



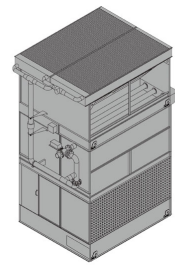
# Construction details

## 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 800™ Corrosion Protection](#).
- The [Baltiplus 810™ 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 304 or 316 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.



## 2. Heat transfer media

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

### Prime surface coil

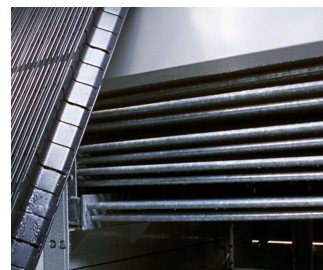
- **The prime surface coil** is constructed of continuous length of prime surface steel, hot-dip galvanized after fabrication. Designed for free drainage of the fluid and for maximum 10 bar operating pressure according to PER. Pneumatically tested at 15 bar.
- Try our coil option: **stainless steel coil** 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 PER. Pneumatically tested at 15 bar.

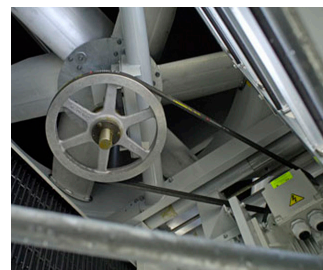
### Fill

- 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.



### 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 moisture protected 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 or optional at the top air inlet, block sunlight to prevent biological growth in the tower, filter air and stop water splash-out.



### 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](#).