

# ELECTRA

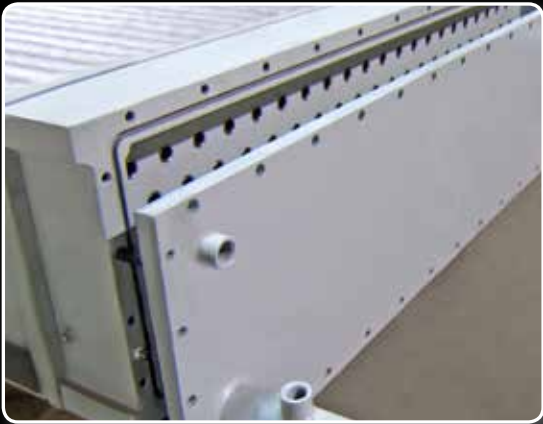
→ Generator and motor coolers

The **reliable** solution

For sustainable exchanges ...



# ELECTRA: Guardian of 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.

Reliability

## Multiple options



to better serve your needs

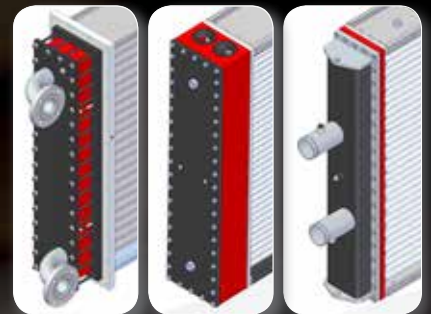
### Material choices

#### Tube material

S.S. 304, 316	Cu-Ni 90/10
Duplex 2205	Cu-Ni 70/30
Titanium	Carbon Steel
Copper	

#### Water boxes and tube plate material

S.S. 304, 316	Copper
Duplex 2205	Carbon Steel
Titanium	Naval Brass
Cu-Ni 70/30 et 90/10	Muntz Metal



Various configurations of water boxes (welded, in sandwich, folded...)



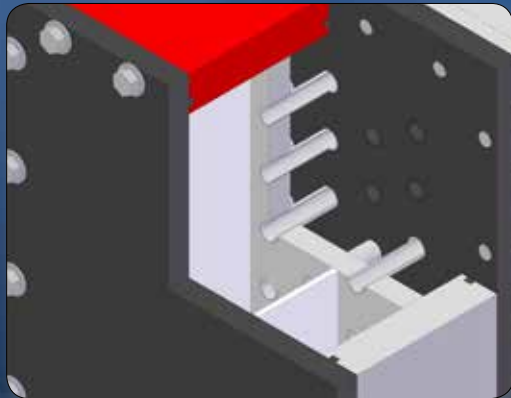
Various coatings available on the tubes or the exchanger (special painting, "Heresite", hot galvanization...)

