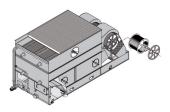
# **Construction details**

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 <u>Baltiplus Corrosion</u> <u>Protection.</u>
- The unique <u>Baltibond<sup>®</sup> hybrid coating</u> is an optional extra. A hybrid polymer coating for longer service life, applied pre-assembly to all hotdip galvanized steel components of the unit.
- Optional <u>stainless steel</u> 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<sup>®</sup> hybrid coating.



# 2. Heat transfer media

#### Prime surface coil

- The coil is constructed of prime surface steel, hot-dip galvanized after fabrication. Designed for free drainage of the fluid and 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.

Optional stainless steel coils are in type 304L or 316L.

#### **Optional finned coil**

- The dry finned coil is constructed of minimum 4 circuits of **staggered copper tubes** with aluminium plate fins.
- In galvanised steel casing with **access door** and enough space for inspection.
- Designed for free drainage of the fluid and maximum 10 bar operating pressure according to PED. Pneumatically tested at 15 bar.
- In combination with a flow control package including a <u>3-way valve</u>, temperature sensor and piping.

## 3. Air movement system

- With motor-driven centrifugal fan and a V-belt drive, sized for dry operation as standard. You can easily remove the entire motor base for proper belt tensioning to ensure constantly correct belt alignment. Together with the heavy duty fan shaft bearings this guarantees optimal operational efficiency.
- Centrifugal fan(s) are forward-curved and nearly noiseless.
  Overcome external static pressure! Use <u>sound attenuators</u> and duct work etc. for air intake/discharge with no loss of thermal performance!
- Our drift eliminators 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 internal access.





## 4. Water distribution system

- A header and spray branches with wide non-clog plastic nozzles, secured by rubber grommets.
- A spray water collection section with:
  - dry sloped basin with circular access doors
  - wet water basin out of the air stream including easy to lift-out antivortexing **strainer**, **make up**, rectangular access doors.
- Close coupled, bronze fitted centrifigal **spray pump** with totally enclosed fan cooled (TEFC) motor at connection end of the unit. Bleed line with metering valve installed from pump discharge to overflow.
- The electric water level control package maintains a constant water level in the cold water sump independent of cooling load changes and water supply pressure variations.

Like to know more about the HFL construction details? Contact your local BAC representative.

