

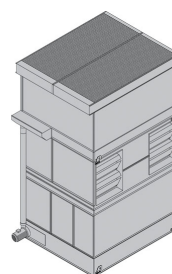
# Construction details

## Refrigerant condensers

### 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.



#### 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 maximum 23 bar operating pressure according to PED. Pneumatically tested at 34 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 HXC coil options:

- **Multiple circuit coils (split coils)** for your halocarbon refrigerants,



maintaining individual compressor systems. Or use it for compressor jacket water or glycol cooling.

- **Stainless steel coils** are in type 304L or 316L.
- **High pressure coils** are designed for 28 bar operating pressure and pneumatically tested for 40 bar. Hot-dip galvanized after fabrication.

All coils are designed for low pressure drop with sloping tubes for free drainage of fluid.

#### **Finned coil**

- The 6-row **dry finned coil** is constructed of stainless steel 304L in a staggered triangle tube arrangement and with pre-coated aluminium high density fins.
- Designed for maximum 23 bar operating pressure according to PED.

#### **Fill**

- The patented and factory-tested [BACross® fill](#) with integrated **drift eliminators** certified by Eurovent. 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

- **HXC 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.
- **Modulating air inlet dampers** are constructed in galvanised steel with air-tight, opposed blade design and proportional modulation through beams.
- **Air flow control package** includes a pressure transmitter (ships loose for on-site installation), damper actuators and intelligent damper controllers.
- 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](#).