Polaris
PLATE HEAT EXCHANGERS

# How the right equipment kept cooling dollars from evaporating

**Case Study:** Geisinger Clinic, Scenery Park, State College, Pa.

**Issue:** Replace old and inefficient cooling system

**Solution:** Polaris Plate Heat Exchanger/Fiberglass Cooling Tower

When this leading Pennsylvania medical center had to replace its outdated evaporative fluid cooler, the economical, efficient choice was a fiberglass cooling tower supported by a Polaris Plate Heat Exchanger. The energy savings compared to the old evaporator were huge – on the order of 80 percent. But the new system offered other big advantages as well:

- It cost 20 percent less to purchase and install.
- Its expected life cycle is 50 years (vs. 10 for a comparable evaporative cooler).
- Its footprint was about half that of the old system.
- **Between its lower installed cost and more efficient operation, expected payback time for the Polaris is less than one year.**

Geisinger Health System, based in Danville, Pa., was founded in 1915. This physician-led system, dedicated to health care, education, research and service, spans 43 counties of 20,000 square miles, and serves 2.6 million people.

Previous system

Polaris PHE system

**Fiberglass cooling towers and Polaris Plate Heat Exchangers beat the high life-cycle cost of evaporative coolers.**

# Make the Efficient, Economical Choice for HVAC and process fluid cooling:

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Need an effective, efficient answer to your HVAC and process fluid conditioning demands? There's a better choice than antiquated evaporative coolers. Structure a system that combines a fiberglass cooling tower with a Polaris plate heat exchanger, and you'll save money from day one. You'll also get a system that maintains effective fluid isolation and cools HVAC or process liquids more efficiently.

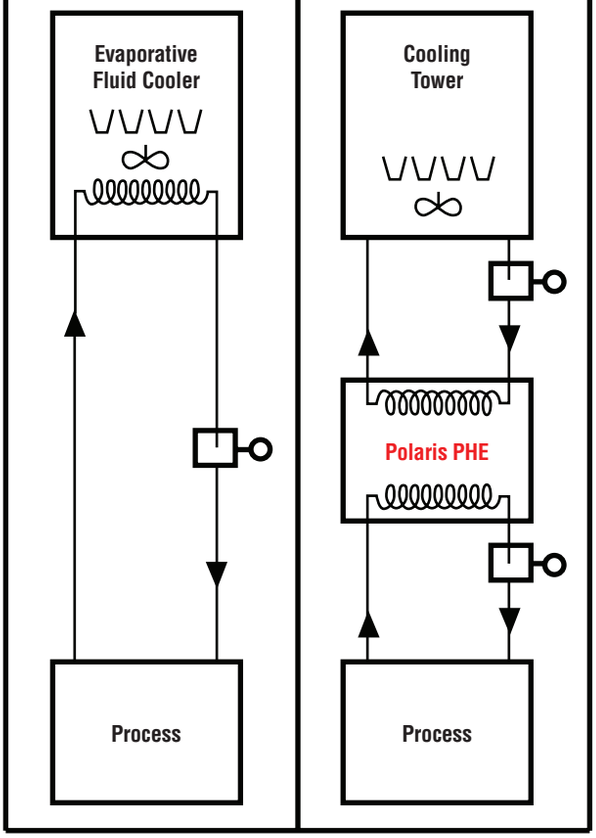
A fiberglass tower system with a Polaris PHE at its heart is far less expensive to buy than an evaporative cooler. Couple the tower and the heat exchanger, and you also get a more efficient system that's cheaper to run, incorporates superior materials, uses colder water (not glycol) and requires smaller components – including heat pumps – with lower horsepower.

Combining a fiberglass cooling tower with a Polaris heat exchanger delivers unbeatable savings at purchase and throughout a long, useful life – up to five times longer than the expected life of an evaporative cooler. Make the efficient, economical choice whenever you need to cool HVAC or process fluids. Choose Polaris PHEs.

Fiberglass cooling tower and Polaris PHE vs. Evaporative Fluid Cooler

**Cost comparison for Geisinger Scenery Park installation**
Conditions: 330gpm, 104HW, 92.6 CW, WB 78

| | Evaporative Fluid Cooler | Cooling Tower and Polaris PHE |
|---|---|---|
| Total HP | 45 | 10 |
| Materials | Galvanized Steel | Stainless Steel PHE, Fiberglass Tower |
| Costs | **$16,800** (including fan, evaporative cooler, spray pump, basin heater and control panel) | **$11,352** (including tower, heat exchanger, spray pump, basin heater and control panel) |




## Seven reasons to choose a Polaris PHE / cooling tower system:

- Much lower purchase price and installed cost than an evaporative cooler system
- Lower horsepower for greater economy
- Colder water in system means lower operating cost
- Superior cleanability results in lower maintenance costs
- Overall system is smaller, saving space
- No need for glycol, so system delivers better heat transfer and lower operating costs
- Stainless steel PHE construction is more durable than evaporative cooler alternatives.

**The choice is clear. For big savings at purchase and more efficient, economical operation afterward, go with fiberglass cooling tower / PHE systems from Polaris.**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