

USN Potable Water Treatment

General Description

The Model 7060 Mixed Oxidant Electrolytic Disinfectant Generator (MEDG) uses the "hardened Commercial-Off-the-Shelf" (COTS) approach for the most effective, most economical way to protect a ship's water supply. HLI manufactures these units under license from MIOX Corporation® (www.miox.com). More than 500 MIOX® systems are in use in the U.S. by the National Park Service, municipal water systems, and industry.

The Model 7060 produces a supply of mixed disinfectants using only salt and a little electrical power. The controller supervises every aspect of operation and provides full diagnostics, requiring minimum operator intervention. In normal operation, the operator merely adds salt to the unit occasionally.

The Model 7060 has been selected for the LPD 17 class, LHD 8, and LHA 6, and for retrofits on the carrier fleet. It is or is being qualified to the full gamut of shipboard environmental requirements, including high-impact shock, vibration, EMI, and airborne noise. All ILS elements are being put into place.

Design features include no tapered pipe threads, for reliable freedom from leaks. All non-metallic wetted materials are certified to NSF-61, 42 or 44 for drinking water. Cell life is typically five years or longer.

The Mark II version features easy disassembly for hatchability through a 36" x 38" hatch.



Model 7060 Mark III

	Mark I	Mark II	Mark III
Application:	LPD 17 Class	CV / CVN	LHD 8, LHA 6
Output Capacity:	0-4 lbs per day free available chlorine (FAC) - about 250 gal/day of disinfectant Treats about 480,000 gal (1800 M ³) of potable water per day to 1 ppm		
Utility Requirements:	115 VAC, 60 Hz, single phase, 20 amperes		
Air Requirements:	150 psig max., 2 scfm		
Water Requirements:	10 - 12 gph distilled water at 35 - 75 psig to operate the electrolysis system		
Other Material Requirements:	Solar (rock) salt; once-a-week loading (typical large ship: one 80# bag per week)		
Dimensions:	32 in D x 56 in W x 57 in H		32 in D x 62 in W x 57 in H
Weight:	825 lb dry; 1108 lb wet	990 lb dry; 1222 lb wet	1111 lb dry; 1377 lb wet
Disinfectant Injection:	(standard) Venturi injector with booster pump		
Disinfectant:	Mixed oxidants include free available chlorine and other chlor-oxygen species		

Specifications

Environmental Qualifications: High-Impact shock per MIL-S-901D, Grade B.

Vibration per MIL-STD-167-1.

Electromagnetic Interference (EMI) per MIL-STD-461D.

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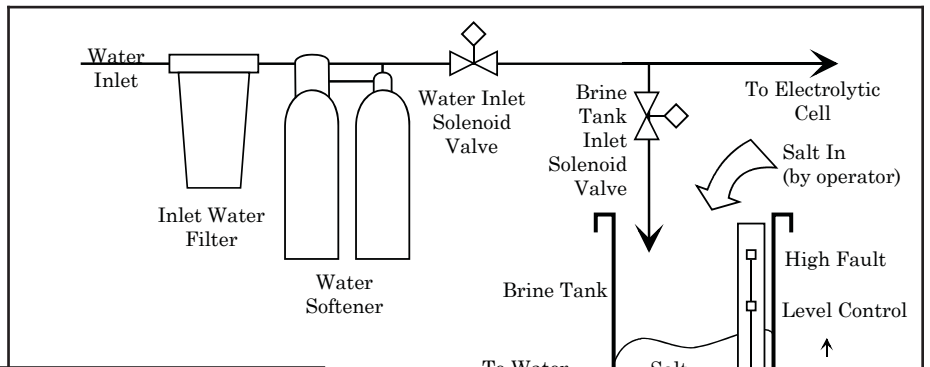
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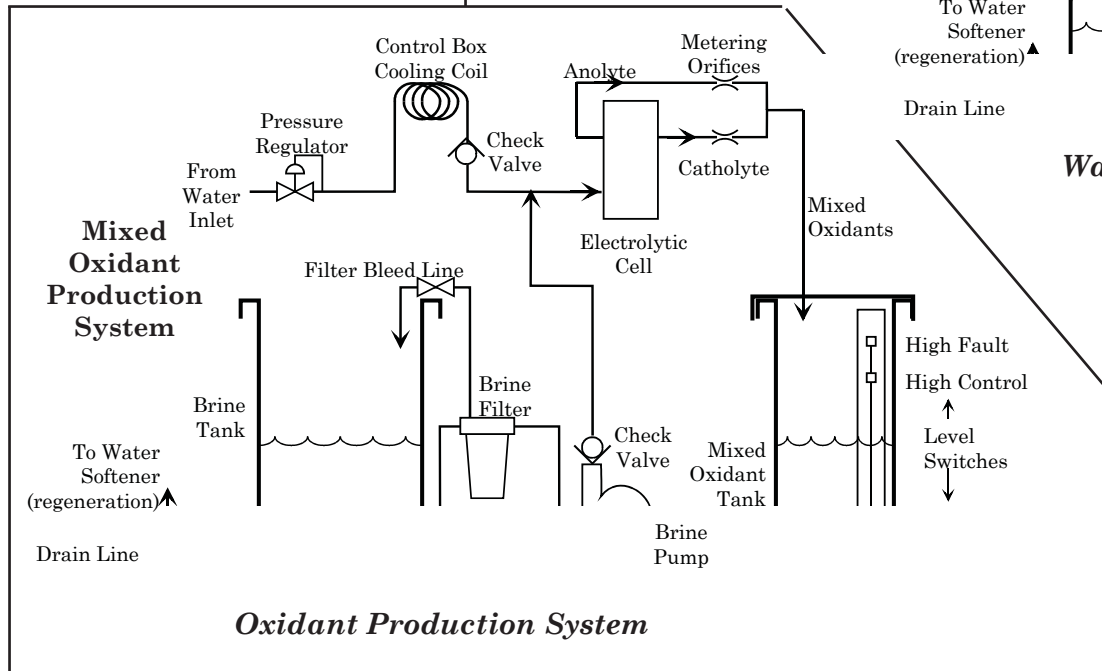
web: www.howelllabs.com

