ELECTRA

Generator and motor coolers

The reliable solution

For sustainable exchanges ...
Allowing access to the tubes internal surfaces, the ELECTRA exchangers are ideal for use with corrosive fluids or heavy fouling process. The tubes interior may then be cleaned periodically; insuring improved efficiency and longevity for your exchanger. In addition with the use of water boxes as inlet and outlet collectors, numerous thermal configurations are possible in order to always better optimize the heat exchange between the two fluids.

**Multiple options to better serve your needs**

**Material choices**

<table>
<thead>
<tr>
<th>Tube material</th>
<th>Water boxes and tube plate material</th>
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</thead>
<tbody>
<tr>
<td>S.S. 304, 316</td>
<td>Copper</td>
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<tr>
<td>Duplex 2205</td>
<td>Carbon Steel</td>
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<tr>
<td>Titanium</td>
<td>Naval Brass</td>
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<tr>
<td>Copper</td>
<td>Muntz Metal</td>
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<tr>
<td>Cu-Ni 90/10</td>
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Various configurations of water boxes (welded, in sandwich, folded...)

Various coatings available on the tubes or the exchanger (special painting, "Heresite", hot galvanization...)
Reliable Technology

For environments where a leak can deteriorate critical equipment and cause exorbitant downtime and maintenance costs, Thermofin proposes two very efficient leak detection technologies.

Double Tube

This configuration is based on the insertion of a tube inside a second tube of a larger diameter. In the event of a leak from the inner tube where the fluid circulates, longitudinal grooves situated between the two tubes permit the transport of the leaking fluid to a detection compartment. It may then trigger an alarm or accumulate in a leak reservoir thus preventing fluid contamination or liquid splashing onto sensitive surrounding equipments.

Double Tube Plate

Statistically, most leaks occur near or at the tube to tube plate joint, the location where the material must withstand the greatest stress concentrations from thermal expansion, roller expansion or tube joint welds. This second technology option is less expensive than the previous and allows, by the addition of a second tube plate, the transport of the fluid leaking through a non functional tube to tube plate joint into a detection chamber.

Thanks to Thermofin’s aluminium extruded fins, it is feasible to mate numerous materials in ever more efficient leak detection designs:

- Cu-Ni
- Copper
- S.S. 304 et 316
- Duplex 2205
- Carbon Steel
The reliability of an exchanger rests on the judicious choice of materials and on sound design. A good example of this is found in Thermofin’s dedication to reliable and durable leaktightness of water box covers via the systematic application of O-ring joints (made of neoprene, silicone, buna-n or other applicable joint material) in the design of ELECTRA heat exchangers. This feature and others like floating tube plates, expansion joints and the latest electronic advances in manufacturing make the ELECTRA heat exchangers a highly technological equipment made to provide long term quality sustainable service.
Whenever the cooling or heating of sensitive equipment is critical, the ELECTRA exchanger is the proven choice.

- Motors coolers
- Generator coolers (T.E.W.A.C.)
- Marine and sea water coolers
- Railcar coolers
- Hydrogen coolers
- Compressor coolers
- Heat recovery unit
- Vapor condensers
- Air preheaters

Other services
- Internal/external cleaning of coolers.
- Existing equipment replacement by reverse engineering or uprating.
- Retubing of existing units.

Durability
The heat exchange specialist

Since 1993, Thermofin has designed, manufactured and marketed a large range of high quality exchangers for industrial processes. Over the years, Thermofin has become one of North America’s leading names in thermal exchange. Through its expertise and its dedicated workforce, Thermofin will always offer you the right exchanger: the one for sustainable exchanges ...

EOLIA: Air cooler

ITEX: Gasketed plate heat exchangers

CALEOS: Shell & Tube heat exchanger

HYDROCOOL: Bearing cooler

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