

# TITUS TWISTER<sup>®</sup> MIXING AERATOR

CHEMICAL FREE ODOR, F.O.G. & RAGGING CONTROL



PATENTS  
US9533900  
CA2909759A1

**TITUSWWS.COM** | **877.582.9899**



**TITUS**  
WASTEWATER SOLUTIONS, INC.



## THE CHALLENGES

# ODOR • F.O.G. • CORROSION • RAGGING

High levels of hydrogen sulfide (H<sub>2</sub>S) gasses, acids, and other chemicals produced from untreated municipal and industrial wastewater can cause odors, corrosion and other safety concerns, as well as costly maintenance, repairs, and replacements of equipment.

Also, F.O.G. (fats, oils, and greases), inorganic solids, pharmaceuticals, and waterborne pathogens will impact the overall "health" of your collection systems.

Problematic waste streams from breweries, restaurants, food processing plants, and industrial discharges create challenges to entire collection systems and wastewater treatment plants.

## THE SOLUTION

The TITUS Twister provides chemical-free, effective mixing, mechanical breakdown of solids and the proper aerobic conditions for wastewater pre-treatment.

### Our unique patented design includes:

- AirLift technology
- Perforated membrane diffuser
- HDPE blades
- Stainless steel components
- High quality regenerative blowers
- Protective enclosures
- Optional ozone generator systems



## THE BOTTOM LINE

**Twister systems are the next generation of mixing and aeration for your wastewater applications.**

The TITUS Twister employs our passion, experience, and patented cutting-edge technology to deliver superior results, for lower costs, and less effort.

Twister systems are also pre-engineered, meaning technical support, sizing, and specifications are available and easy to apply to projects.

### What sets us apart:

- Provides greater aeration *and* more effective mixing
- Eliminates odors without use of chemicals
- Designed and manufactured for durability
- Easy to install and operate (up and running in as little as an hour)
- Requires less maintenance than comparable solutions
- Provides tremendous and demonstrable savings in time and costs
- TITUS Twisters are available as Diffused Air Only or Ozone Enhanced systems





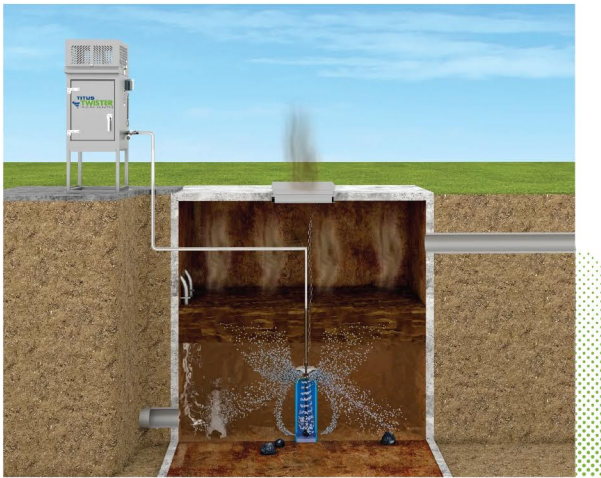
# AERATION ELEVATED

## SPECIFY TITUS TWISTER TO GET THE JOB DONE

### TITUS Twister Diffused Air Models

*For F.O.G., Ragging and moderate odor challenges*

The **TITUS Twister Diffused Air** models are designed to resolve moderate odors, eliminate F.O.G., and prevent ragging and blockages. Streamlined designs make it easy to size, specify and install. Standard Twister heads, regenerative blowers, and a variety of enclosures are readily available. Installation, operation and maintenance are straightforward and simplified.



### TITUS Twister Ozone Enhanced TT-Series

*For F.O.G., Ragging and extreme odor challenges*

The **TITUS Twister TT-Series** models are the perfect solution for applications with extreme or varying odor issues. TT-Series systems are capable of providing ozone output ranging from 10gph (grams per hour) to 40gph. These ozone enhanced systems include Primary Modules, which are adjustable; and Secondary Modules, which provide additional ozone as needed.

## ENCLOSURE OPTIONS



FIBERGLASS



ALUMINUM



STAINLESS STEEL

## AIR SOURCE CONNECTION OPTIONS



EPDM HOSE



STAINLESS STEEL HARDDPIPED

## TESTIMONIALS

“For 13 years we have been searching for ways to control odor and FOG, other than chemicals and costly carbon scrubbers. Since installing a TITUS Twister our odors and FOG are gone!”

**T. Bybee, Supervisor, Yuba City**

“The smell is gone! Thank you to those who made the decision to create a plan and execute it, using a TITUS Twister, eliminating the stench in our neighborhood!”

**M. Testerman, Resident, Bend OR**



# TITUS® TWISTER® MIXING AERATOR

## APPLICATIONS

Pump Stations  
Lift Stations  
Wet Wells  
Pretreatment Manholes  
Wastewater Treatment Plants  
Decentralized Wastewater Systems  
Other locations requiring efficient  
aeration and/or mixing

## ADVANTAGES

Reduces odors  
Resolves fat, oil and grease issues  
Prevents ragging and blockages  
Decreases corrosion  
Keeps solids suspended  
Easy to install, operate, and maintain  
Eliminates or reduces the need for chemicals  
Extends life cycle of pumps and equipment



## PATENTED TITUS TWISTER TECHNOLOGY

1. Air is generated by a properly sized, regenerative blower located in the enclosure.
2. The air is delivered via EPDM hose or stainless steel piping down through the manifold. For enhanced odor control, ozone may be introduced to the water column during this stage of the process.
3. Air exits the manifold through narrow perforations in the membrane diffuser, creating fine air bubbles that transfer oxygen into the liquid.
4. A vortex and air lift column is created within the barrel which forces liquid and solid materials to draw up into the static HDPE shear blades and flow deflector plate. Solids are broken up and directed back into the cycle.
5. Liquid and solid materials are continuously drawn in through the ports located at the bottom of the barrel, resulting in constant suspension of materials within the structure.



MANUFACTURED BY  
**TITUS®**  
THE NEXT GENERATION OF WASTEWATER SOLUTIONS



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