ANESI™

BETTER EFFICIENCY. BETTER COMFORT. BETTER PLANET.



Domestic Water Heating

Your customers have expectations. Your staff have expectations. Hot water on demand is mission critical. Until you can't provide it or there is a gap in the supply, you don't hear about it. Your business spends a lot of money to meet these expectations and providing hot water represents a significant operational expense.

Anesi's Commercial Water Heating System uses a gas-fired heat pump with the existing natural gas, propane, or other gas fuel source. With superior operating efficiency, the Anesi system cuts fuel consumption up to 50% without sacrificing performance. By using less fuel with the Anesi Commercial Water Heating System, you can save money and the planet at the same time.

BENEFITS

- Proven Gas Heat Pump technology yields immediate operational savings for commercial water heating up to 50%.
- A reliable gas-fired energy source ensures hot water availability.
- Uses existing 120V / 15A circuits.
- Conserves valuable indoor space.
- All combustion and refrigerant remain outdoors.
- Positive environmental message for customers.
- Excellent economics and investment payback.

COMPONENTS

Gas Heat Pump
Anesi HP80

The Heat Pump sits outdoors, adjacent to the building or on the rooftop.

Indirect Storage Tank
Anesi IST119

The Indirect Storage Tank replaces or augments a traditional water heater inside the mechanical room. Heated hydronically, it has no internal combustion or need of venting.

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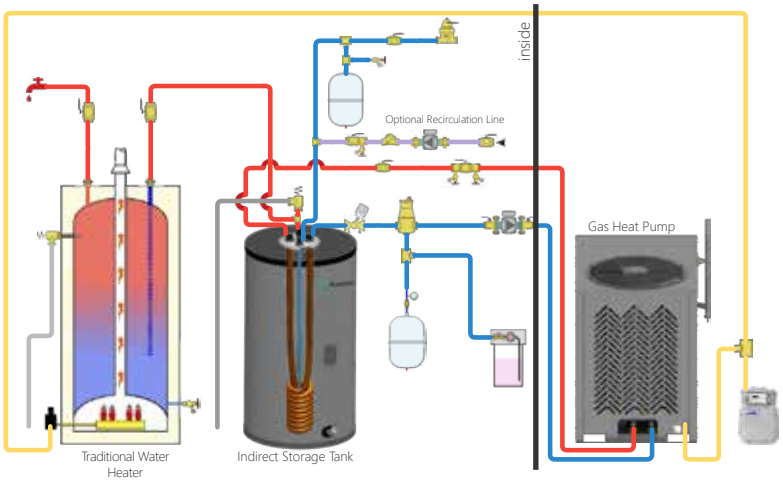
HOW IT WORKS



Replacement:
The Anesi Commercial Water Heating System is installed to support the existing gas water heater(s) by preheating the supply before "finishing" by a boiler or other gas water heater. The Gas Heat Pump provides this base load heating at a much higher efficiency compared to legacy equipment, due to the 1.43 Coefficient of Performance (CoP).

Typical installations include an indirect storage tank heated by the Gas Heat Pump and the existing traditional water heater retained as a backup unit. This backup unit assists with the peak water demand while the indirect storage tank heated by the high-efficiency Gas Heat Pump provides the majority of the hot water.

New Construction/Remodel:
Each project is sized appropriately to provide the majority of the DHW requirement via the Gas Heat Pump. Having at least two separate water heaters helps ensure the facility does not run out of hot water.

Temperature
The Anesi Commercial Water Heating System is the best solution when providing hot water in the range of 125°F to 140°F. The system design allows the Gas Heat Pump to provide base load preheating in the noted range at a higher efficiency as a result of the 1.43 Coefficient of Performance (CoP). This preheated water is fed into the traditional water heater for finishing or meeting less-frequent demands for temperatures up to 180°F. In many cases, the appliance requiring higher temperatures may be able to provide the additional heating from 140°F to 180°F.

Location
The Anesi Gas Heat Pump is typically located outside the building, near the mechanical room or on the rooftop. This saves mechanical room space and keeps all combustion and refrigerant outside

ENVIRONMENTAL

The ultra high efficiency Anesi Gas Heat Pump can reduce gas consumption and associated carbon emissions up to 50% beginning the moment it's installed. The Anesi Gas Heat Pump captures heat from the outdoor air which contributes to its efficiency. Because the heat pump relies on an ammonia-water, gas absorption cycle and NOT a mechanical compressor, it operates with a very low power requirement in temperatures down to -40°F/C. Unlike other heat pumps, the Anesi Gas Heat Pump uses ammonia - a safe and natural refrigerant (R717) with zero global warming potential (GWP) and no PFAS. The Anesi system is designed for use with natural gas or propane. As the carbon composition of this gas fuel is reduced by research and development within the gas utilities, the Anesi system will continue to outperform. Decarbonization is the goal for everyone and through the combined innovation efforts across all industries, sectors, and geographies great strides can be made.

INSTALLATION

Your contractor or specifying engineer will assess the building site and advise on feasibility. The Anesi Commercial Water Heating System can be customized for certain individual site requirements based on a professional assessment.

Find a local Anesi-trained installation professional at: AnesiComfort.com

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