# **Construction details**

Closed circuit cooling towers

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### 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 preassembly to all hot-dip 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

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.

- Our heat transfer media is a **cooling coil**. Its thermal performance is proven during comprehensive <u>lab</u> thermal performance tests, and it offers you unrivalled system efficiency.
- The coil is constructed of prime surface steel, hot-dip galvanized after fabrication. Designed for maximum 10 bar operating pressure according to PED.
- Try our **optional extended surface coils** with selected rows, finned at 3 to 5 fins per inch and hot-dip galvanized after fabrication, for dry operation during winter time.
- Optional stainless steel coils are in type 304L or 316L.





#### 3. Air movement system

- With motor-driven centrifugal fan and a V-belt drive. 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. Singleand multi speed motors available.
- 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.
- <u>Steel eliminators</u>, protected with the unique <u>Baltibond<sup>®</sup> hybrid coating</u>, for optimal corrosion protection, are also available for specific applications.

#### 4. Water distribution system

- These consist of:
  - A header and spray branches with wide non-clog plastic **nozzles**, secured by rubber grommets. You can easily remove, clean and flush both nozzles and spray branches.
  - A cold water basin with:
    - strainers which are easy to lift out and the anti-vortexing device also helps stop trapped air
    - mechanical make up
    - circular access door
  - 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.

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



