

SembEco LUV

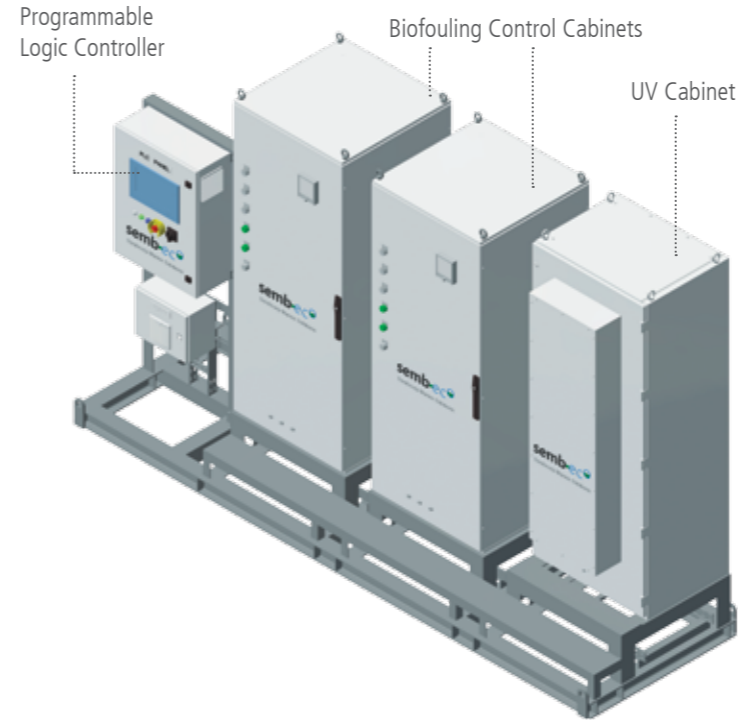
your power efficient
ballast water
management
solution



SEMB-ECO LUV BWMS

The Semb-Eco LUV Ballast Water Management System is the world's first Ultra-Low Frequency (ULF) G8 ballast water treatment system. A chemical-free solution, it treats ballast water efficiently using a two-stage process of filtration, UV irradiation and patented ULF waves generated by a Biofouling Control (BFC) unit. The synergy between the BFC and UV results in a more effective disinfectant treatment with very low power consumption.

The Semb-Eco LUV BWMS is the first system of its kind that is researched, developed, manufactured and factory-tested in Singapore. It carries the IMO type-approval certification issued by the Maritime and Port Authority of Singapore. The system is both land-based tested by IMO and USCG-accredited facilities.



COMPONENTS

Auto-Back Flush Filter

The Auto-Back Flush Filter traps sedimentary particles and organisms as the ballast water passes through. The auto-backflush function ensures and maintains filtration efficiency.

LUV Chamber

The LUV Chamber houses the UV lamps set-up in parallel flow arrangement. The lamps deliver UV irradiation to achieve disinfection.

Biofouling Control

The Biofouling Control generates the ULF wave which, when combined with UV, produces the most effective disinfectant treatment. Concurrently, the ULF wave treatment of ballast water reduces bio-fouling in the ballast system.

Programmable Logic Controller

The Programmable Logic Controller (PLC) monitors and controls the LUV BWMS system via a network of sensors and remote-controlled valves, simplifying the ballast water treatment operation.

WHY SELECT SEMB-ECO LUV?



- Lowest power consumption in the UV class
- First and only system to have passed in challenging tropical water conditions
- IMO Revised G8 type-approved by Lloyd's Register on behalf of Singapore Flag Administration
- USCG type approved
- ULF treatment by the BFC unit offers bio-fouling protection within the BWMS



User-friendly operation

POWER CONSUMPTION & FOOTPRINT DATA

Semb-Eco LUV BWMS Model	Treatment Rated Capacity m ³ /h	Max. Rated Power kW	Footprint on Skid m ²
LUV-250-U1	250	27	4.6
LUV-500-U1	500	40	5.8
LUV-750-U1	750	68	8.0
LUV-1000-U1	1000	86	9.0
LUV-1500-U1	1500	111	11.5

IMO Revised G8 and USCG Type Approved

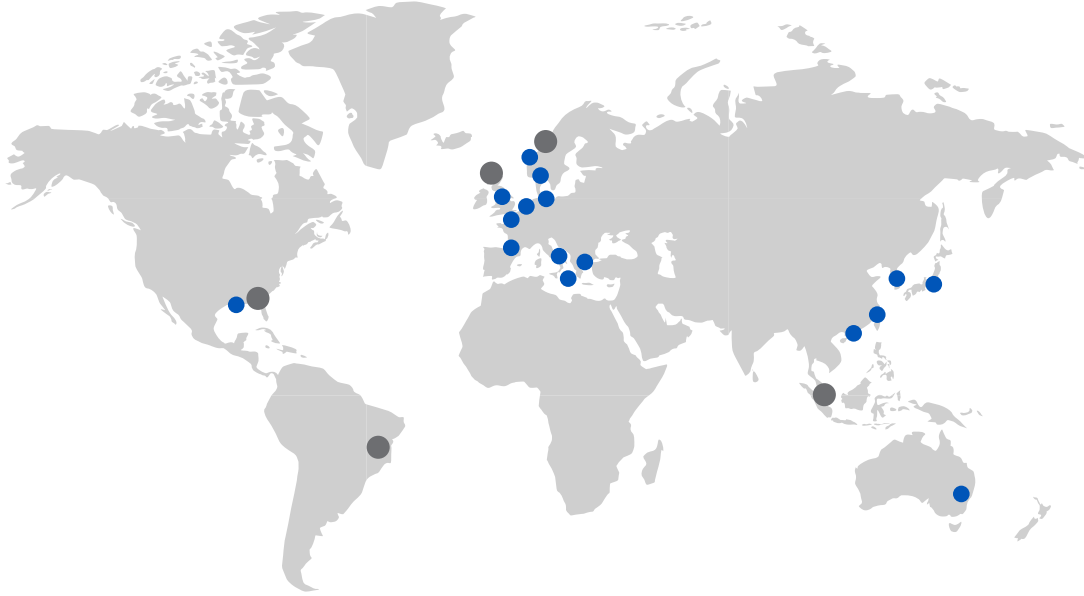


Installation in a MODU

WORLDWIDE NETWORK

SALES | AFTER SALES | SERVICE SUPPORT | MAINTENANCE

Semb-Eco leverages on the extensive worldwide representation of Sembcorp Marine, as well as shipyards and facilities in Singapore, Indonesia, the United Kingdom, Norway and Brazil.



WHO ARE WE?

Semb-Eco is a wholly owned subsidiary of Sembcorp Marine that promotes novel, viable, cost-effective and sustainable solutions, developed by the Group, to help our customers and our partners meet environmental challenges in the Marine & Offshore industry.

Together with our products, we also provide complete solutions including integrated engineering and installation.

Our product range includes:

- Semb-Eco LUV Ballast Water Management System (BWMS)
- SembSOx Hybrid Exhaust Gas Cleaning System (EGCS)
- ELMag corrosion protection system for seawater cooled stern tubes



FOR FURTHER INFORMATION, PLEASE CONTACT:

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