# → 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.

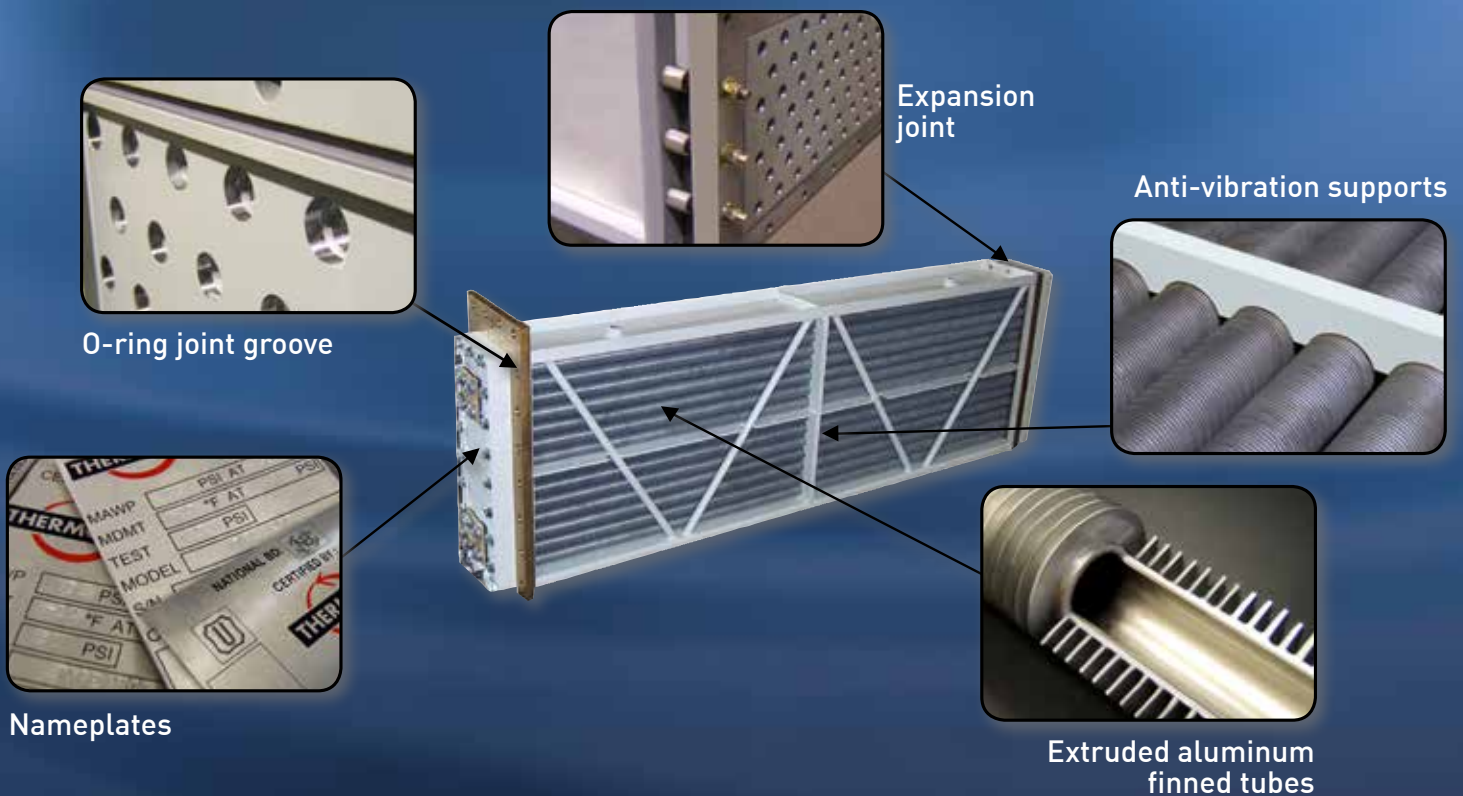
Thanks to Thermofin's aluminium extruded fins, it is feasible to mate numerous materials in ever more efficient leak detection designs :

Cu-Ni	Copper
S.S. 304 et 316	Duplex 2205
	Carbon Steel

# Safety

# → Quality Design

Thermofin heat exchangers may be designed to meet the prescriptions of the ASME Code, TEMA and even more restrictive specifications such as American military specifications or those of some of our renowned clients. Accordingly Thermofin's unit may bear the ASME "U" or "UM" Stamp, the China Licence number or they may also be registered with quality control agencies such as the American Bureau of Shipping (ABS), the National Board (NB) and other regional jurisdictions (CRN).



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.

# Quality



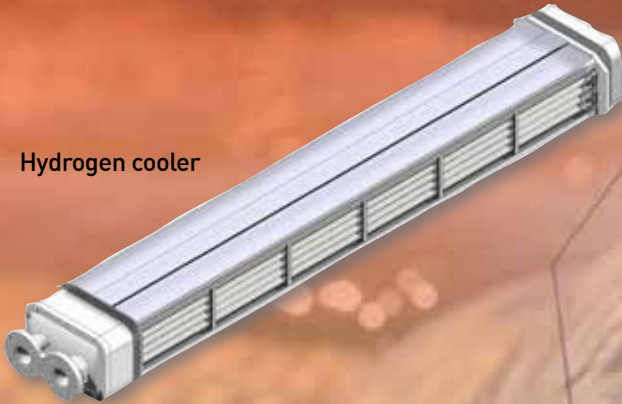
# Fields of excellence

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



Hydrogen cooler



Railcar cooler



## Other services

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

# Durability



# The heat exchange specialist

# Thermofin



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 name in thermal exchange. Through its expertise and its dedicated workforce, Thermofin will always offer you the right exchanger: the one for sustainable exchanges ...



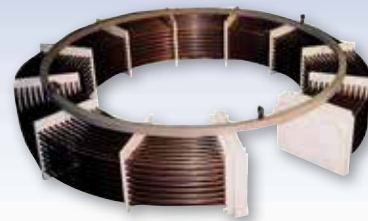
→ EOLIA :  
Air cooler



→ ITEX :  
Gasketed plate heat exchangers



→ CALEOS :  
Shell & Tube heat exchanger



→ HYDROCOOL :  
Bearing cooler

47, Marie-Victorin Blvd. Candiac  
Quebec, Canada  
J5R 1B6  
Tel.: +1 450-444-4405  
Fax: +1 450-444-7745  
E-mail: [thermofin@thermofin.net](mailto:thermofin@thermofin.net)  
[www.thermofin.net](http://www.thermofin.net)



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