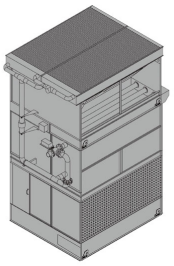
Construction details

Closed circuit cooling towers

Construction details

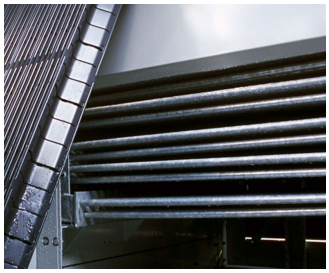
1. Material options



- Heavy-gauge hot-dip galvanized steel is used for external unit steel panels and structural elements featuring **Baltiplus Corrosion Protection**.
- The unique **Baltibond® hybrid coating** is an optional extra. A hybrid polymer coating for longer service life, applied pre-assembly to all hot-dip galvanized steel components of the unit.
- **Optional stainless steel** panels and structural elements of type 304L or 316L for extreme applications.
- Or the economical alternative: a **water-contact stainless steel cold water basin**. Its key components and the basin itself are stainless steel. The rest is protected with the Baltibond® hybrid coating.

This file has been generated from the BAC website on: 29/03/2024
For more up to date information, visit: https://www.baltimoreaircoil.eu/en/products/HXI-construction-details

2. Heat transfer media





Unique and patented heat transfer system: **featuring combined flow** via heat exchange coils and fill pack.

Prime surface coil

- **The prime surface coil** is constructed of prime surface steel, hot-dip galvanized after fabrication. Designed for free drainage of the fluid and for maximum 10 bar operating pressure according to PED. Pneumatically tested at 15 bar.
- All hot dip galvanized and stainless steel coils are delivered with BAC's **Internal Coil Corrosion Protection**, to ensure an optimal internal corrosion protection and guaranteed quality.
- Try our coil option: **stainless steel coil** in type 304L or 316L.

Finned coil

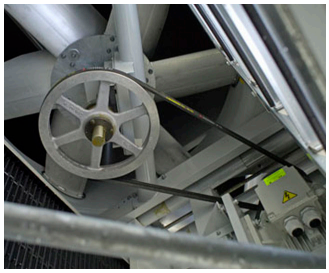
The **dry finned coil** is constructed of copper tubes with rippled edge and aluminium flat plate fins. Designed for free drainage of the fluid and for maximum 10 bar operating pressure according to PED. Pneumatically tested at 15 bar.

Fill

- The patented and factory-tested BACross fill with integrated **drift eliminators**. Optional BACross fill bundles with handles for quick and easy removal and cleaning of the fill. The bundle includes individual **sheets** which are easy to dismantle for inspection and cleaning, eliminating the need for frequent fill replacement.
- In self-extinguishing **plastic**, which will not rot, decay or decompose.
- For operation above 50°C, try our **optional high temperature fill**, usable with spray water up to 55°C.

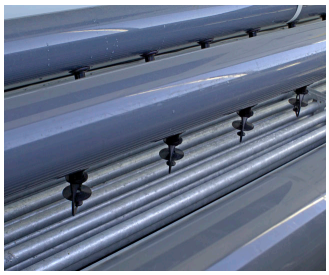
This file has been generated from the BAC website on: 29/03/2024
For more up to date information, visit: https://www.baltimoreaircoil.eu/en/products/HXI-construction-details

3. Air movement system



- HXI **fan system** features two corrosion resistant sheaves, belt and motor. Together with the heavy duty fan shaft bearings and the BAC **Impervix** motor, this guarantees optimal and year-round operational efficiency.
- **Low kW and noise axial fan(s)** in corrosion resistant aluminum, encased in fan cylinder.
- **Option: flow control package** includes a 3-way valve with actuator and connecting piping
- Our **drift eliminators** in the coil section come in UV-resistant plastic, which will not rot, decay or decompose and their performance is tested and **certified by Eurovent**. They are assembled in **easily handled and removable sections**, for optimal coil access.
- Easy removable UV-resistant plastic **combined inlet shields** at air inlet. Sunlight block to prevent biological growth in tower, air filter and water splash-out stop.

4. Water distribution system



These consist of:

- **Spray branches** with wide non-clog, plastic, 360° distribution nozzles secured in grommets. Overlapping spray pattern for complete coil wetting.
- A **sloped cold water basin** with: large hinged and inward swinging **access** door and **internal walkway** .
- Anti-vortexing **strainers** and **make up** both easily accessible from air inlet side.
- Close coupled, bronze fitted centrifugal **spray pump** with totally enclosed fan cooled (TEFC) motor**.** Bleed line with metering valve installed from pump discharge to overflow.

Need more information? Contact your local BAC representative.