Utilizing precision control devices throughout the chilled and heating water systems, Flow Control Industries provided a cost effective solution to add capacity, improve efficiency, simplify operation and reduce maintenance.



FAST FACTS

Location

Denver, Colorado

Industry

International Airport

Foot Traffic

>52M Passengers per Year

Complex Size

34,000 Acres Space Under Roof: >6M sq ft

Year Opened

1995

PROBLEM

A new hotel and proposed terminal expansions would have strained the existing infrastructure, and hundreds of tertiary distribution pumps were reaching the end of their useful lives. The capital cost and ongoing maintenance expenses were significant, and adding capacity or replacing pumps would not address the root cause of poor system performance.

SOLUTION

Replaced 500+ chilled water and heating water control valves at air-handling units and fan-coil units with DeltaPValves to reduce the total system flow, recover capacity and eliminate the tertiary distribution pumps.

IMPACT

- · 6.8M kWh annual reduction energy consumption
- · 820 kW demand reduction
- · 15M lbs/yr reduction in CO2 emissions
- · Annual Cost Reduction of over \$400,000
- · \$330,000 Rebate
- · Chilled water delta T increased by 56%
- · Heating water delta Tincreased by 75%

