

## Case History No. 10

*Pioneering the use of gas energy to heat water to sterilizing temperatures for dishmachines.*



# Energy Saving PowerMax™ Gas Booster Heaters Provide Chemical-Free Sanitization For Marché Restaurant Dishmachines

Like many restaurateurs, Stephanie Kimmel didn't originally set her sights toward the restaurant business. The innovative chef and owner of the renowned Marché Restaurant, Marché Cafes and Marché Provisions, a European style food emporium and wine bar in Eugene, Oregon's bustling 5th St. Market says she always enjoyed cooking at home, encouraged by her parents' love of cooking. With her father's career as an Air Force pilot taking the family all over the globe, she was fortunate to have experienced an array of worldwide cuisines that have influenced her restaurant menu selections and brought raves from patrons.

"The ability to pick up and move at a moments notice, as we frequently had to do as a military family, was a good learning experience about change, so relevant to the restaurant business," says Kimmel.

While a graduate student studying comparative literature, Kimmel started cooking part time in a restaurant to help pay expenses, enjoying the hospitality and energy of a business and lifestyle she would eventually pursue. "I realized I didn't want to become a professor," she adds with a subtle laugh.

Kimmel opened her first restaurant, Excelsior Cafe, in Eugene in 1972 and operated it for 21 years. During that time, the restaurant was featured in



*Vanguard's compact PowerMax 200™ Gas Booster Heaters (shown under dish table at left) consistently and reliably provide all the 125°F domestic hot water needs for the Marché Restaurant units as well as the 180°F sterilizing rinse water for the dishmachines. At that high temperature, dishware is sanitized without the need for harsh and costly chemicals, prolonging dishware life and producing a much cleaner outcome.*

numerous publications including Food & Wine, Gourmet, Travel and Leisure, Bon Appétit, The New York Times and Sunset.

Kimmel's initial contact with Vanguard Technology Inc. came during her Excelsior Cafe years: "We bought a heat exchanger from them to take the heat from the refrigeration units," she says. "Later on, when we built our home, Vanguard installed the on-demand hot water system." Kimmel continues, "We realized Vanguard's energy saving and

*(continued over)*



*"With Vanguard's PowerMax™ Gas Booster Heaters our gas bill has gone down while rates have gone up," says Marché owner Stephanie Kimmel.*

## Marché Restaurants

(continued from front)

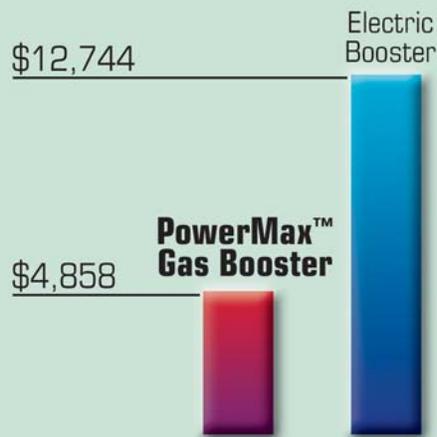
environmentally responsible gas booster heaters were available to put in my business. We do as many things as we can to have a minimal impact on the environment and to go along with our food philosophy to use organic, chemical free and genetically unaltered products whenever possible.”

Vanguard PowerMax 200™ Gas Booster Heaters are employed throughout the various Marché units to consistently and reliably produce all of the required domestic hot water (125° - 140°F) for the sinks and dishwasher pre-rinse and 180°F sanitizing rinse water for the dishmachines. “We still use the real stuff – dishes, not disposables” – says Kimmel smiling.

Steve Kujawa, Vanguard’s president, says in addition to providing sanitizing water for the dishwasher, an available temperature control unit can be placed on PowerMax™ boosters to also produce lower temperature water for restaurant kitchens, as was done here.

Vanguard gas boosters are typically used with commercial dishwashers of all sizes in restaurants, hotels, schools and institutional operations, taking 120°F water going into the dishwasher and boosting it up to 180°F for the machine’s sanitizing rinse. At that high temperature, dishware is sanitized without the need for harsh and costly chemicals, prolonging dishware life and producing a much cleaner outcome. “Dishwashers operating at lower temperatures invariably leave a chemical residue on dishware and glasses – a chlorine taste certainly detracts from the enjoyment of well prepared food and beverages,” says Kujawa.

### ANNUAL OPERATING COST COMPARISON



#### Data For Comparison

Dishwasher Rinse	300 gal/hr
Dishwasher Use	6 hr/day
Electricity	\$0.10/kwh
Electric Demand	\$8.00/kw
Natural Gas	\$1.20/therm

**The National Restaurant Association notes that water heating accounts for an average 18% of a restaurant's annual energy costs. While utility prices may vary, gas is generally 50% to 70% less expensive than electricity.**

What makes Stephanie Kimmel so enthusiastic about Vanguard gas boosters? Is it because of the energy saving natural gas (or propane) operation that produces the hot water at the least possible cost? Is it the 90% operating efficiency, low emissions that reduce the carbon footprint, easy servicing, reliable single source supply for all water heating needs? It's all these and more.

According to the company, the energy savings of Vanguard gas boosters as compared to electric units can be as high as 70%, the cost savings going directly to a restaurant's bottom line. “Our gas bill in the restaurant has gone down while rates have gone up,”

says Kimmel. “We budget for our gas each year and when we look at previous year's cost there's money left over.”

Vanguard gas boosters install quickly under the dish table and can vent through the dishwasher ventilation system, eliminating the need for a separate roof penetration. Up to 200 sq. ft. of floor space can be saved when replacing a hot water heater and electric booster with a Vanguard “All-in-One” gas booster, says Kujawa.

Constructed of an all stainless steel welded frame, cabinet and tank, Vanguard gas boosters feature a patented water flow and temperature regulating heat transfer unit. A rugged, high efficiency infrared woven ceramic fabric burner with excellent thermal properties and resistance to mechanical impact permits lower combustion temperatures and reduced NOx emissions while operating at 90% efficiency. Microprocessor controlled ignition and temperature control and factory installed pressure relief and regulating valves assure accuracy and consistency. Quick, easy service is assured with front access and single point electric, water and gas connection. All PowerMax™ gas boosters are hand-built and fire-tested before shipment.

Running a profitable restaurant during times of economic growth is challenging enough but to survive and thrive in today's environment requires paying attention to every facet of the operation, including back of the house issues that don't typically excite culinary school graduates. “We're saving real cash and getting more control over our costs,” says Kimmel. “Thanks to Vanguard, we're in a much better position to be successful today and into the future.”



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Vanguard Technology, Inc. also manufactures high-efficiency production water heaters.