

# Construction details

## Open 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 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<sup>®</sup> hybrid coating.

#### 2. Heat transfer media

- Our heat transfer media is factory-tested and patented <u>BACross fill</u>
  with integrated **drift eliminators** certified by Eurovent. Its thermal
  performance is proven during comprehensive <u>lab thermal</u>
  performance tests, and it 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

- S1500E's feature a multiple fan system covering independent fan motor and drive assembly per fan for independent fan operation for extra capacity control or stand-by fan in case of fan failure.
   Together with the heavy duty fan shaft bearings and the BAC Impervix motor, this guarantees optimal and year-round operational efficiency.
- The smaller diameter fans on the 2.4m wide units are direct driven.
   The larger fans on the rest of the product line are equipped with a belt drive system.
- 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 reducing the noise even further 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, air filter and water splash-out stop.



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.
- 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 air inlet side.
- Optional internal walkway for easy access to the interior of the unit.

**Need more information?** Contact your local <u>BAC representative</u>.



