BALTIMORE
AIRCOIL COMPANY

Reliably serving your cooling process ....

HXI

Hybrid Cooler

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... because temperature matters™

HXI

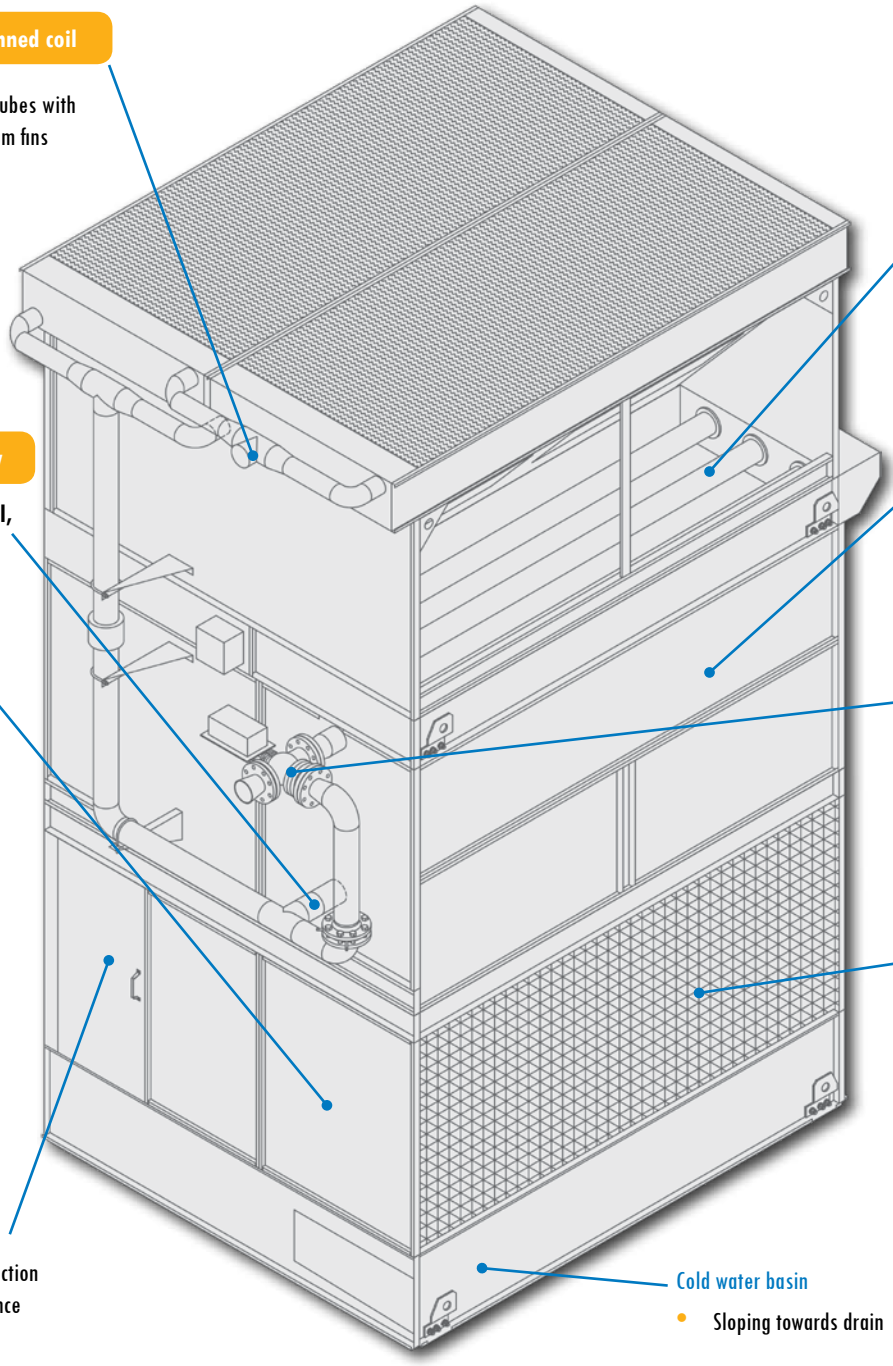
Hybrid Cooler

Baltimore Aircoil Company is the worldwide leading manufacturer of heat rejection equipment for a wide range of applications. In its constant search for improvement in design and performance BAC has developed and perfected many features which have become the standard of excellence for cooling throughout the world.
The **HXI hybrid cooler** utilizes Combined Flow Technology with the addition of a finned dry coil to bring you the best of both evaporative and dry cooling in a single, energy efficient, and water conserving unit. HXI satisfies today's environmental concerns, simplifies maintenance requirements and maximizes year round reliable operation.

Capacity up to 1630 kW

Dry finned coil

- Copper tubes with aluminium fins



Water distribution system

- Spray branches with non-clog nozzles
- Accessible during operation

Combined flow

- **Prime surface coil,** hot-dip galvanized after fabrication
- **BACross fill,** for sheet by sheet inspection without dismantling, with integrated drift eliminators

Heavy duty construction

- Hot-dip galvanized steel panels with Baltiplus or Baltibond hybrid coating

3-way valve*

