

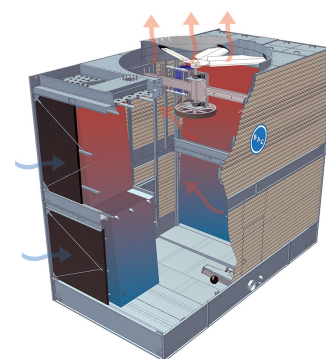
# Construction details

## Open cooling towers

### Construction details

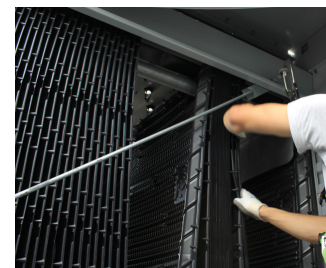
#### 1. Material options

- Heavy-gauge hot-dip galvanized steel is used for external unit steel panels and structural elements featuring [Baltiplus 800™ Corrosion Protection](#).
- For casing panels we use UV resistant **fiberglass** reinforced polyester. 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 (and hot) water basin**. Its key components and the basin itself are stainless steel.



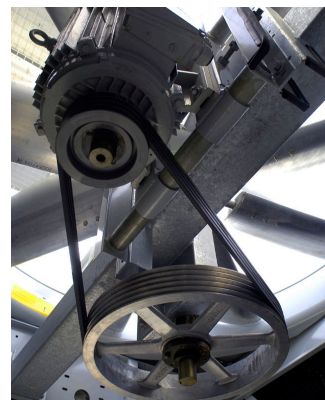
#### 2. Heat transfer media

- Our heat transfer media is patented [BACross fill](#) with integrated **drift eliminators** certified by CTI. Thermal cooling tower performance was shown in comprehensive [lab thermal performance tests](#) and offers you unrivalled system efficiency.
- Patented BACross fill **eliminates water splash-out** and allows freeze free winter operation. The fill pack includes individual **sheets**. Sheets are easy to inspect and clean inside the tower without dismantling, eliminating the need for frequent fill replacement. Optional telescopic support for easy fill replacement.
- In self-extinguishing **plastic**, which will not rot, decay or decompose.
- For operation above 55°C, try our **optional high temperature fill**, usable with intake water up to 60°C.



### 3. Air movement system

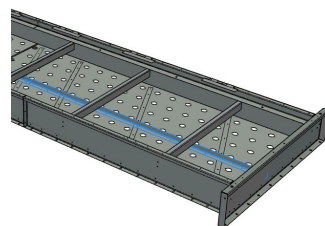
- S3000E **fan system** features two corrosion resistant sheaves, belt and motor. Together with the heavy duty fan shaft bearings and the moisture protected motor, this guarantees optimal and year-round operational efficiency.
- **Fan(s)** in corrosion resistant aluminum, encased in fan cylinder with removable fan guard. To reduce noise even further, choose for a low noise or [Whisper Quiet fan](#) with minimal impact on thermal performance.
- Easy removable UV-resistant plastic **combined inlet shields** at air inlet. Sunlight block to prevent biological growth in tower, filter air and stop water splash-out.



### 4. Water distribution system

These consist of:

- **Low pump gravity water distribution basin** with wide non-clog plastic nozzles for uniform water distribution. You can easily clean and flush both nozzles and basin.
- Distribution basin covers **prevent contamination of basin water** due to debris etc.
- **Weir dams** in the hot water basin for variable flow. These close off partly the hot water basin in periods of reduced load, resulting in **up to 50% power savings** on process pump and ensuring **freeze free operation**.
- A **sloped cold water basin** with:
  - large hinged and inward swinging **access** door
  - anti-vortexing **strainers** and **make up** both easily accessible from inside the unit.
  - optional **internal walkway** for easy access to the interior of the unit.



**Need more information?** Contact your local [BAC representative](#).