



Model
BOWTS

BOWTS

Bilge and Oily Wastewater Treatment
Systems

The BOWTS Treatment Systems provide a variety of flexible chemical/physical treatment scenarios where bilge wastestream volumes are generated.

The BOWTS Series **Bilge and Oily Wastewater Treatment Systems** are designed to implement a wide variety of flexible chemical/physical treatment scenarios to fit shipping/naval treatment requirements for shore-side treatment installations.

In the reduction of emulsions, solids, metals, oils and fuels chemistry is important and dependent on the wastewater makeup and requires jar testing to verify proper chemical recipe(s). Typical chemicals used: ferric, alum, polyacrylamide flocculants, NaOH, H₂SO₄, calcium hydroxide.

The BOWTS systems by design encompass a system family with a wide variety of equipment configurations and combinations dependent primarily on US Naval specifications.

Due to wide configuration variability and size it's difficult to provide a single BOWTS layout as THE standard as this flexibility is at the heart of the system concept.

Naval & commercial engineers can choose from a vast array of equipment and components for combinations to fit installation, water and project cost requirements.

Technology Selection:

- ◆ DAF (Dissolved-Air-Flotation)
- ◆ Oil Water Separation (coalescing)
- ◆ Chemical Pretreatment
- ◆ Coagulation, Flocculation, pH
- ◆ De-watering Screw Press
- ◆ LET (Load EQ Tank)
- ◆ AFFF Monitoring System
- ◆ Hydro-pneumatic Water Supply
- ◆ MCC Controls
- ◆ Feed, Sump, Sludge, Oil Pumping Systems
- ◆ Sludge Preconditioning Systems
- ◆ Oil Storage Tank
- ◆ Post Filtration
- ◆ Alarming Systems
- ◆ SCADA Systems

Typical applications:

- ◆ Naval Shipping Bilge Offload
- ◆ Commercial Ship Bilge Offload



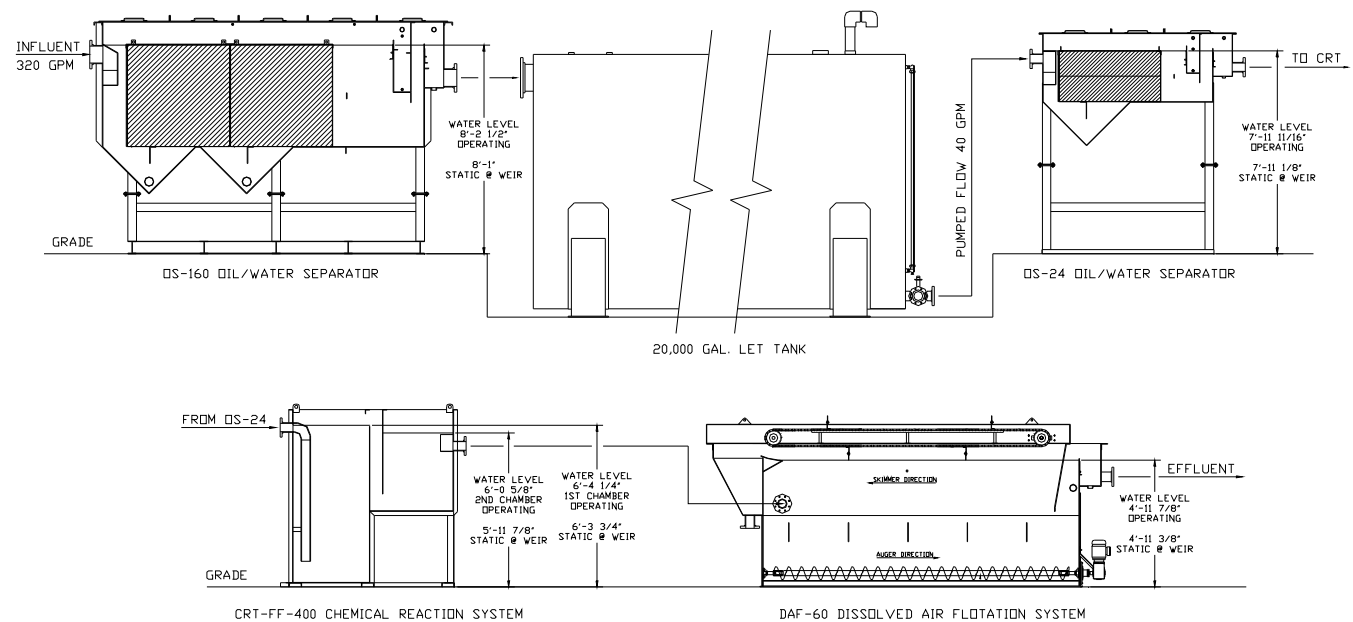
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Meet Discharge Requirements

The use of a bilge and oily wastewater treatment system can help facilities meet pretreatment standards for discharges of wastewater to a POTW (40 CFR 403) or meet the effluent limits of an NPDES permit (40 CFR 122). In addition, this treatment process may help facilities meet the requirements of waste reduction under RCRA (40 CFR 262) and Executive Order 13148. It may also help facilities reduce the amount of regulations they must comply with for the management of hazardous waste i.e., recordkeeping, reporting, inspections, transportation, and accumulation) under RCRA (40 CFR 262).



Controls

The MCC controls typically provide:

- pH controller
- Mixer variable speed
- Automatic/manual pump control
- High/low level alarms
- DAF Auger on/off control
- DAF Drag skimmer variable speed
- Chem pump on/off
- AFFF monitoring & alarm
- Hydro-pneumatic control
- Screw press control
- Nema 4X enclosure
- 480V/3ph/60 Hz power req'd

