

## Dockside Chlorinator

### Features

- Retards bio-fouling of seawater intakes, filters, pipes, and coolers.
- Small lightweight footprint for dockside applications.
- Free-standing.
- Treats auxiliary and main seawater systems on submarines while in port.
- No hazardous chemicals required.
- Designed for continuous operation.
- Electrolytic cell is designed to be self-cleaning.

### General Description

The Model 8850 Mk II Dockside Chlorinator is an electrolytic chlorine generator designed to provide point-of-use protection against bio-fouling in dockside applications at construction and overhaul facilities.

The 8850 Mk II is free-standing and easily installed near a seawater intake. Requiring only seawater and electricity to operate, the 8850 Mk II uses an electrolytic cell to produce a simple, natural form of chlorine – sodium hypochlorite – on demand. Sodium hypochlorite has long been recognized as a superior anti-fouling agent against both micro- (bacteria, slime, algae) and macro- (mussels, barnacles, etc) fouling agents which can greatly restrict the flow and efficiency of cooling water for auxiliary seawater (ASW) heat exchangers. This application of additional biocide is particularly important in modern piping systems that employ high-strength, light-weight alloys such as titanium rather than conventional copper-nickels.

The 8850 Mk II incorporates more than 45 years of Howell Laboratories, Inc. experience designing and building fluid processing equipment for the US Navy. With proven capabilities for producing equipment to meet the most demanding US Navy shock, vibration, EMI and welding requirements, all HLI equipment is designed for reliability and low maintenance.

### Specifications

#### Capacity:

Produces approximately 1 lb (454 g) equivalent chlorine per hour, enough to treat 2,800,000 gal (10,800 M<sup>3</sup>) of seawater per day to 1 ppm.

#### Inlet Seawater Conditions:

- Temperature: 28 - 105° F (-2° - 40° C)
- Pressure: 20 - 80 psig (138 - 552 kPa)
- pH: 7 - 8.5
- Flow rate: 7 - 30 gpm (26.8 - 113 l/min) nominal
- Total dissolved solids (TDS): 20 - 38 grams per liter salinity

#### Electrical Requirements:

- 480 VAC, 3-phase, 60-Hz

#### Environmental Conditions:

- Ambient temperature: 0° - 122° F (-18° - 50° C)
- Ambient relative humidity: to 100%

#### Dimensions and Weight (approx):

- Dimensions: 41" (104 cm) W x 38" (96.5 cm) D x 46" (117 cm) H (includes room to open front cover)
- Weight: 700 lb (318 kg) calc.



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