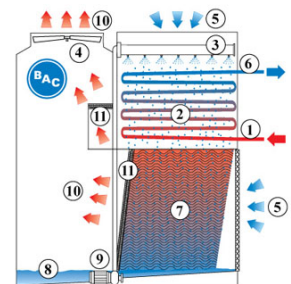


# Principle of operation

## Closed circuit cooling towers

### Principle of operation

The FXVE combines the function of a cooling tower and a heat exchanger into one unit. The warm process **fluid (1)** circulates through a **heat exchanger coil (2)**, which is wetted by a **spray system (3)**. In parallel with the water spray flow, an **axial fan (4)** draws **air (5)** over the coil. The evaporation process cools the **fluid (6)** inside the coil. The process fluid travels from the bottom to the top of the coil because the coldest spray water and air are in the top of the tower. The spray water falls onto a **fill pack (7)** where it is cooled before falling into the **water basin (8)**. The spray **pump (9)** recirculates the cooled water to the top of the tower. The warm saturated **air (10)** leaves the tower through the **drift eliminators (11)** which remove water droplets from the air.



**You want to use the FXVE cooling tower to cool your process fluid?**  
Contact your BAC representative or use the [information request form](#) and tell us how we can help you.