



BALTIMORE AIRCOIL COMPANY



TrilliumSeries™ Adiabatic

Trillium Adiabatic: Best solution for natural refrigerants

Unrivalled Efficiency & Flexibility

- Best in class for Water & Energy efficiency
- Suitable for all refrigerants:
 - › CO₂
 - › NH₃
 - › Hydrocarbons
 - › Glycol



Why Adiabatic?

Air Cooled

Tracks Dry Bulb

- Simple
- No water use

Evaporative

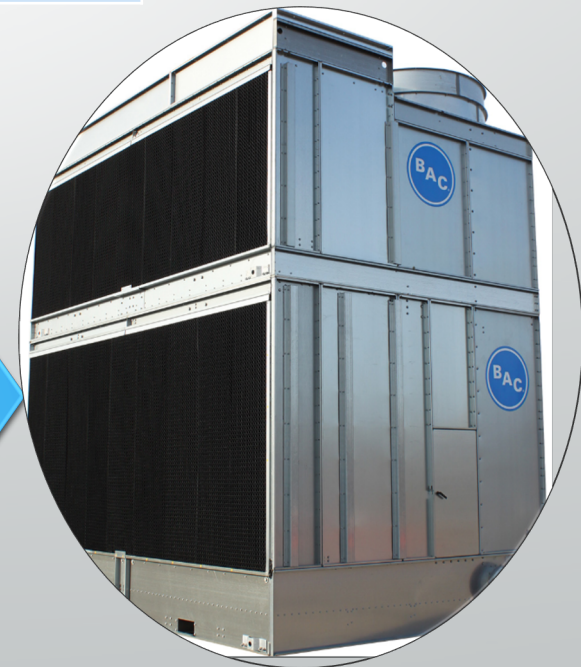
Tracks Wet Bulb

- Extremely efficient
- Water use & treatment

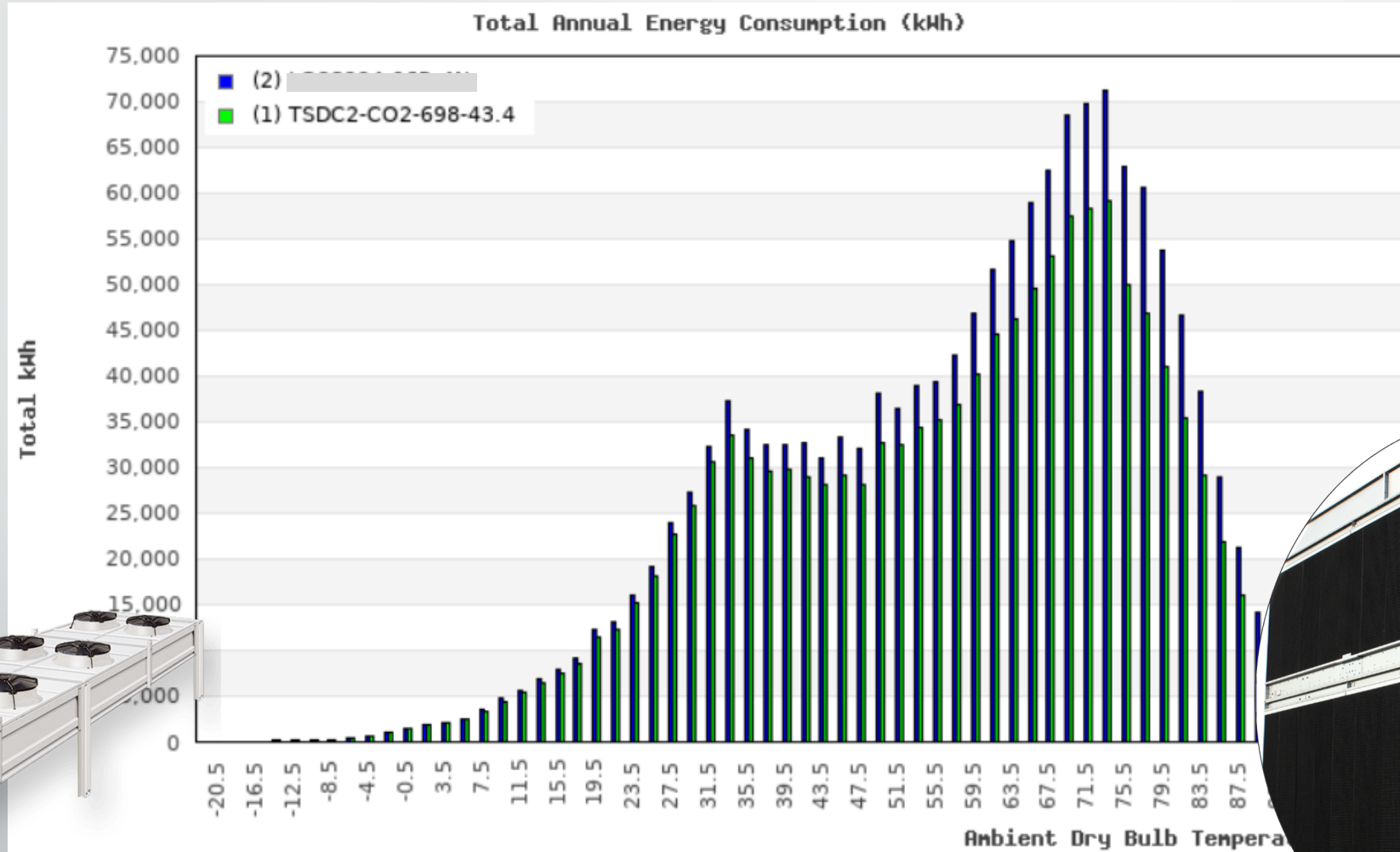


Air Cooled

Evaporative

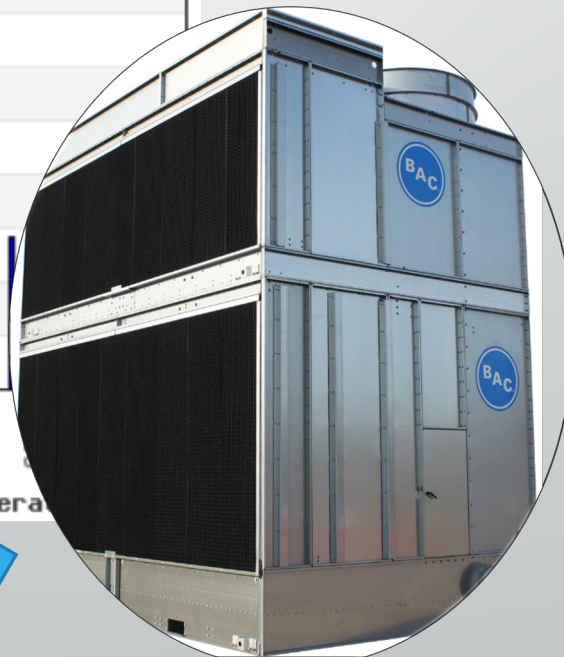


Why Adiabatic?



