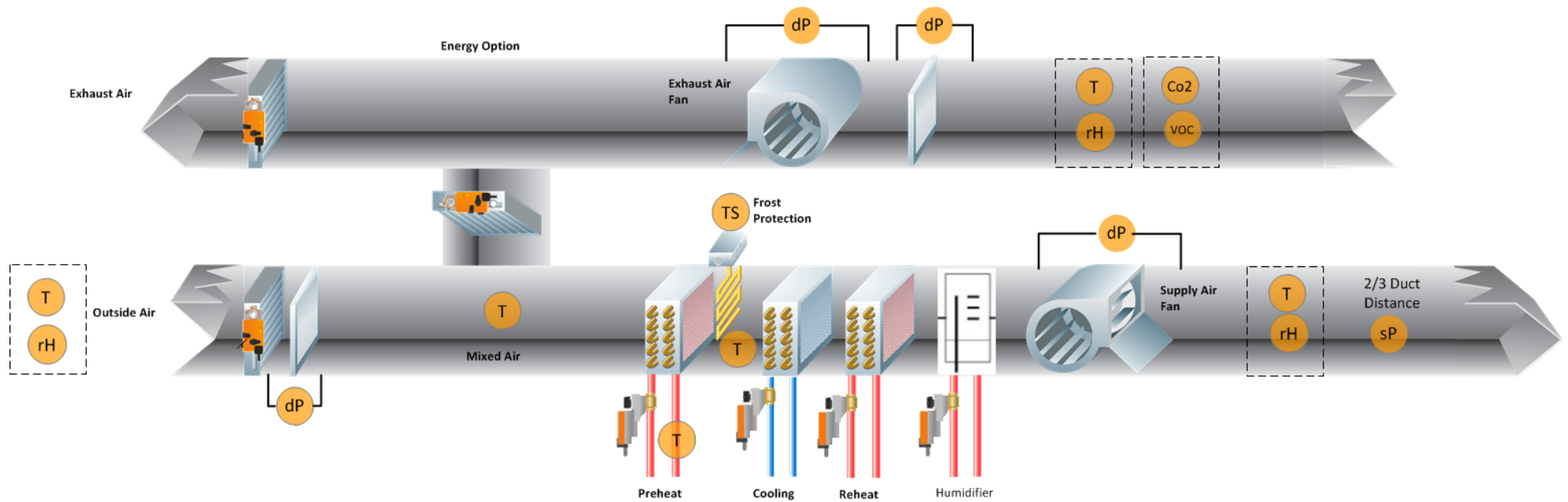




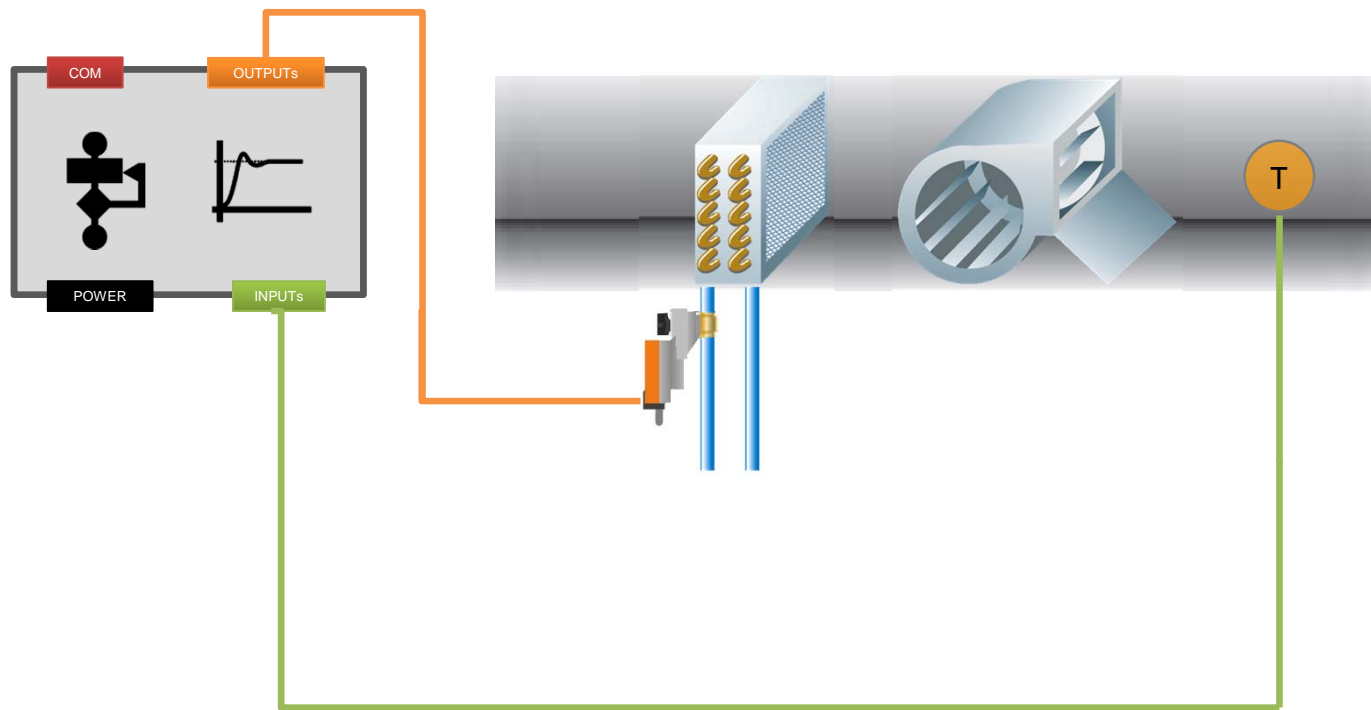
Belimo is the global market leader in the development, production and marketing of actuator solutions for controlling heating, ventilation and air conditioning systems. Actuators, control valves and sensors make up the company's core business.