- Optimal water savings by modulating the flow through prime surface coil

Combined inlet shields

- Completely prevent biological growth from sunlight and avoid any water splash-out to dry section

Hinged access door

- For easy inspection and maintenance

Cold water basin

- Sloping towards drain

* patented

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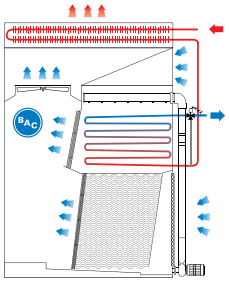
benefits

superb water savings

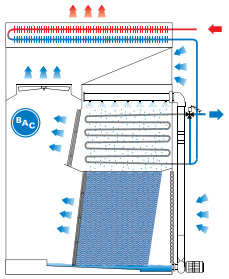
Integrated controls with patented 3-way valve giving up to 70% annual water savings through 3 operation modes.

Dry operation



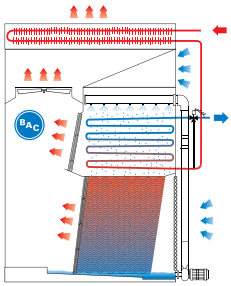
The spray water pump is turned off, saving pump energy, and the process fluid circulates through both the finned and prime surface coil. Both coils receive full flow, utilizing the maximum heat transfer surface area. No water consumption occurs in this mode and plume is completely eliminated.

Adiabatic operation

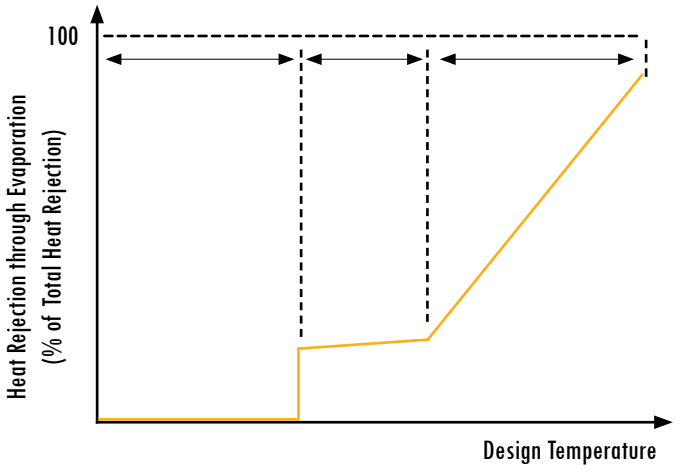


The process fluid circulates only through the dry finned coil and bypasses the prime surface coil. Recirculating spray water saturates and adiabatically pre-cools the incoming ambient air, resulting in significantly lower air temperatures and greatly increasing the rate of sensible heat transfer. Visible plume and water consumption are greatly reduced while the design fluid outlet temperature is kept.

