

Your Advantage

WEKA
BOXCOOLERS

NATURAL PROTECTION IS THE WEKA DIFFERENCE

Protection against biological marine growth is necessary. This image illustrates a comparison between traditional aluminum brass tubes with hard baked coating (left side) and uncoated 90/10 copper-nickel tubes (right side). The high copper content of the tubing provides natural anti-fouling capabilities, offering protection against marine growth.

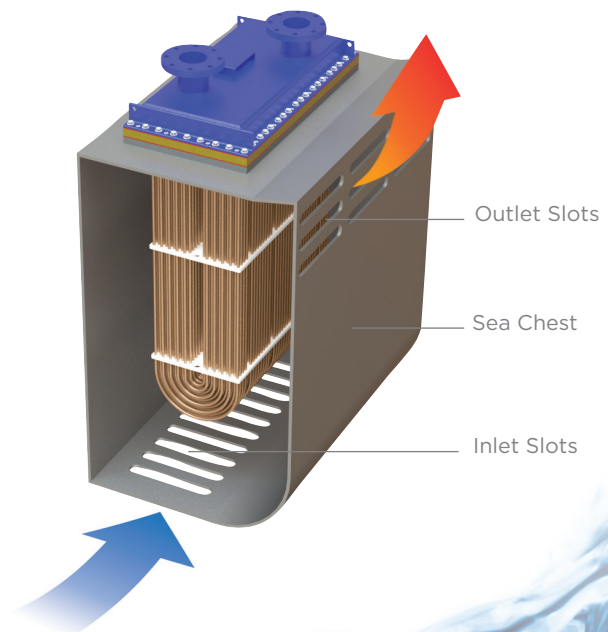


TECHNOLOGY

A boxcooler exploits natural convection. The heat source cooling water is circulated through the boxcooler tube bundle which is suspended in the sea chest. Heat is transferred from the boxcooler tubes to the seawater, causing it to rise due to its lower density, creating a natural upward circulation. Openings in the bottom and upper side of the sea chest help to direct and focus the natural convection flow of seawater through the sea chest and across the boxcooler tubes. Additional cooling efficiency can be realized through forced circulation induced by the motion of the vessel.

Boxcooler Advantages

- Eliminates raw water pumps, strainers, and filters
- Virtually maintenance free
- Cools engines up to 10,000 kw
- In-hull protection

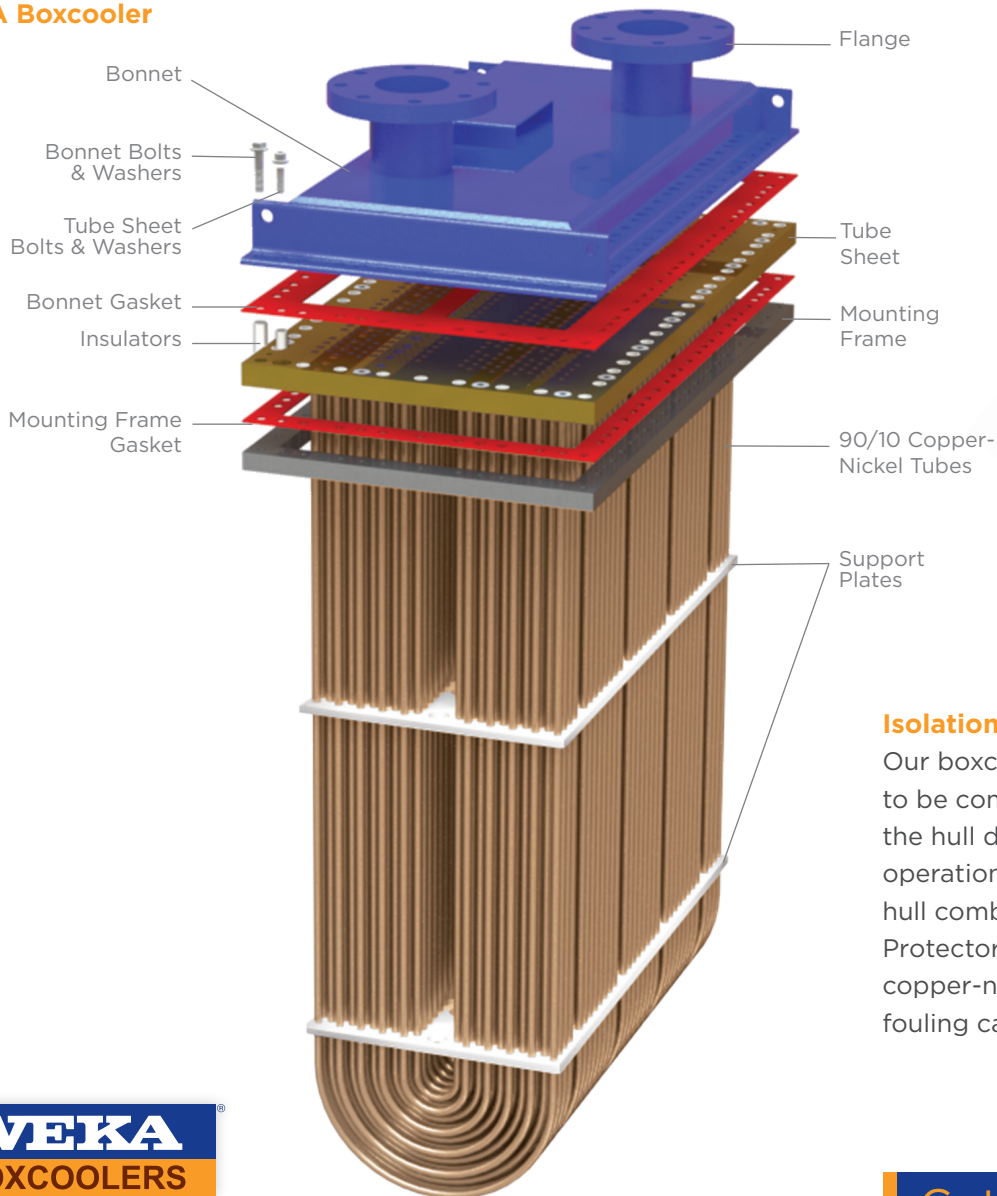


DESIGN FEATURES

90/10 Copper-Nickel

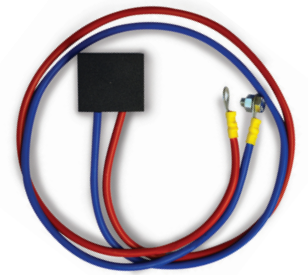
WEKA Boxcoolers are constructed using uncoated 90/10 copper-nickel tubing. This alloy does not require a protective coating or ICAF (Impressed Current Anti-Fouling) system due to its inherent corrosion resistance to seawater and natural anti-fouling capabilities. To protect the uncoated boxcoolers against potential stray current corrosion, a WEKA Guard™ and WEKA Protector™ Type T system are applied. This exclusive design is successfully utilized in hundreds of vessels in fresh and saltwater applications worldwide.

Exploded View of the WEKA Boxcooler



WEKA Protector™ Type T and WEKA Guard™

Exclusive to WEKA Boxcoolers are the WEKA Protector™ Type T and WEKA Guard™. This equipment helps to minimize potential damage to the units and hull from stray electrical currents and galvanic corrosion. The WEKA Protector™ Type T also allows the copper-nickel to maintain its anti-fouling capabilities, protecting the tubes from marine growth.



Isolation

Our boxcoolers are constructed to be completely isolated from the hull during installation and in operation. Isolation from the ship's hull combined with the WEKA Protector™ Type T allows the copper-nickel to maintain its anti-fouling capability.



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