

Bulkhead-Mounted MEDG

Features/benefits:

- **Simultaneous inline and recirc treatment.**
- **Semi-automatic following initial startup, or fully automatic with added internal chlorine monitor and recirculation skid.**
- **Compact; bulkhead-mounted to accommodate surface combatants (i.e. DDG 51, CG 47, LCS, FFG 7, LSV 7) as well as larger platforms.**
- **MCS interface.**
- **Easy access for loading salt.**
- **Minimal operator training required.**
- **Advanced diagnostic capability/troubleshooting.**
- **Modular; disassembles for hatchability or separate installation.**

General description:

The Model 9130 Mixed-Oxidant Electrolytic Disinfectant Generator (MEDG) is an on-demand on-site mixed-oxidant generator, designed to be capable of disinfecting two sources of water simultaneously using an injection process, with minimal operator attention. The MEDG is an electrically operated, package-type (bulkhead-mounted) unit ready for operation (turn-key system).

The MEDG uses granular or pellet salt (sodium chloride) and potable water as inputs to produce a concentrated disinfectant solution in an electrolytic cell. The disinfectant solution is metered into the discharge from the ship's desalination plants as an initial disinfectant and/or metered into recirculated water from the ship's potable water tanks to maintain the proper level of disinfectant.

Specifications:

Built in accordance with MIL-STD-22D weld joint design; S9074-AR-GIB-010/278 fabrication welding; T9074-AS-GIB-010/271 NDT.

Designed using P-5010-6 standards for potable water; NSF 60 drinking water treatment chemicals; and NSF 61 drinking water system components.

Designed to meet MIL-S-901D high-impact shock; MIL-STD-167-1A vibration; MIL-STD-461E EMI.

- Power requirements: 115 VAC, 12 A, 60 Hz.
- Nominal capacity: 2.0 lb/day (0.91 kg/day) of equivalent chlorine, minimum.
240,000 gallons (908,500 liters) of water per day @ 1 ppm.
Inline: 1 or 3 ppm (FAC) residual in the desalinated water discharge with rated capacities of 95,000 gpd or 31,000 gpd, respectively.
Recirc: Rated capacity to treat 150,000 gpd @ 1 ppm.
- Efficiency: uses 3.0 - 3.5 lb salt per lb chlorine produced (3.0 - 3.5 kg/kg).
- Safety shutdown in the event unsafe events are detected.
- Ambient temperature: between 40° and 125° F (4° - 52° C).
- Maintenance: Includes self-cleaning cell technology.
Electrode service life: 10,000 hours minimum.
Five-year typical cell life.
- Hatchability: Modular; disassembles to fit through hatches and tight spaces for retrofit.
- Hydrogen (generated in the electrolysis process) is diluted and vented. Electrolysis is stopped in the event of loss of dilution air.
- Footprint: 48" W x 12" D x 48" H.



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Parts List:

| Part Number | Description | Note | Manual | Auto |
|-------------|--|---|--------|------|
| 9130-G501 | 9130 MK I, Bulkhead MEDG | Base part model | X | X |
| 9406-G501 | Connector kit, AC power plug (TF) | Mating connector for bulkhead connection on enclosure | X | X |
| 9406-G502 | Connector kit, remote interface plug (TG) | Mating connector for bulkhead connection on enclosure | X | X |
| 9406-G503 | Connector kit, AC power to pump (PS) starter (TAB) | Mating connector for bulkhead connection on enclosure | | X |
| 9138-G501 | Spool piece, inline injection | Manual option - supplied with 15-ft signal power cable and plug [for customer connection (TH)] | X | X |
| 9138-G502 | Spool piece, recirc injection | Manual option - supplied with 15 ft signal power cable and plug [for customer connection (TJ)] | X | |
| 9260-G501 | Auto recirculation skid | Automatic option - supplied with 15 ft signal power cable and plug [for customer connection (TJ) and (TAA)] | | X |
| 9298-G501 | Chlorine analyzer | Automatic option - install inside of 9130. | | X |

* All parts in this list are supplied separately from the base part model.