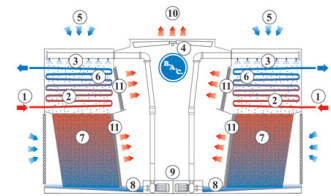


# Principle of operation

## Closed circuit cooling towers

### Principle of operation

The FXV-D combines the function of a cooling tower and a heat exchanger into one unit. The warm process **fluid (1)** circulates on both sides of the tower 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 coils. Because the coldest spray water and air are in the top of the tower, the process fluid travels from the bottom to the top of the coils. The spray water falls onto a **fill pack (7)** where it is cooled before falling into the **water basin (8)**. Spray **pumps (9)** recirculate 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.



**Interested in the FXV-D closed circuit cooling tower?** Contact your local [BAC representative](#) for more information.