## **Municipal Solutions**

Equipment for Water and Wastewater Treatment







### WesTech offers engineering process expertise to achieve the best solutions for water treatment in a world with critical water needs.

Our decades of experience in equipment engineering and passion for problem solving means we have the complete range of equipment to provide our customers with not just a solution, but the best solution.

Founded in 1973 with over 500 employees around the world who deeply value the trust our customers place in us when they choose WesTech.

WesTech has been operating for more than 45 years and now counts more than 15,000 installations worldwide.

We are proud that the equipment and systems we **design**, **build**, **maintain**, **and operate** are making the world a better place and creating a more sustainable environment for future generations.

WesTech's core purpose is to provide process equipment and water technology solutions to benefit humanity. This commitment means we form long-term working relationships to meet and exceed client expectations. Attitudes, behaviors, and decisions are further shaped by WesTech's six distinct core values, which are:

- Exhibit Honesty and Integrity
- Value our People and Their Families
- Provide Superior Service
- Make and Keep Commitments
- Take Pride in Doing the Right Things, and in Doing Them Well
- Achieve Productivity Through Hard Work and Intelligence



### Global Response

WesTech equipment includes the support of a global network of experienced engineers and qualified sales agents, representing offices and partnerships throughout the world.





## **Industry Leader**

**Broad Capabilities** 

Aftermarket Support

## **Quality Water Treatment**



WesTech helps customers treat challenging water sources by implementing sound solutions with quality process equipment. Customers benefit from WesTech's process expertise to produce better water for the communities they serve around the world.

#### Groundwater

WesTech offers a wide variety of equipment for groundwater treatment for potable use. Whether your treatment objective is gas removal, iron and manganese removal, color removal, softening, or even filtering a source under the direct influence of surface water, WesTech has your solution.

#### **Surface Water**

WesTech offers a holistic approach to surface water treatment for potable use. Depending upon the raw water quality, flow rate, and operational preferences, WesTech can provide conventional treatment systems, combination treatment units, package plants, high-rate processes, or even customized solutions.

### Superior Customer Service, Support, and Quality

We take pride in our work and stand behind every project. Our quality standards translate to longer life cycles and lower maintenance costs. Customers experience trouble-free construction because we shop-assemble equipment prior to shipment to the site. WesTech keeps your plant running with services such as:

- Complete plant audit
- Electrical / programming
- Equipment installation
- Field service
- Full-service parts department
- Lab testing
- Pilot plants
- Trouble shooting
- Upgrades and retrofits











# over 4,000 water installations



#### 1. Aeration

Aeration is an effective and low-cost solution to oxidize iron and manganese. It can also provide high-efficiency removal of gases such as hydrogen sulfide, carbon dioxide, methane, and volatile organic carbons, which results in better process performance and/or improvement of taste and odor.

#### 2. Flocculation and Clarification





Source waters with moderate-to-high turbidity and/or organics require pretreatment. WesTech can provide conventional layouts with separate flocculation and clarification, or combination units such as solids contact clarifiers and even high-rate processes that can squeeze into very small footprints. Need soft water? No problem, WesTech does that too.

#### **3. Filtration**

Filters come in all shapes, sizes, and configurations. WesTech will help you select the right filter. This might include a cluster filter with self-generating backwash, packaged steel tank filters, pressure filters, or even a membrane filter. Selecting filter internals such as underdrains, washtroughs, and media is just as important, and WesTech has more options and expertise than anyone else in the market.

#### 4. Thickening

Gravity sludge thickeners are an easy and costeffective approach to minimizing the volume of waste solids. Our experts size thickeners to achieve the highest concentration of sludge with the smallest footprint.

#### 5. Backwash Recovery

Water conservation is an important consideration in today's water treatment plants. Spent filter backwash treatment can easily be incorporated into your plant design or existing facility. WesTech solutions can result in a water recovery efficiency of >99%.

#### Package Systems

These self-contained plants are well-suited to tight spaces, reach high flow rates per unit area, and provides lower capital cost than conventional systems.



WesTech reestablished two respected brands in water treatment: Microfloc<sup>®</sup> and General Filter. Microfloc developed the Trident<sup>®</sup> package plant technology that is now part of the WesTech group of brands.

One of the many possible WesTech water treatment flow schemes.

## Proven Wastewater Solutions



Since WesTech's formation on the heels of the 1972 Clean Water Act, the company has become a global leader in municipal wastewater treatment. We have thousands of installations providing clarification, biological treatment, anaerobic digestion, tertiary treatment, thickening, and stormwater treatment.

**High Rate Treatment:** Our solutions can minimize your required footprint and meet your treatment needs.

**Nutrient Removal:** We implement solutions to remove nitrogen and phosphorus from your wastewater effluent to improve the environment downstream.

**Water Reuse:** We have many treatment options to achieve reuse quality water. Whether you want to reuse the water for landscaping or sell it to local industries, WesTech can help you profit from your water resource.

**Resource Recovery:** In addition to water reuse, our treatment processes result in other by-products for beneficial use. WesTech systems can provide Class A biosolids for land application and methane gas for power generation.

### Rental and Temporary Units

Mobile water or wastewater treatment equipment can provide an immediate solution for interrupted service.

Meet your temporary, emergency, and testing needs with WesTech's fleet of rental equipment. Our mobile, containerized, and skid-mounted units can be on site within days. They are easy to install and offer a quick setup. Contract time frames can be as brief as one month, or as long as a year or more.

- Containerized Reverse Osmosis Systems
- Containerized Ultrafiltration Systems
- Mobile Clarifiers
- Mobile Pressure Filters
- RapiSand<sup>™</sup> Ballasted Flocculation





# over 7,000 wastewater installations





#### 1. CSO/SSO Treatment

WesTech offers equipment and solutions for combined sewer overflow (CSO) and storm sewer overflow (SSO) systems for those communities where excessive wet weather events can overwhelm the treatment plant.

#### 2. Primary and Secondary Clarification

WesTech's name is synonymous with innovative sedimentation solutions for primary and secondary clarification. WesTech's vast experience, testing, and research of the clarification process provides clear effluent, increased overflow rates, and thicker underflow concentrations.

#### **3. Biological Treatment**

With the most efficient and reliable treatment processes available, WesTech can customize each biological treatment system to achieve your plant's discharge needs.







#### 4. Thickening

Thickeners improve the operation of your digestion process. WesTech's gravity thickeners and rotary drum thickeners have a proven history. For biological nutrient removal applications or sites with limited area, dissolved air flotation thickeners offer many advantages.

#### **5. Anaerobic Digestion**

Whether for waste-to-energy or for conditioning of biosolids prior to disposal, WesTech offers complete digestion systems. WesTech's systems provide effective and reliable solids storage, heating, and mixing of biosolids, as well as the capture of biogas to convert into usable energy.

#### 6. Tertiary Treatment

With growing demand for high-quality effluent and the reuse of treated wastewater, WesTech has your solution. WesTech offers a full range of tertiary treatment equipment for new construction, plant upgrades, and in-basin retrofits.

One of the many possible WesTech wastewater treatment flow schemes.

6





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

© WesTech Engineering, LLC 2023