



APPLICATION TIPS

Greenhouses Facilities

Griswold Controls Pressure Independent Valves and Actuated Valves have been installed for years in greenhouse facilities around North America to help improve the growing conditions inside. Controlling the temperature in a greenhouse facility is crucial to maximize a plant's health and growth rate. The ambient temperature for plants directly impacts the quality of the final product so it is critical that the hydronic HVAC systems maintain temperature within a narrow range in the most cost efficient method possible.

Reduce Energy and Control Temperature

Controlling the climate in a greenhouse is a precise job since outside air temperature, machinery, and high intensity lights impact the heating or cooling requirements. For over 55 years, Griswold Controls has improved the efficiency of hydronic HVAC equipment (coils, AHU, terminal units, etc) in hospitals, schools and office buildings by controlling the flowrate of hot or cold water to the heating and cooling coils and in the last decade our Pressure Independent Valves have been used in many greenhouse installations to solve temperature issues. Pressure Independent Valves control the flow regardless of pressure changes in the system which guarantees each zone has adequate cooling or heating at all times. No more complaints about being "too hot" or "too cold" in a part of the greenhouse which means healthier plants with greater yield. Additionally, by



controlling the flowrate there is no need to pump extra hot or cold water to the zone farthest from the pump, which saves pump energy.

Guaranteed Heating and Cooling When Critical Facilities Need It Most

Pressure Independent valves are automatic and don't require any balancing at the greenhouse, so the flowrate at each HVAC coil meets the engineer's design specifications from the moment the system is started up regardless of what happens throughout the day. By removing the need to balance and protecting the zone from changing flows due to system changes, we guarantee the correct heating or

cooling at all times so both the plants, and the farmers, can focus their own energy on growing a plentiful harvest.