Water Savings

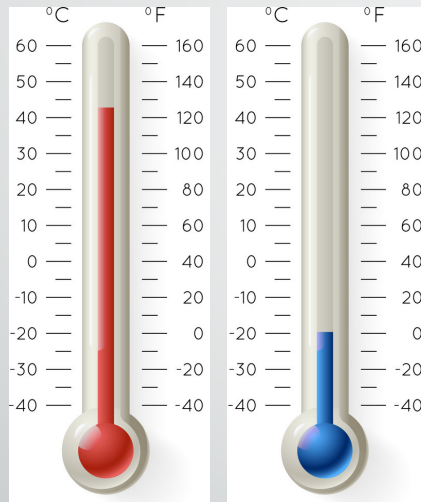
Adiabatic



Energy Savings

What determines Adiabatic Efficiency

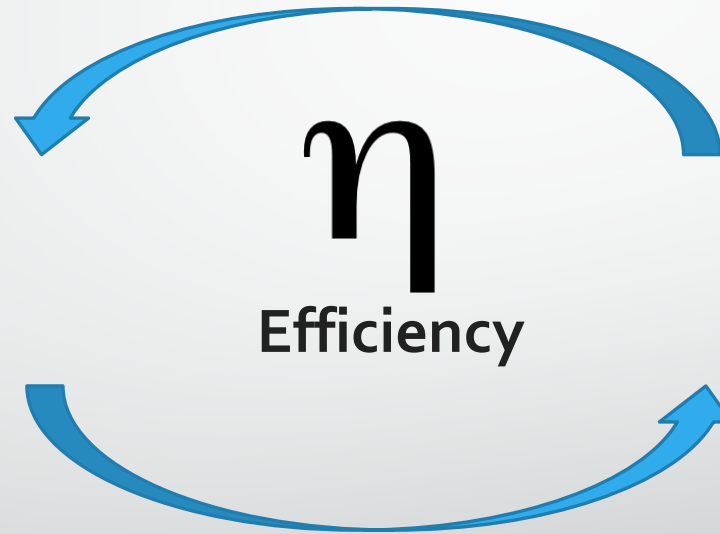
How **Close** it can get to wet bulb



DB

WB

Humidifying

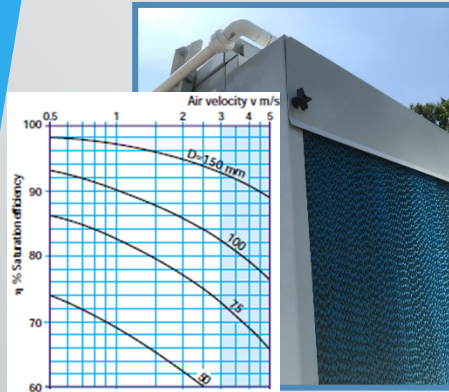


Water use

How **Long** it can operate Wet

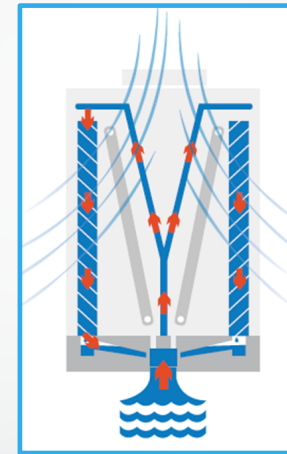


Why Trillium?



Unrivaled Humidifying Efficiency

Coldest incoming air

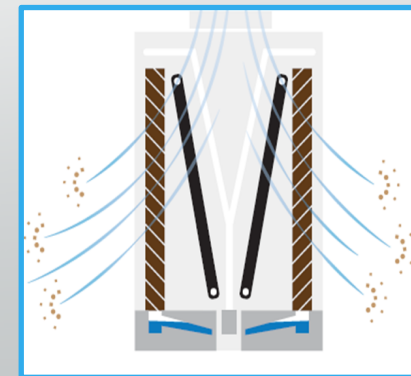


Highest Water Use Efficiency

Prolonged wet operation

Best-in-class std MOC

- EC Fans
- Integrated Controls
- Coated fins & pads
- Stainless Steel / TSHP



Exclusive Features

- Self-clean Protocols
- Cleansing Cycles
- Backup Connections
- 1000 + Installations!



