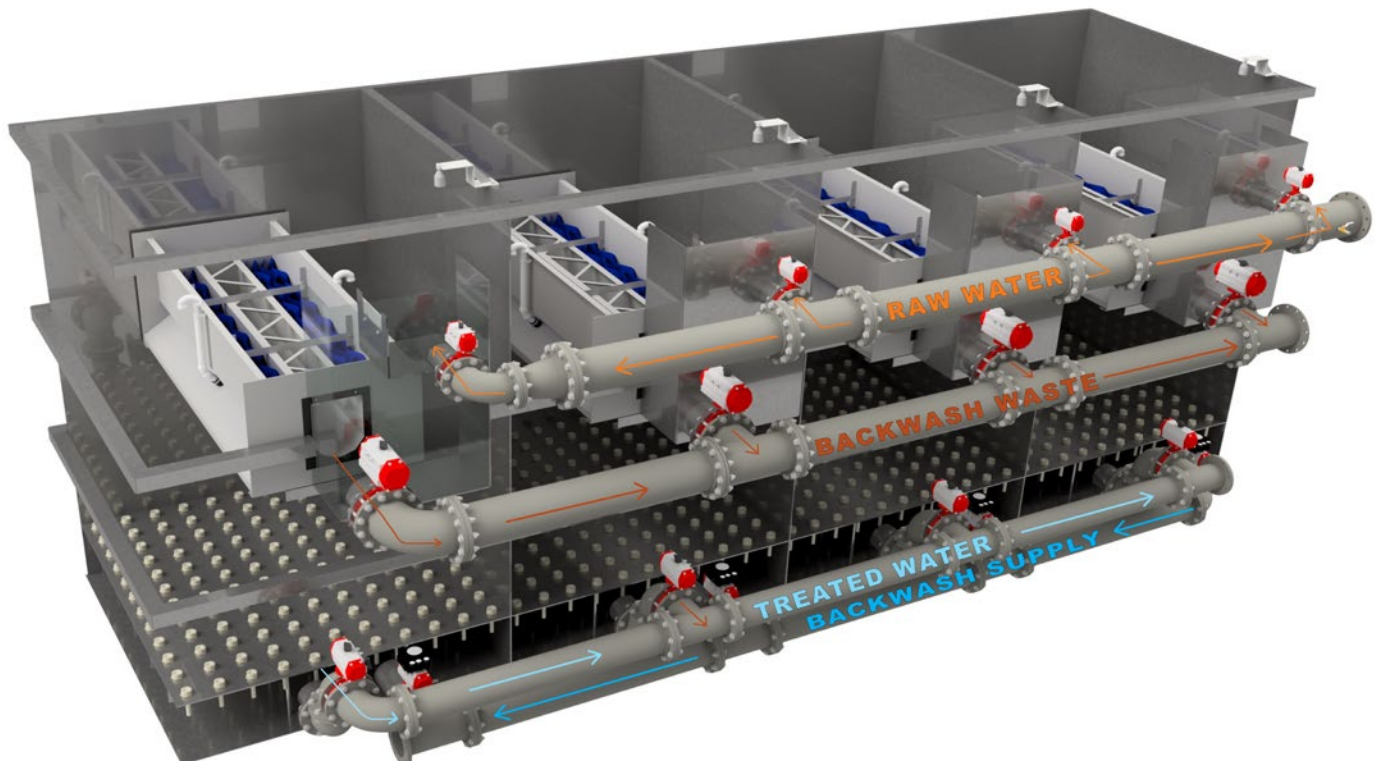
Why Choose WesTech?

WesTech has been designing gravity filters for well over 20 years, and with the acquisition of General Filter, now has a combined experience of over 80 years. WesTech provides global municipal, industrial, and minerals clients with reliable and cost-effective process solutions for water treatment, liquid/solids separation, and biological treatment needs. For over 45 years, WesTech has collaborated closely with both customers and industry, delivering on project commitments in a way that meets company principles of integrity and quality.

Configurations

WesTech gravity filters are available in a variety of configurations and designs that can be customized to meet various constraints:

- Water quality, footprint, backwash requirements, and flow requirements can vary based on specific applications or a customer's preference
- The filter designs can be either circular or rectangular
- Filters can be either single or multi-cell
- Systems can be designed for self-contained backwash storage, eliminating the need for backwash pumps



Backwash Systems

Underdrain

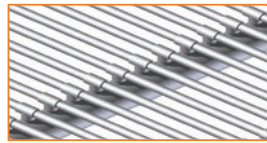
- **MULTIBLOCK®**
 - Features a dual lateral design for even distribution during filtration and combined air-water backwashing processes
 - Utilizes the Laser Shield™ technology, a stainless-steel plate with laser cut slots for direct media retention
- **Flat Plate False Bottom** allows for ease of access to the media retaining nozzles for maintenance and allows the underdrain to be used to distribute backwash air
- **Header and Lateral** provides PVC or stainless steel design options with multiple choices for media retaining nozzles or perforated laterals



MULTIBLOCK® Underdrain



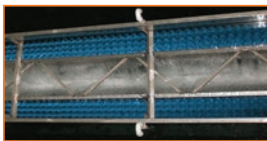
Flat False Bottom Underdrain



Header and Lateral Underdrain

Overdrain

- **MULTIWASH®**
 - Combines air and water simultaneously for the duration of the backwash
 - Provides vigorous scouring action to clean the media, while specially designed wash trough baffles are used to eliminate media loss
- **Trough** allows for conventional process for air followed by backwash



MULTIWASH® Overdrain



Trough Overdrain

Tank Material Options

- Aluminum: No paint, lower maintenance
- Carbon Steel: Most cost effective
- Stainless Steel: No paint, lower maintenance
- Concrete: Larger flows with fewer units

Applications

Municipal

- Surface and Ground Water Filtration
- Iron and Manganese Removal
- Tertiary Filtration

Industrial

- Cooling Tower Makeup Water
- Surface Water Treatment
- Plant Process Water

Media Options

Sand



Commonly used in municipal and low turbidity applications

Anthracite



Commonly used for arsenic removal

Greensand or Manganese ANTHRA/SAND™



Commonly used for manganese removal

Deep bed coarse media



Commonly used in industrial and wastewater applications



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Tel: 801.265.1000
westech-inc.com
info@westech-inc.com
Salt Lake City, Utah, USA

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