



Energy Saving Heat Pump Water Heating Solutions

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geyserhotwater.com
www.nyle.com

Nyle Systems - Overview

- Energy saving heat pump solutions for:
 - Drying and Dehumidification:
 - Lumber dryers
 - Food dryers, other product dryers
 - Humidity control systems for warehouses and production facilities
 - Heat Pump Water Heating Solutions:
 - Residential
 - Commercial
 - Made to Order
 - Energy Recovery:
 - From simple heat recovery to ORC Systems (2012)



- 34 Years of experience building advanced systems, manufactured in Brewer, Maine, USA

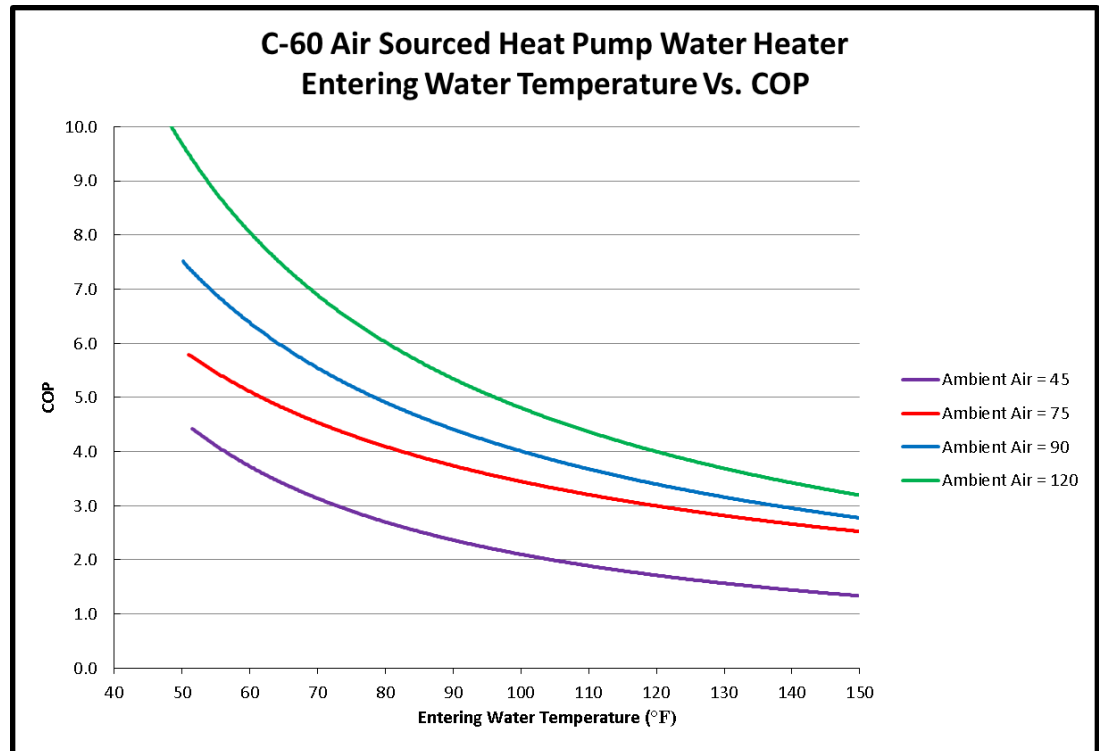


Air Source Heat Pump Water Heating

The Concept

- Extract energy from ambient air to heat water in the tank:
 - “Move heat” instead of creating new heat by burning gas/oil or electric resistance
 - Efficiencies of 300% - 500% relative to electric input
 - Technology has been around for decades but hasn’t caught on in the US until recently (classified as renewable energy in parts of the world)

- Efficiencies depend on ambient air temp and water temp:



Air Source Heat Pump Water Heating

The Concept – continued

- **Potential applications:**
 - Need ambient air of 45F or more (Cold Climate version to be developed – 2012)
 - Pick up energy from areas with waste heat (boiler rooms; kitchens; storage rooms; etc.)
 - Areas that need cooling: Use cooled air to off-load the AC - the extra cooling is free!
- **Bottom line:**
 - Any application that currently heats water using Electric, Propane or Oil can see savings of 60% – 75% (commercial units), or will cut water heating costs in half (residential units).
 - Pay-back period of 1 – 3 years