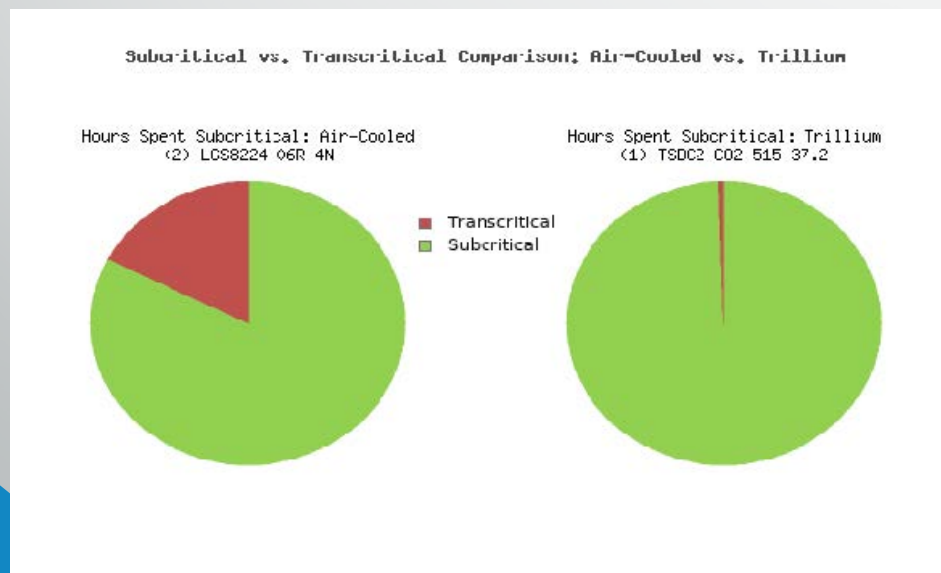
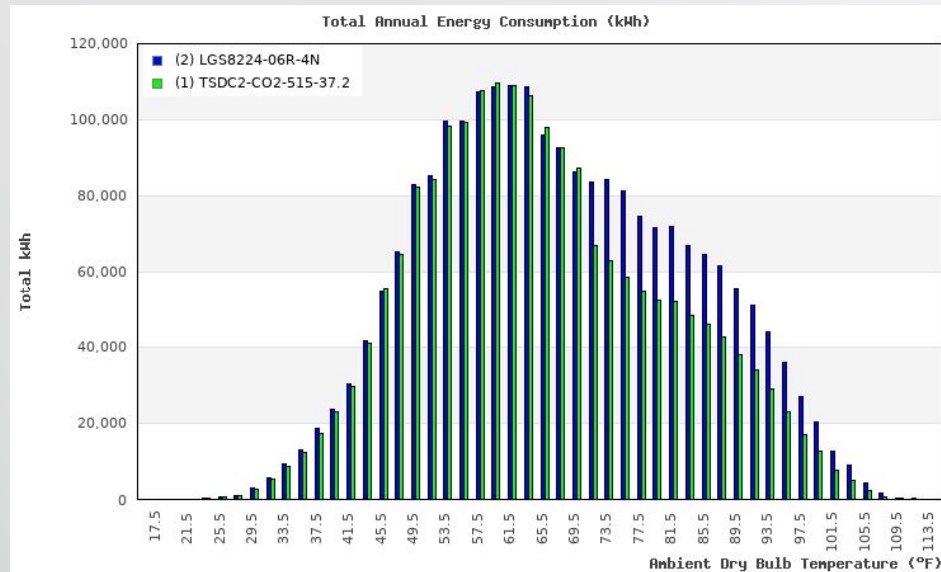
Case Study #1



Food Process Facility in the California Central Valley

- CO₂ Transcritical System
- 116,000 sqft Refrigerated Space
- 550,000 lbs Processed Daily
- 1,880 Refrigeration Tons
- 3 Suction Levels
 - › LT: 545 tons, -15 F SST
 - › MT: 815 tons, +20F SST
 - › HT: 520 tons, +38F SST

Case Study #1



Savings vs Air-Cooled

- 99.9% of year in sub-critical operation.
- 2,604 kW reduced Peak Demand (59% reduction)
- 1,527,841 kWh reduced Total Energy Consumption (15% reduction)
- Over \$500,000 yearly savings!
- Annual CO₂-e Tons saved: 472 (98 Cars off the road!)