Certified to ISO 9001

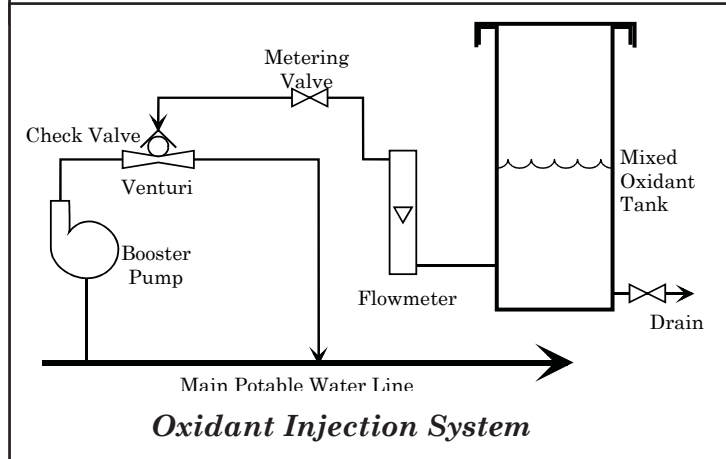
See also technical bulletin 'tb-edg_footprint.pdf' for the mounting footprint and the locations of piping and electrical connections of the various 7060 versions.



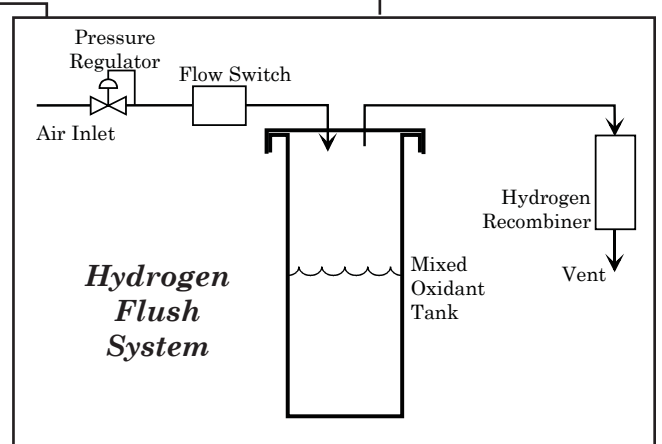
Water Inlet System



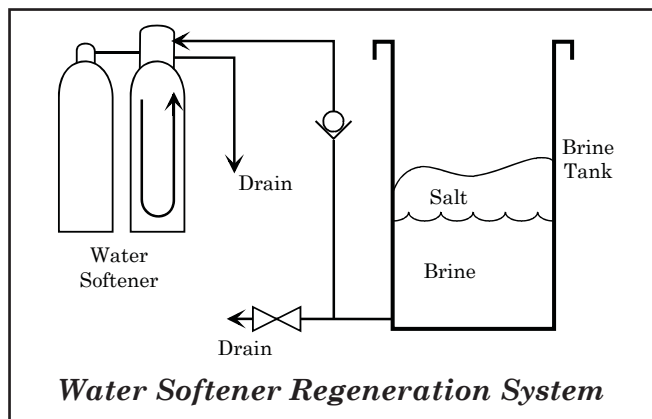
Oxidant Production System



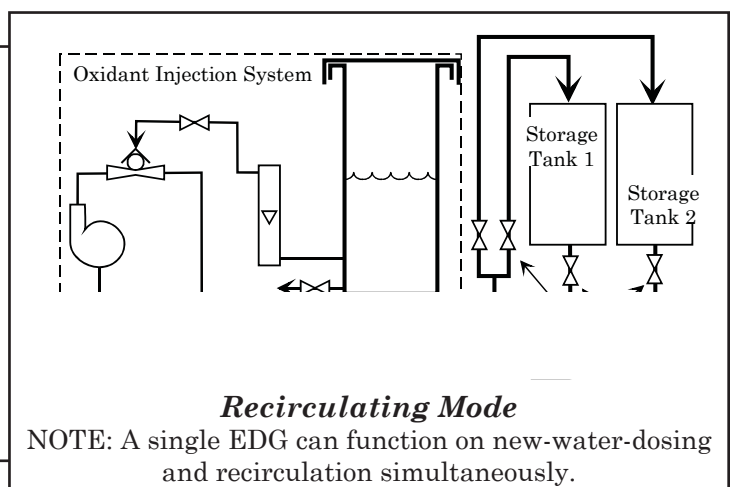
Oxidant Injection System



Hydrogen Flush System



Water Softener Regeneration System



Recirculating Mode

NOTE: A single EDG can function on new-water-dosing and recirculation simultaneously.