

Effective Removal of Pollutants from Oily Bilgewater.

**WETT-O** uses a novel, compact and efficient electrochemical coagulation reactor to separate nearly all oil and grease from bilgewater.

## Wastewater Electrochemical Treatment Technology

### CERTIFICATION OF COMPLIANCE WITH 46 CFR 162.050 – Oil Pollution Prevention Equipment Compliance with the requirements of MARPOL Annex I

- Free and Emulsified Oils • Grease • Heavy Metals • Suspended Solids
- Organics • Bacteria • Detergents • Phosphorus



*Type Approved by USCG/Transport  
Canada/IMO MEPC.107(49)*

*Treats to 5 ppm or 15 ppm for  
discharge at sea*

*Shipboard Tested*

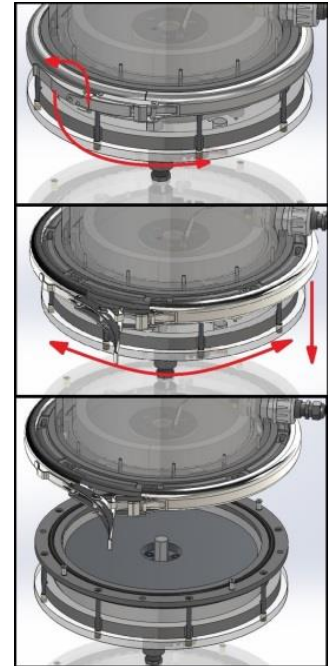
*Chemical-Free and Filter-Free*

*Fully Automated Operation*

*Removal of Toxic Heavy Metals*

*Removal of Deleterious Phosphorus*

*Low Oily Sludge Generation Rate*



**Simple electrode change-out  
In less than 15 minutes**

### Important Features of WETT-O™

- WETT-O consists of a compact free oil separator (FOS) and a proprietary electrochemical purification technology (EC)
- Treatment performance unaffected by ship motions
- Self-cleaning electrochemical process
- Push button start-up, continuous treatment
- Automated operation with remote monitoring
- Generates half the sludge of oily water separators using chemical coagulants.
- Can be used with a Clean Water Holding Tank as presented in MEPC.1/Circ.642, to decouple treatment from discharge for greater operational flexibility.
- State-of-the-art laser-induced fluorescence OCM that detects oil and not other contaminants.



**Bilgewater vs. Treated Effluent**



### TECHNICAL SPECIFICATIONS: WETT-O 6.1

#### DIMENSIONS

Total Dry Weight & Footprint	451 kg (995 lbs) 0.9 m (2.9 ft) x 1 m (3.4 ft) x 1.5 m (5.1 ft) (W x D x H)
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#### OPERATING CONDITIONS

Nominal Throughput	1.44 m <sup>3</sup> /d (380 gal/d) for 5 ppm discharge 2.16 m <sup>3</sup> /d (560 gal/d) for 15 ppm discharge
Liquid Temperature	4-55 °C (39-131 °F)
Ambient Temperature	< 40 °C (104 °F), control cabinet must be air cooled if T > 40 °C (104 °F)
Types of Wastewater	Bilgewater, oily-water

#### UTILITIES / CONSUMABLES

Electrical Consumption	<1 kW (230 or 440VAC/60Hz)
Aluminum Electrodes	Replacement every 3 months (varies depending on bilgewater generation rate and contamination level)
Fresh Water	4 L/min at 16 psi (1 gal/min) for automatic shutdown cleaning procedure (take 30 mins)
Dilution Air	40 L/min (85 CFH) for dilution of gaseous emission

#### EMISSIONS

Gaseous	Total flow approximately 0.16 L/min (0.34 CFH) H <sub>2</sub> at 30 °C (86 °F)
Treated Effluent	Typically 1.35 m <sup>3</sup> /d (361 gal/d) for a nominal wastewater throughput of 1.44 m <sup>3</sup> /d
Oily Sludge	Typically < 5% of the nominal wastewater throughput
Audible	Negligible
Surface Temperatures	Less than 35 °C (95 °F)



1.4 m<sup>3</sup>/day (left) and  
7.2 m<sup>3</sup>/day (right)  
versions.

Specifications are  
included for the  
smaller version.



**USCG and ABS  
Certified**