

## Potable Water Treatment

### Features

- **Unique cartridge housing will never corrode.**
- **Cartridge housing mounts on left or right side of frame.**
- **Remote operation and tank selection.**
- **Uses NSN 4610-01-022-9970 replacement cartridges.**
- **MIL-STD-167 vibration and MIL-S-901 shock qualified.**
- **All-bronze pump with IEEE-45 motor.**
- **Comprehensive technical manual included.**
- **Manual DPD (diethyl-p-phenylene diamene) colorimeter test kit included.**

### Description

The Howell Laboratories Model 6550 Recirculating Bromination System was designed to purify drinking water for U. S. Coast Guard 110' cutters. It meets or exceeds all its design specifications and incorporates improvements not previously available on any bromination system. The system consists of a rugged, below-deck, bulkhead-mounted, brominator/pump assembly, fully compliant to MIL-S-901D high-impact shock (Grade 8) and MIL-STD-167-1 (Environmental) vibration requirements. The all-bronze pump and corrosion-resistant fittings throughout are designed for reliable service and long life. The standard unit is alternately aligned with one of two potable water tanks, but can easily be configured for any reasonable tank number or size. Tank alignment is achieved by solenoid valves activated by a switch on the remote control panel. When treating a tank, a portion of the pumped flow is diverted through a cartridge containing bromine-impregnated resin. The bromine dissolves into the water stream and enters the storage tank, disinfecting the potable water with its biocidal action.

The cartridge housing is manufactured of a high-strength technical plastic, and will never corrode. This non-metallic composition ensures long life and reliable service. The housing can be easily mounted on either side of the brominator, minimizing required access space. The unit conveniently uses government-standard replacement cartridges, NSN 4610-01-022-9970.



The electrical control panel can be mounted remotely, providing an extremely user-friendly installation. For example, the brominator/pump assembly can be mounted in a less accessible bilge area, while the control panel can be conveniently located in a stateroom or passageway.

The standard control panel includes the pump start/stop station, tank selector switch, and an indicator of the bromine feeder status. A totalizer keeps track of bromination time, as an aid to the operator in determining bromination status in the tank being treated.

A fully automatic bromine level control system (BLCS) is also available. The automatic system provides continuous, real-time measurements and maintenance of the total bromine residual (TBR) level, eliminating guesswork, retesting, and over- or under-brominating. Contact the factory for details.

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## Specifications:

**Dimensions:** Bromination unit: 30.5" W x 16" D x 30" H  
Remote electrical panel: 9" W x 9.5" 1) x 30" H

**Weight:** Bromination unit: 170 lbs.  
Remote electrical panel: 25 lbs.

**Capacity:** Two tanks of 50 - 12,000+ gallons each\*

**Operating Conditions:** Ambient temperature: 32° F to 120° F  
Water temperature: 32° F to 105° F  
Pump flow rate: 15 gpm  
Operating pressure: 30 psig  
Proof pressure: 100 psig

**Cartridge Housing Proof Pressure:** 150 psig

**Power Requirements:** 440 VAC, 3-phase, 60-Hz, 5 Ampere (110 VAC control circuit power provided by an internal transformer)

## Available options (please contact factory):

- Automatic bromine level control system.
- Remote alarm signal for cartridge replacement.
- 115/230 VAC power supply.
- Variable number of tanks.
- Electronic DPD colorimeter test kit.
- Additional cartridge housing for increased capacity.\*

\* Actual capacity is dependent on many variables; please contact factory with your requirements.