Combined wet-dry operation



The process fluid circulates through both the finned and prime surface coil. Recirculating spray water is sprayed over the prime surface coil, allowing evaporative cooling to occur, before falling over the fill, further cooling the spray water. Water is saved as the dry finned coil reduces the amount of heat that needs to be rejected in the prime surface coil. When there is less heat load or the ambient temperature drops, the 3-way valve will reduce the flow through the prime surface coil, thereby saving more water and minimizing plume.



Low kW and low noise axial fans

Full access to spray distribution and top of coil during operation

Large access door and internal walkway

low maintenance and easy inspection

Crossflow configuration provides full access to the spray distribution and top of prime surface coil during operation.

- Easy to inspect the fill from the inside and via the easily removable combined inlet shields from the outside.
- The patented Bacross fill sheets can be easily inspected, sheet by sheet without dismantling.
- Inspection and maintenance can be done with unrivalled comfort, while standing inside. The HXI has a spacious plenum, easily accessible via a large hinged access door and internal walkway.
- Sloped basin must not be drained for interior unit inspection.

no plume

- Non-plume wet operation thanks to dry finned coil reducing humidity of discharge air from the prime surface coil

year-round reliable operation

- HXI uses high quality components, meeting very strict technical specifications for operation in the most demanding conditions.
- Multiple fan motor system covers independent fan motor and drive assembly for stand-by in case of fan failure.
- HXI hybrid coolers offer a broad choice of corrosion-resistant construction materials, ranging from Baltiplus to the unique Baltibond hybrid coating and stainless steel (AISI 304L or 316L).

unmatched hygiene control

- Easy to inspect and clean HXI units reduce hygiene risks from bacteria or biofilm inside.
- Combined inlet shields block sunlight to prevent biological growth in the unit, filter the air and stop water splashing outside.
- Highly efficient drift eliminators prevent droplets from escaping into the air.
- Optional sump sweeper piping, minimizing sediments in the cold water basin, is available for use with side stream filtration.

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more than 80 years of experience and know-how

ISO 9001:2008 certified

With thousands of successfully operating installations worldwide Baltimore Aircoil Company has the **application and system experience** to assist you in the design, installation and operation of your cooling equipment. Ongoing investment in research, combined with an advanced **R&D** laboratory facility, enables BAC to consistently offer new technologies and products to meet developing industry demands.

Baltimore Aircoil Company has a **network of highly qualified sales representatives** backed up by an experienced technical staff to ensure that each customer project is a success.
Sustainability is fostered and cultivated in BAC's business processes. Through our products we also help our customers to achieve their sustainability goals. You can find BAC's sustainability commitments on the website www.BacSustainability.com


3D-design software


5000 m² R&D-test centre


selection and simulation software


testing


high quality and sustainable manufacturing


on site services


sustainable business processes and culture

There is a wide variety of closed circuit cooling tower concepts available on the market. For this reason we recommend you to evaluate different cooling tower configurations for your project. Your BAC Balticare representative is available to assist you in this evaluation.

In order to select the right closed circuit cooling tower for a specific application, a number of important parameters should be considered. Listed below are questions, which should be answered when making your choice.

about the application

- ☐ What are the design conditions (temperature, flow rate,...)?
- ☐ What are the site limitations (physical, acoustical,...)?
- ☐ How much water can be used for cooling?
- ☐ How is maintenance and cleaning achieved and how often, in order to guarantee safe and hygienic operation?
- ☐ How much efficiency can be gained by lowering the process temperature?

about the supplier

- ☐ What is the level of the manufacturer's service and access to original spare parts?
- ☐ Does the manufacturer have the knowledge and experience to understand my application and offer a solution considering all the needs?
- ☐ Can the manufacturer demonstrate compliance with directives and regulations?
- ☐ Who is my contact person for technical and commercial assistance?
- ☐ Are the manufacturer's products produced in a sustainable way?

For more information visit our website at www.BaltimoreAircoil.co.za or contact your BAC representative to assist you with the selection, operation and maintenance of your cooling tower installation, to ensure continuous efficiency of your process.

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BLUE BY NATURE
GREEN AT HEART

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Your local contact :

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