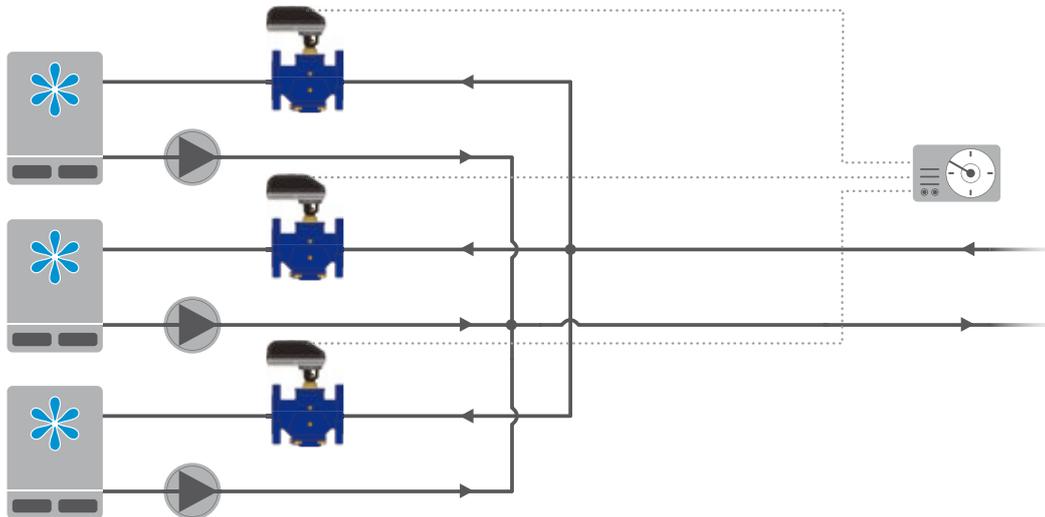


Cooling Towers - Primary Side

with Pressure Independent Control (PICV)



System Functionality:

A cooling tower is a big vessel which contains a large fan blowing air through the unit. Water including excess heat from the HVAC system is entered at the top of the cooling tower. As the water passes to the bottom, heat is withdrawn through evaporation. Cooling towers normally involves larger flow rates. Without proper balance and control, energy consumption and operating costs will run wild. This can be prevented by installing a PICV on every cooling tower. PICVs will help significantly to reduce energy consumption and operating costs and still provide required cooling to the building's HVAC system.

Requirements:

The PICV will react to system pressure changes and regulated the flow of cold water to required flow by adjusting the actuator position. This helps the cooling tower to be accurately controlled even with pressure changes and at reduced loads allowing reduced fan speed and thereby enhancing cooling tower efficiency.

Solutions:

The solution is to mount a PICV on every unit and FlowCon offers:

- FlowCon SM (built-in regulation unit)

Benefits:

- Assures correct flow for each unit automatically - also at partial loads - securing optimal comfort
- Flexible solution with minimum 51 different max. flow settings
- Electrical actuators with selectable control mode, linear or equal%
- Cost savings due to reduced commissioning time
- True PICVs - 100% authority and pressure independence at all flow rates with accurate actuator control.