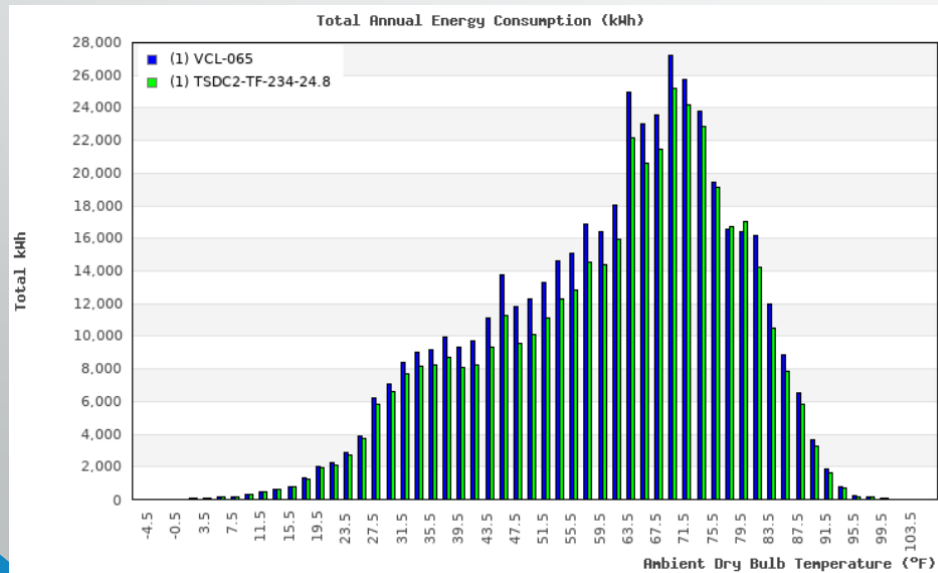
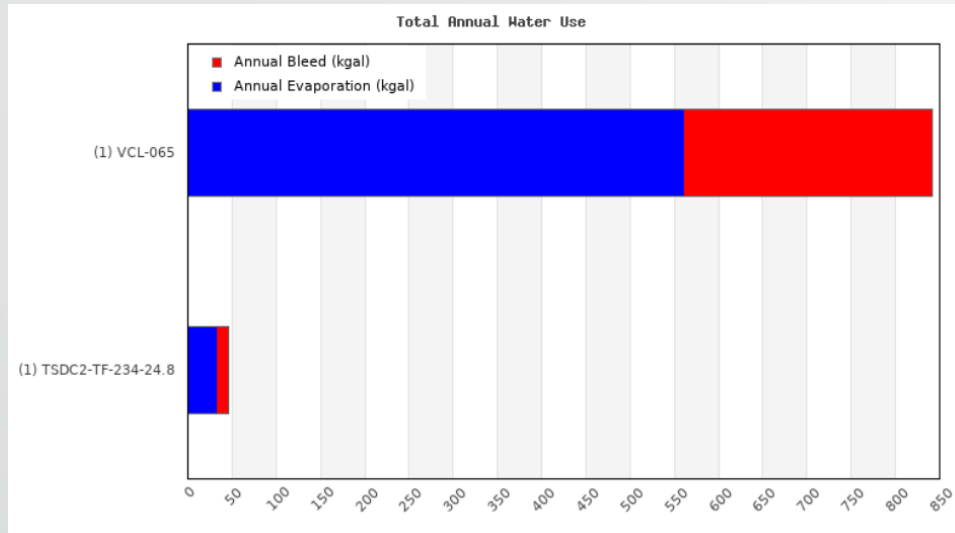
Case Study #2



Supermarket in the Southeast

- Evaporative Fluid Cooler Replacement
- 11 Glycol-Cooled Refrigeration Stations Throughout Store
- 67 tons of refrigeration
- 840 kgal/yr water consumption

Case Study #2



Savings vs Evaporative

- 95% Water use reduction.
- Water treatment expenses eliminated.
- 8 kW reduced Peak Demand (10% reduction)
- 47,004 kWh reduced Total Energy Consumption (10% reduction)
- Almost \$16,000 yearly savings!
- 795,000 gal/yr water consumption saved!



BALTIMORE AIRCOIL COMPANY

