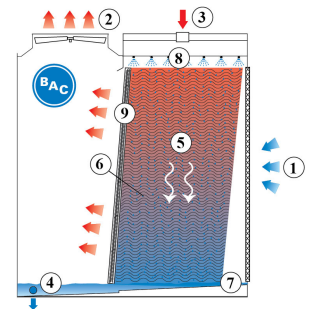


# Principle of operation

## Open cooling towers

### Principle of operation

Warm process **water (3)** from the heat source enters the **water distribution system (8)** at the top of the cooling tower where it is distributed over the **fill** or heat transfer media (**6**). At the same time **axial fans**, located at the top of the unit, draw the **air (1)** from the side of the unit over the fill. **Combined inlet shields** protect the tower from debris being drawn into the unit. While the warm process water contacts the cold air the latter heats up and part of the process water is evaporated which removes the heat from the remaining water. The **sloping sump (7)** or basin collects the cooled water after which it returns to the **heat source of the process (4)**. The warm saturated **air (2)** first passes through the **drift eliminators (9)**, which remove water droplets from the air, and then exits the tower at the top.



**You want to use the S1500E cooling tower to cool your process water?** Contact your local [BAC representative](#) for more information.