Heat Pump Water Heating Product Line

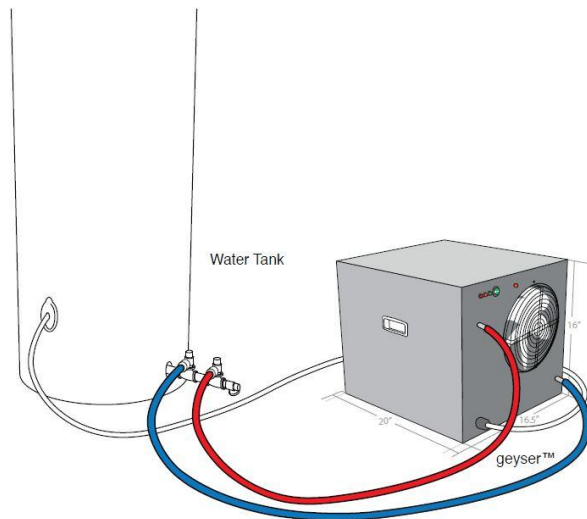
Introducing the
geyser[™] Hot Water Naturally

- Residential
 - Geyser-R
 - Geyser-RO
- Commercial
 - Geyser C-25
 - Geyser C-60
 - Geyser C-125
 - Geyser C-250
- Made to Order
 - Custom heat pump water heating systems designed to specification



Residential Line: Geyser R and Geyser RO

- Residential size units, to be installed with existing tanks (retrofitted):
 - Geyser R: Electric tanks
 - Geyser RO: Gas and oil fired and most other tanks
- Saves 50-65% on costs and energy
- Cools and dehumidifies the surrounding air
- Professional installation in 30 – 60 minutes



Example Testimonial

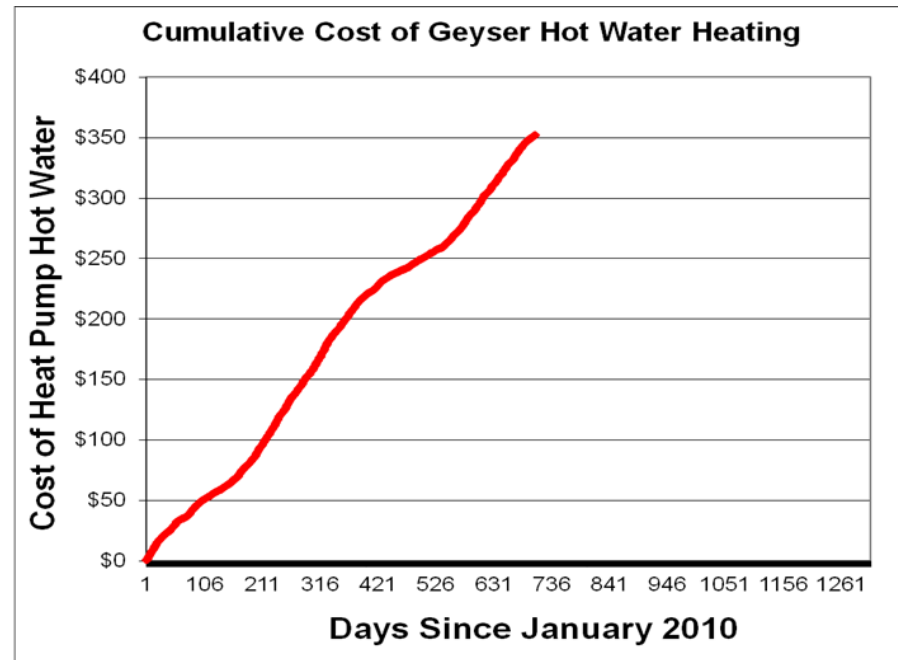
“On January 1st, 2010, I retrofitted my Geyser unit to my propane hot water tank and turned off the propane supply. The cost to heat my domestic water over the 22 month period was only \$350. Previously, my monthly propane usage for my domestic water heating was about 16 gallons of propane per month, so over the 22 month interval, I saved about 352 gallons of propane.

Propane costs me \$3.19 per gallon, so these 352 gallons of propane would have cost me \$1,123. My Geyser retrofit has therefore saved me \$773, or almost 69%.

I am very happy with my decision to purchase and install my Geyser which has satisfied the domestic hot water needs for a family of 2, with the periodic addition of visiting relatives. While the propane heater is normally turned off, it is available for supplemental heat on the rare occasions when we have a houseful of visitors.

I can highly recommend the Geyser hot water heater to anyone wishing to save on their hot water heating bill.”

John Logan, B.Sc., Ph.D
Member Environmental Technology Board
Maine Technology Institute



Commercial Line: Geyser C Series

- Commercial units, ranging in size from 25,000 BTUH to 250,000 BTUH
- Recovery rates from 57 - 500 Gph
- Applications include: Restaurants, hotels, schools, gyms, laundromats, and much more
- High COPs save 60-75% on costs and energy
- Cools and dehumidifies the ambient air
- Cold climate systems to be commercialized in 2012





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