



#### THE CHALLENGES

## **ODOR • F.O.G. • CORROSION • BLOCKAGES**

High levels of hydrogen sulfide (H2S) 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.

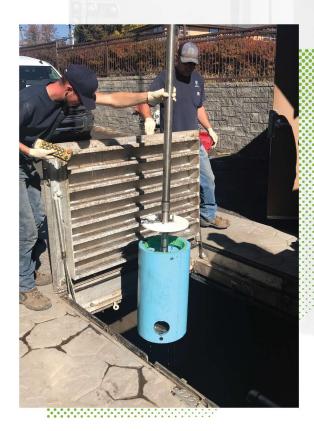
Problematic waste streams from breweries, restaurants, food processing plants, and industrial discharges create challenges to entire collection systems and wastewater treatment plants.

#### 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
- CSM 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

# CHEMICAL FREE ODOR & F.O.G. CONTROL TITUS TWISTER TT SERIES

Ozone enhanced systems offer an effective, safe, natural, solution for odor and F.O.G. challenges.

The TITUS Twister - TT Series is 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. The TT-20 model incorporates a Primary Module, is adjustable, and generates ozone output of 10gph, 15gph, and 20gph. The Secondary Modules are available and increase ozone output up to a total of 40gph. They may be included during the initial commissioning, or as an easy add-on for even more robust odor control.

- Project Specific Design and Sizing
- Efficient Corona Discharge Generation Technology
- Safe, Natural, Efficient Odor Control

- Adjustable Ozone Output
- · Temperature & Humidity Climate Controlled
- Secure, Durable Enclosures



#### **ENCLOSURE OPTIONS**



**FIBERGLASS** 



**ALUMINUM** 



STAINLESS STEEL

#### AIR SOURCE CONNECTION OPTIONS



**EPDM HOSE** 



STAINLESS STEEL HARDPIPED

#### **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!"
- 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

T. Bybee, Supervisor, Yuba City



#### **APPLICATIONS**

- Odor & F.O.G. Control
- Disinfection
- Wastewater & Stormwater
- Pump & Lift Stations
- Pretreatment Manholes
- Wastewater Treatment Plants
- Decentralized Wastewater Systems

### **ADVANTAGES**

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





# PATENTED TITUS TWISTER TECHNOLOGY

- Air is generated by a properly sized, regenerative blower located in the enclosure.
- 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 CSM membrane diffuser, creating 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 ports located at the bottom of the barrel, resulting in constant suspension of materials within the structure.



