



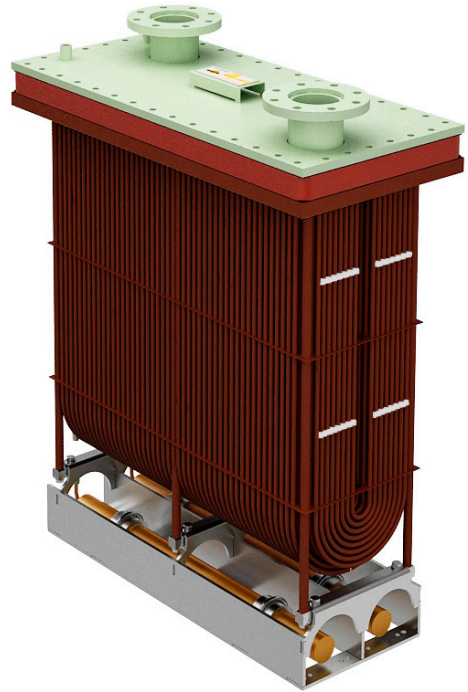
ANTIFOULING SYSTEMS FOR YOUR BOX COOLER

ICAF SYSTEM

IMPRESSED CURRENT ANTI FOULING SYSTEM

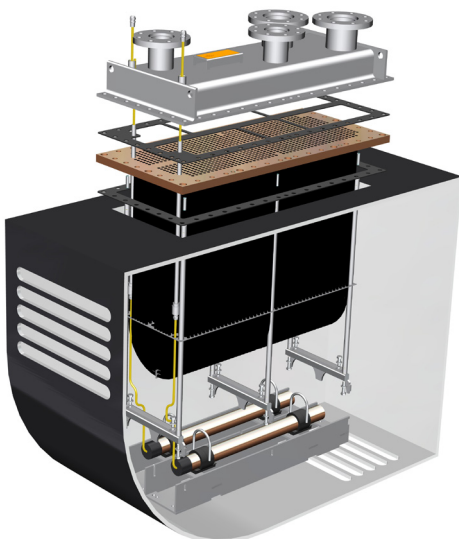


TOP-BUILD WITH ICAF SYSTEM



BOTTOM-BUILD WITH ICAF SYSTEM

The ICAF System is a highly effective anti-fouling system that can be installed on the box cooler. Highly reduces biological fouling thanks to the copper anodes mounted under the box cooler that slowly dissolve by receiving an electrical current from a power supply. This creates an environment in which biological marine growth will not develop and will just be flushed out back into the sea. The copper ridden environment is only active during a limited time as these ions fall back to the stable Cu^{++} which doesn't harm the environment.



ADVANTAGES:

- | | |
|---|--|
| ✓ | Perfect for extreme biological fouling can be expected. |
| ✓ | Control functions to ensure the release of the minimum necessary copper particles. |
| ✓ | Lifetime of copper anodes adjusted to the ship's docking period. |
| ✓ | Special seawater resistant 3m cable. |
| ✓ | Power supply unit 50/60Hz and 1 or 3 phase. |
| ✓ | Cable feed trough ships hull. |
| ✓ | Junction box |

ULTRASONIC ANTIFOULING



SHIPS  NIC

TRANSDUCERS



The Ultrasonic system offers an effective solution for addressing marine biofouling, preventing potential overheating of ship engines that could lead to expensive emergency dry dockings. Its continuous operation eliminates the need for frequent inspections both onboard and underwater, thanks to the monitoring system.

The working principle of ultrasonic marine growth prevention is straightforward: any object submerged in seawater that vibrates within the ultrasonic frequency range, with sufficient sound pressure, remains unfouled. Larvae of fouling organisms do not settle on objects undergoing ultrasonic vibration.

The proven track record of this system demonstrates high effectiveness. Additionally, the patented monitoring software promptly notifies the chief engineer of any transducer malfunctions, allowing for timely intervention from the Engine control room.

ADVANTAGES:

✓	One time, simple installation
✓	Plug and play commissioning
✓	Dry installation
✓	Maintenance free
✓	Reduce fouling costs
✓	Less down time
✓	Environmentally friendly



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