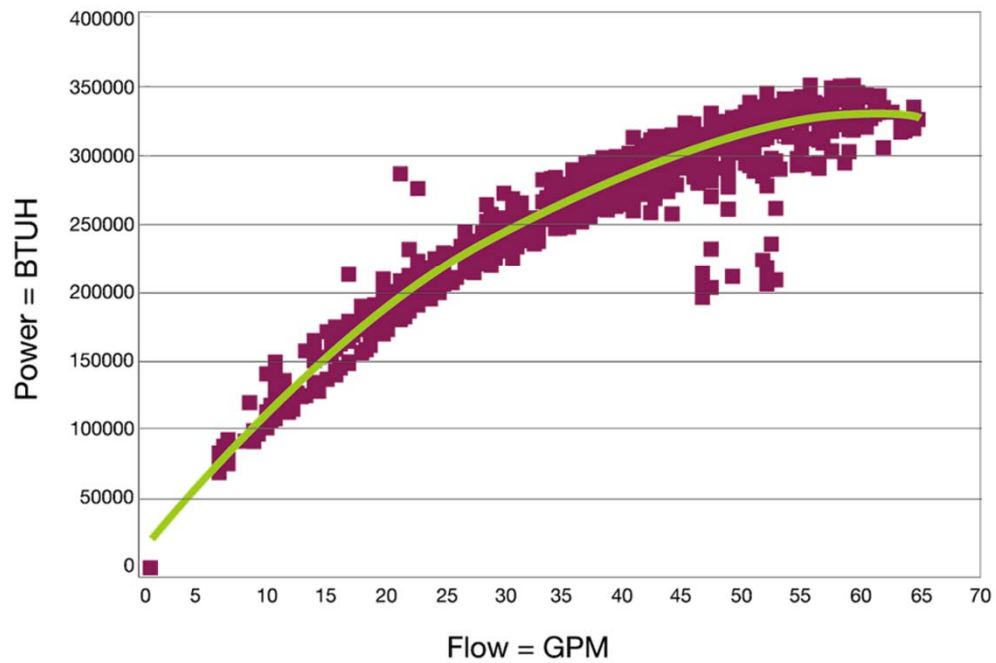
# Typical Air Handling Unit



# Chilled Water Valve Control

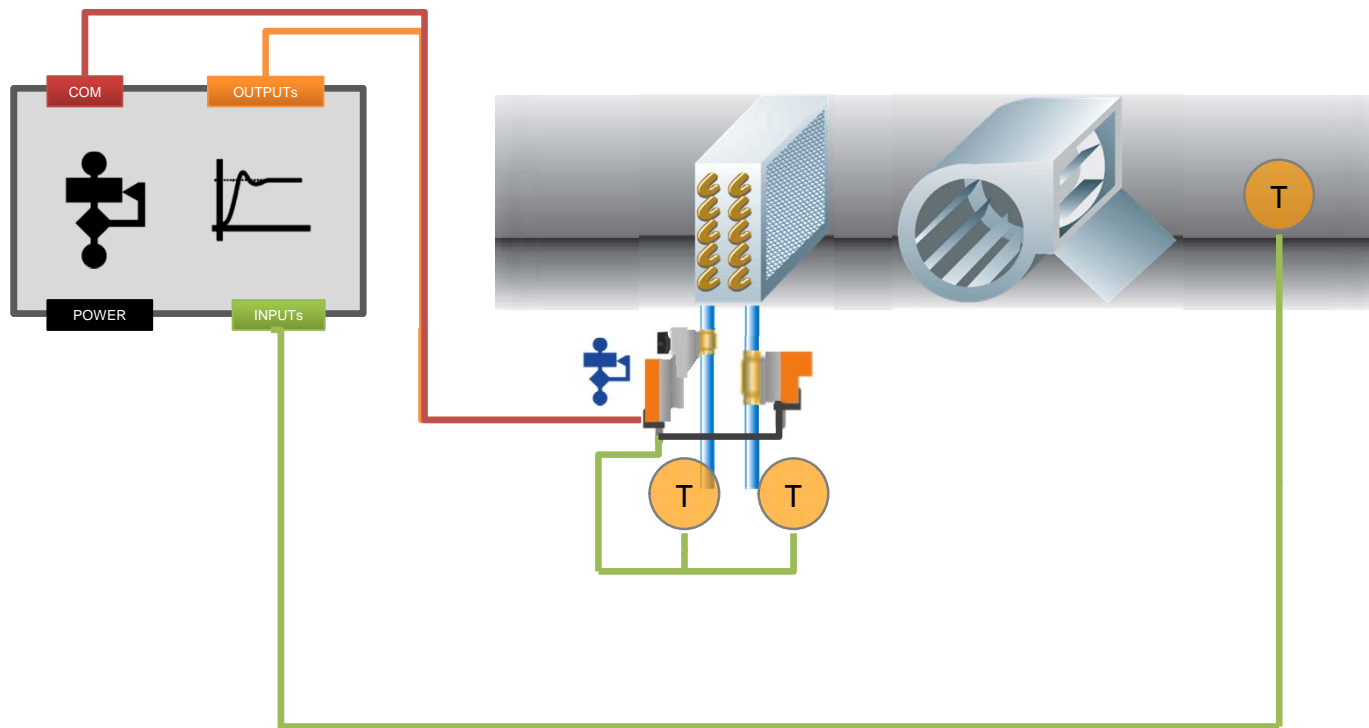


## Power as a Function of Flow Rate



Power Output:  $Q(\text{Btu/h}) = 500 \times \text{GPM} \times \Delta T$

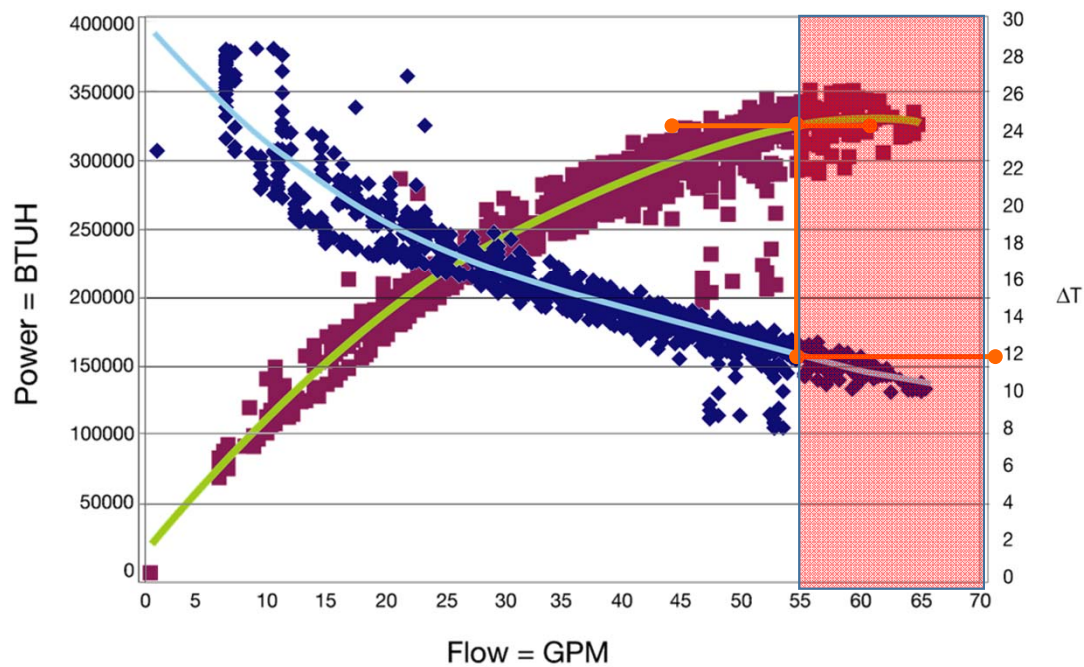
## Adding Smarts for Optimization



## Belimo Energy