

Pressure independent valves are TODAY'S SOLUTIONS for reducing energy consumption, improving efficiency, and solving customer comfort issues.

Problem: A major university's recreation center, originally specified with conventional control and balancing valves, needs to improve its performance.

Solution: Change the air handler chilled water valves to Griswold Controls pressure independent control valves.

Results: (10) PIC-V® and (1) MVP™ pressure independent valves were installed. ΔT across the athletic center has been as high as 31°F (17°C) with all systems meeting set point. On cool mornings, building has run with 24gpm of chilled water, less than 10% of the design flow. Chilled water flow requirements are very low and the booster pumps rarely, if ever, need to run. The recreation center has achieved ideal comfort performance combined with reduced energy consumption from the chilled water system.

Problem: The domestic terminal at a major international airport was not able to consistently achieve comfort set points; they were seeing low ΔT causing high energy consumption; and during warm weather they were operating additional chillers to achieve desired temperature.

Solution: Retrofit system with MVP™ pressure independent valves on 25 air handling chilled water coils.

Results: Chilled water ΔT increased to as much as 21°F (12°C) with peak flow rate reduced accordingly; all terminals were able to achieve comfort set points with travelers' complaints reduced; and in spite of some very hot weather one summer they never had to run more than two chillers. Annual energy savings are estimated to be approximately \$40,000.

When conventional 2-way valves in variable flow systems open or close, it causes a pressure change to other valves in the system. Griswold Controls' MVP™ and PIC-V® valves pressure independent control valves maintain the required flow rate regardless of pressure changes, eliminating the need for balancing.

Griswold Controls...solving problems and providing solutions for over 45 years.