



Getting the Most from Your Cooking Equipment



Boost Profits with Gas Booster Water Heaters

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As an operator, your reputation depends on more than your food, it depends on your dishwashing process and its ability to provide clean, dry and sanitary dishware. Heating your dishwasher's rinse water to 180°F assures that your dishware is free of food deposits, lipstick stains, residue and harmful bacteria. With a gas hot water rinse, dishware not only looks better, it dries faster. This means less handling and quick turnaround time, requiring less inventory of dishware, glasses and utensils. In addition, a gas booster heater can supply low temperature dishwashers with 180°F hot water for improved operation, thereby eliminating all those nasty chemicals and making your dishware last longer.

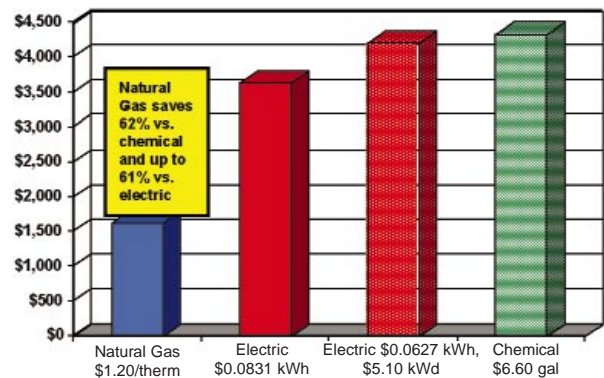
What you just read may sound a bit like a commercial, and in a way, it is, but in actuality it addresses an issue that touches virtually every operator in the business. Dishes need to get cleaned somehow, and a gas booster water heater helps you do that quickly and efficiently, while also saving money and space. The flexibility, compactness, quiet operation and heating capabilities of gas booster water heaters allow the units to be installed in virtually any warewashing situation. Technology that has improved over the years has enabled booster water heater manufacturers to introduce more efficient burners and unique heat exchanger configurations. And in many cases, installation is easier than ever before as many of today's modern gas booster water heaters can be free-vented directly into the warewash room.

A Significant Energy Factor...

According to the National Restaurant Association, water heating can account for as much as 20% of an operator's annual energy costs. Restaurants that use dishes and glassware are likely to spend an even greater portion of their energy dollar on water heating because, most often, the largest consumer of hot water in a restaurant is the warewasher. Whether your back-of-the-house relies on a single rack or a conveyor unit, optimizing your warewashing operations can improve your bottom line through reduced energy costs, increased productivity, and most importantly, higher

Annual Operating Costs for Dishware Sanitation

(44" rack conveyor operating 6 hours/day at 70% capacity)



These operating costs are based on an average electric cost of \$0.0831/kWh, including fuel cost and demand charges. The gas cost used is \$1.20/therm.

customer satisfaction!

Nationwide, natural gas is the preferred energy for water heating — it simply heats water twice as fast as electricity. While most operators recognize this and take advantage of gas-fired water heating for the supply source, many still use electric units for their high-temp booster water heating needs.

This, says Chef Doug Allen, a consulting chef with Premier Hospitality, is a mistake.

“Gas boosters give you the fast recovery needed for today's fast paced restaurant operation and they're a lot more economical to operate. Gas boosters don't contribute to the costly peak electric demand,” he says.

While prices vary regionally, natural gas is between 30 - 50% less expensive than electricity, even with today's record pricing levels. So with that in mind, the payback for investing in a gas booster will vary, but generally speaking, operators will see a return on their investment in three years or less. In today's economy, a 30% return is not bad! In the northeast, where electricity is expensive, the payback is quick. In the northwest, where energy is cheaper, a longer payback is expected. It also depends on how you use your machine — a 24 hour operation will see a much faster payback than a school doing just one meal a day.

Today, many booster manufacturers have online analysis tools, which can project site-specific savings and an estimated payback period for your operation. The Gas Foodservice Equipment Network website, www.gfen.info, has links to many of these sites, where you can calculate your potential for cost savings, whether comparing electric high-temp or chemical rinse washer systems.

