

# MESURFLO™ AUTOMATIC FLOW CONTROLS PROVIDE ENERGY SAVINGS FOR ALAMO HEIGHTS INDEPENDENT SCHOOL DISTRICT



Alamo Heights High School San Antonio, Texas

### Preface:

Alamo Heights Independent School District determined it necessary to re-evaluate their energy use and find ways of cutting cost while improving the efficiency of their heating and cooling system.

Syntergy LLC, offered AHISD cost saving ideas using Hays Fluid Controls Mesurflo™ Automatic Balancing Valves to control the water flow for their heating and cooling system.

Syntergy was very confident in the operating efficiency of Hays' balancing valves.



### Situation:

Alamo Heights High School was built in 1949-1950. AHISD was having trouble maintaining comfortable temperature control in selected areas of their high school that relied on chilled water to provide cooling. After verifying capacity at the central plant, Syntergy LLC, determined that the age, combined with numerous expansions, left the District's chilled water distribution system unbalanced and inefficient.

#### Solution:

Syntergy, LLC developed a solution that focused on improving the chilled water distribution system. The initial goal of the project was to improve space comfort for the 1,500+ students and faculty at Alamo Heights High School.

Hays Fluid Controls was selected because their Mesurflo™ valves were superior to their competitors and their technical support was excellent. The Mesurflo™ automatic balancing valves have an operating range of 2-80 psid. The large operating range and performance of Hays' valves allowed the School District to recover the cost of the project through energy savings.

"Because the new valves performed so well, we were able to "load match" their central plant and water distribution system to the actual load of the building. Their chilled water distribution system operates at a lower pressure and the overall output of the plant is significantly less. This project will pay for itself in less than one year."

 Everett Pastureau, President Syntergy, LLC

Mesurflo<sup>TM</sup> Automatic Balancing Valves





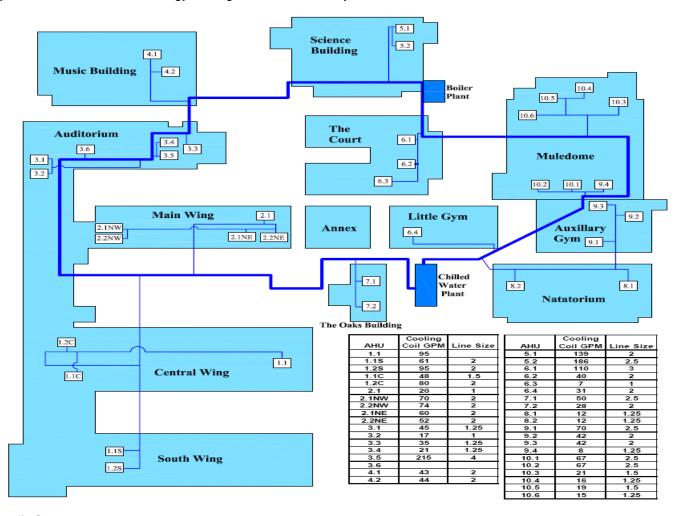


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#### Results:

The comfort complaints have been significantly reduced and the humidity issues have been eliminated. The system operates at lower pressures further reducing maintenance cost associated with the HVAC system.

Project cost: \$48,000.00 - Energy Savings: \$68,000 Annually



### **Benefit Summary:**

### Mike Hagar Business Director for Alamo Heights ISD:

⇒ "Energy cost for Alamo Heights, including electrical and gas were estimated between \$800,000-\$900,000 per year. We feel with Syntergy's help, along with energy efficient methods, we can cut cost by 10%-15%."

## **Everett Pastureau: President, Syntergy, LLC**

⇒ "Secondary chilled water systems are ramped as low as 5-6 psi, and we are still making temp in the building it sits there and runs. Other facilities are running two-three times as hard pushing water around their buildings due to the problems they've created with an unbalanced system. When you take the step to install a Hays automatic flow control valve, then take the additional steps to rebalance the system, to take advantage of the capabilities that gives you, there is no doubt it saves in energy cost. In this case, it paid back in six months."