Valve



## Reducing Waste Through Flow Limiting



### Operating in the Waste Zone

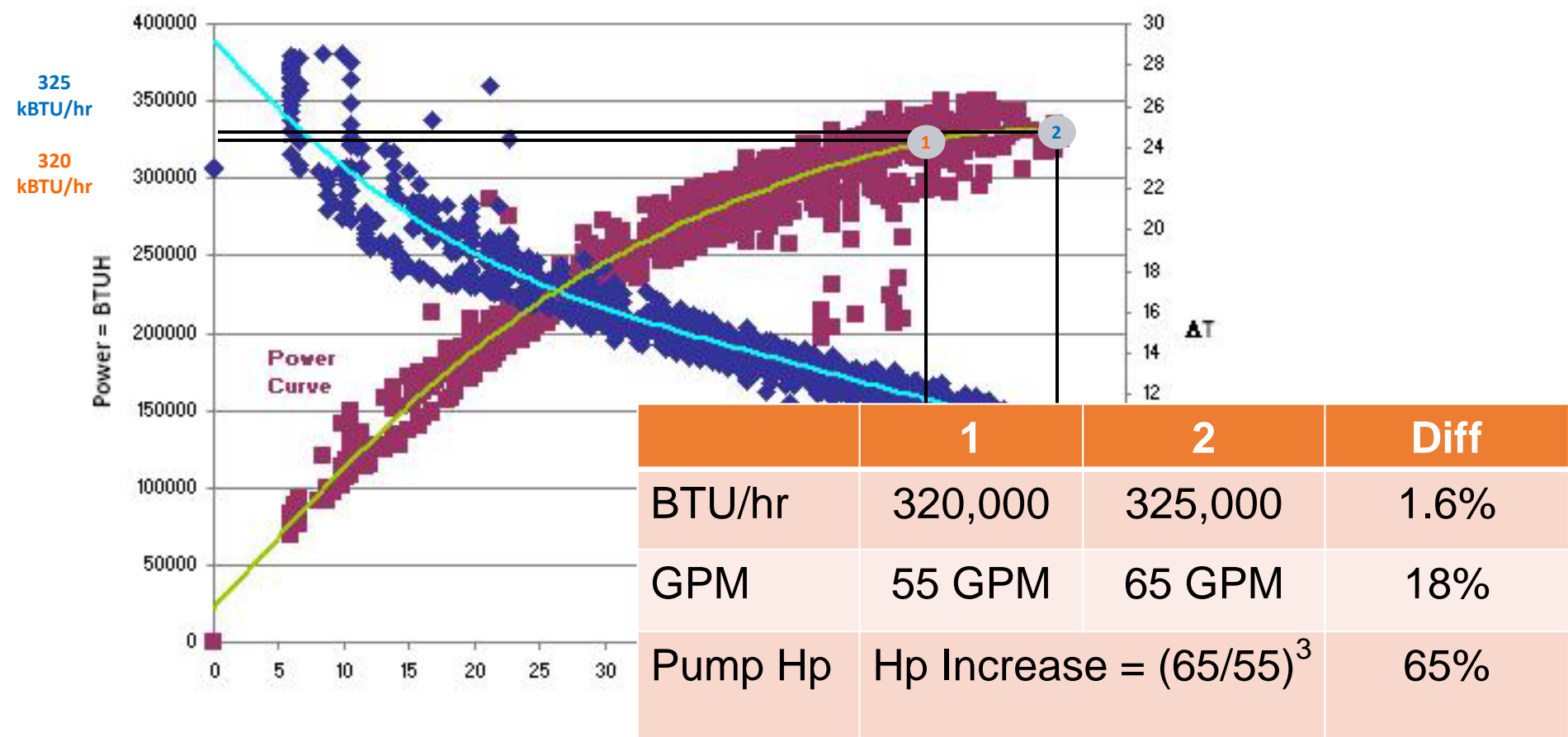
1. Pumping more Water
2. Reduced Delta T
3. No additional BTUs



$$\text{Power Output: } Q(\text{Btu/h}) = 500 \times \text{GPM} \times \Delta T$$



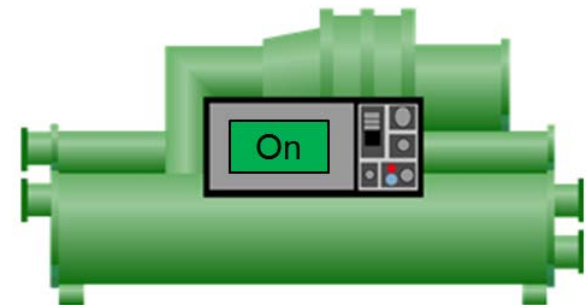
# Energy Savings





## Benefits of Smart Flow Reduction

- **Reduced Pumping Energy Costs**
- **No Loss of Comfort**
  - Reduced Flow Only in Overflow Situations
  - More Data = Better Maintenance and Reliability
- **Reduced Chilled Water Generation Costs**
  - Higher DeltaT = Higher Chiller Efficiency
  - Reduced Water Consumption at Cooling Tower



# Keep Informed, Follow Belimo