It's a Smart Investment...

While the initial “first-cost” of a gas booster-heated warewasher might seem costly to many operators, manufacturers conclude that the costs will be made up in energy savings and reduced maintenance. Operators might spend several thousand dollars more up front, but the payback will be there in just a few short years. After that, the savings continue to be a major contributor to that most important bottom line year after year! And many operators now find that leasing is an easy and financially “painless” way to get into hot water without the capital needed for a direct purchase.

Gas Sanitizing Just Makes “Cents”...

A prominent national chain cut nearly \$300 per month, per store out of electricity bills since changing from an electric booster heater to a gas unit. The restaurant also has a more reliable source of hot water for the dish washing machine.

With the restaurant open 24/7, hot water is always in high demand for general kitchen and cleaning use. The dish machine is in full use at least five hours a day to keep up with all of the china, glasses and flatware used. Although the electric booster managed to produce enough 180°F water for the first two or three racks of dishes going through the machine, maintaining proper sanitizing temperatures after



*HATCO
Powermite® Gas Booster Heater*

those racks was a struggle.

The operating costs compounded their troubles. Besides the high electric bill, when you add costs of detergents, water and sewage from the rewashes due to improper sanitizing temperature, the costs really start to pile up. And then, figure in the costs of maintenance required to replace the electric elements that burned out every year or so, and the total cost of using electric boosters proves to be a losing battle! With the new gas booster heater, costs are down, payback is well underway and dishes are clean and sanitized —every wash!

Gas Booster Improvements...

Although electric booster heaters traditionally dominated the foodservice industry, increased electric costs and consumer awareness have made the gas booster an increasingly attractive option. Manufacturers have lowered gas booster operating costs by improving the design for increased energy efficiency, and their reliability has improved ten-fold from models that were introduced just a few years ago. Some of these improvements include:

- Improved burner technologies; some with modulating features. (FSTC Report 5011.03.28)
- Improved energy efficiency; up to 88%. (FSTC Report 5011.02.10)
- Improved heat transfer through innovative baffle design.
- Increased insulation to reduce heat loss.
- Extended tank life by reducing hard water buildup.
- Improved pump technology.
- Solid state controls for better reliability.
- Vent-free applications for simple installations.

Plus, depending on the type of machine you have, most warewashers with electric boosters can be quickly and easily converted to accommodate today's improved and reliable gas units. Chemical rinse machines are also candidates for fast and simple



*DELTA TEMP
SoftHeat® Booster
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retrofit conversions, and with the added cost savings associated with the elimination of those harsh chlorine-based sanitizers, the payback can be even quicker — not to mention the labor savings associated with eliminating the typical 20% rewash factor associated with most chemical sanitizing processes. Just imagine what the reduced labor and associated water and sewage savings can mean for your foodservice establishment.

Wine Fanciers Can Tell...

For an example of the importance of effective, high quality dish sanitizing from your customers' perspective, consider this example. If your operation prides itself on featuring a fine wine selection for your most discriminate customers, imagine an expensive bottle of your finest offering quaffed in a glass sanitized in a low temp dish machine. The telltale smell of chlorine will most certainly taint the vintage and might even cause the customer to stop patronizing your establishment or, at the very least, he'll never purchase an expensive bottle of wine again. That would certainly not be a "boost" to your profits, and it is a critical reason for insisting on a high temperature machine that incorporates a gas-fired booster water heater.

No matter which way you look at water heating and warewashing, and regardless of the brand you select for your foodservice operation, one thing is for certain: gas will provide more hot water in less time and for less money than any comparable electric unit. With gas, you can be sure that you are indeed "getting MORE for LESS!"

If you would like to know more about testing and evaluating gas-fired booster heaters, log onto the Gas Foodservice Equipment Network's website at www.gfen.info. There you will find a list of utility member test kitchens and links to manufacturer member cost analysis tools. You may also contact me at tom.stroozas@piedmontng.com or 704-731-4357.



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Gas Water Booster Heaters
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the 30th Edition 2006 - 2007
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Gas Equipment Catalog

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