



A  Sempra Energy utility

Emerging Food Service Technologies

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What's facing the Food Service Industry



- Food & Workplace Safety Concerns
- Strong Competition
 - Building & Maintaining Sales Volume
- Labor & Time Savings
- Recruiting & Retaining Quality Employees
- Energy Costs
- Governmental & Environmental Impacts
 - Energy efficiency –Conservation-Security
- Health Concerns
- Growing use of Technology
 - Information Management- Inventory Control

Equipment Trends and Opportunities



- Healthful, organic and some fusion cuisines
 - Bite size desserts
 - Flatbreads
 - Specialty sandwiches
 - Pan-seared items
 - Asian, Mediterranean and Latin American cuisine

Focus on specialty display equipment, display and exhibition cooking

- Gas Deck Ovens with built-in charbroilers
- Rotisseries both horizontal and vertical
- Mongolian BBQ's
- Specialty Ranges with Woks
- Tandoori Ovens
- Tortilla Makers



Stone Conveyor

Who uses this pizza oven?

- Independent Pizza chains
- University dining

What are the benefits?

- Granite gathers & transfers heat to product
- Saves energy & simplifies labor
- Cooks a wide variety of foods
- Granite conveyor maintains a consistent level of heat; reducing the amount of time the burners must fire
- Reduces bake time; increases energy savings.
- Automated production eliminates supervision & handling during cooking process.
- Takes “old world” technology and makes it real world for today.
- Deck oven quality with the production advantages of a conveyor



Combination Ovens



- Who uses combi ovens?
 - High Volume Venues
 - Casinos
 - Chain Accounts
 - Hotels
 - Schools
 - Healthcare
- What are the benefits?
 - Versatility & Quality
 - Increased Productivity
 - Faster Cooking Times
 - Better Production Yields
- Modes of operation
 - Steam, Defrost, Simmer, Poach, Reheat, Roast, Grill, Bake, Fry, Hold
 - Simultaneously - both steam and convection
- Expanded menu possibilities
- Downloadable information
- Smart Kitchen Technology – NAFEM Protocol



Steam Griddles



- Who uses steam griddles?
 - Chain restaurants
 - Healthcare
 - Schools
- How is steam generated?
 - Steam is generated by infrared gas burners that boil water in a hermetically sealed vacuum chamber directly under the griddle surface.
- What are the benefits?
 - Delivers uniform surface temperatures of +/- 2°f of set temp
 - Higher production capacity per foot of griddle
 - Sealed steam system never needs water, cleaning or maintenance.
 - Not designed for use by all operations who need varied zone temperature control.



High Efficiency Fryers



- Who uses high efficiency fryers?
 - Chain restaurants
 - Recreational facilities
 - Colleges & universities
- What are the benefits?
 - Higher Production
 - Uniform Temperature Controls
 - Faster Recovery
 - Consistent Cook Times
 - High Quality Food
 - Lower Exhaust Temperatures
 - Reduced operating costs



Gas Booster Heaters



- What is a booster heater?
 - Dedicated Water Heater
- Who uses booster heaters?
 - Healthcare
 - Hotels
 - Restaurants
- What are the benefits?
 - High temp sanitizing-rinse water 180°F with 110°F to 140°F water supply
 - Optimizes efficiency and temperature control
 - Alternative to chemical sanitizing; environmentally friendly
 - Sizes/styles for every need
 - Check on hood requirements (varies by make and size)
 - Flexibility & compactness
 - Increased insulation
 - Unique baffled heat exchanger
 - Modulating burner technologies



Infrared Char broilers



- Who uses char broilers?
 - Chain restaurants
 - Hospitals
 - Schools
- What are the benefits?
 - Technologies – either 100% sheet steel or ceramic infrared burners, in combination with a secondary mechanism to reduce flare-ups (either glass or air curtain).
 - Quick preheat
 - Efficient and even heat distribution
 - More energy efficient than standard char broilers
 - Intense infrared energy quickly heats the food not the surrounding air



Gas Tilting Pressure Braising Pans



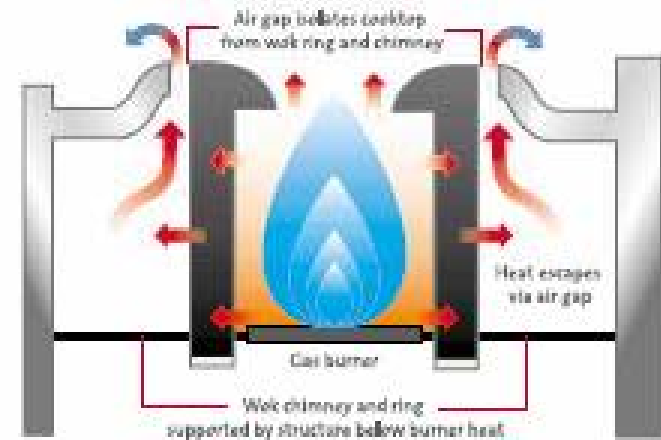
- Who uses pressure braising pans?
 - Chain restaurants
 - Hospitals
 - Schools
- What are the benefits?
 - 5.8 psi of saturated steam pressure/Reduces cook time by approx 40%
 - Efficient and even heat distribution
 - Heat insulated: holding temperature/gentle heat input for delicate products
 - Pan tilts over 90° for complete emptying & cleaning
 - Creates high volume in a short amount of time



Waterless Wok



- Who uses Waterless Woks?
 - Asian Chain restaurants
 - Asian Independent Restaurants
 - Colleges & Universities
- What are the benefits?
 - Conventional wok stoves use water for two main purposes:
 - Cooling
 - Cleaning
 - Efficient and even heat distribution
 - Has an air gap that insulates wok stove burner and ensures the release of gases into the kitchen exhaust system, eliminating the need for cooling water





- Demand Control Ventilation
 - Infrared beam which responds to vapors or steam
 - Automatically varies speed of fan
 - Reduces amount of make-up air required
 - Reduces amount space conditioned air stolen from the space
 - Saves energy (fan, cooling and space heating)
 - Slower speeds make the hood quieter
- Ultraviolet Hood
 - Burns off grease inside hood cavity , reducing the risk for fire
 - Insurance companies may lower rates
 - Cleaning costs significantly lower

Water Heaters



- Foodservice Operators' Choice
 - 76% of all food service operators choose natural gas for all their water heating needs.
- Condensing Water Heater
- New Burner Technologies
 - “Ultra Clean Low Swirl Combustion” ULSC
 - Uses small air jets to swirl the premixed flow inside the burner tube, providing a stabilized, lean, pre-blended air/gas mixture.



Why Choose Natural Gas?



- Even heat
- Highly efficient
- Cost effective basic energy source – not manufactured
- Easy maintenance
- Economical energy source
- Available
- Reliable
- Clean

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