



Track: Commercial Natural Gas I Unit #9: Foodservice

Greg Tomsick, Energy Solutions Center

Presentation Outline

Opportunities for natural gas equipment

- Featured equipment

- Fryers
- Ovens
- Ranges
- Steamers
- Broilers
- Griddles



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Presentation Outline, Continued



- Specialty Equipment
- Ancillary Equipment
- Ventilation Systems
- Cost Analysis Tools
- Associations and Resources
- Manufacturers

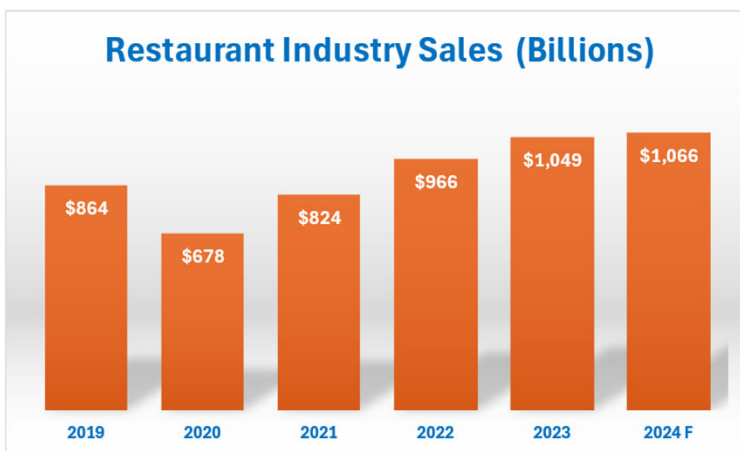


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Restaurant Growth

Restaurant Industry Sales (Billions)



National Restaurant Association: 2024 State of the Restaurant Industry

Employment:

2010: 12.2 Million
2020: 15.6 Million*
2030: 17.2 millions*
*Projected



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ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protecting the environment through energy efficient products and practices

ENERGY STAR certified commercial kitchen equipment helps cafe, restaurant, and institutional kitchens save energy by cutting utility and maintenance costs without sacrificing features, quality, or style. Saving energy helps save money on utility bills and protect the climate by reducing greenhouse gas emissions.

Outfitting a commercial kitchen with a suite of commercial food service equipment that has earned the ENERGY STAR could save operators about 340 MMBTU/year, or nearly \$5,300/year.



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Trends

Top 10 Overall Trends

1. World Stage Soups & Stews
2. Global Chicken Wings
3. International BBQ
4. Incorporating Social Media Trends (TikTok)
5. Grilled/Cooked Cheeses
6. Wagyu Beef
7. Stuffed Vegetables
8. Regional Menus
9. Streamlined Menus
10. Hot Honey Breakfast Sandwiches



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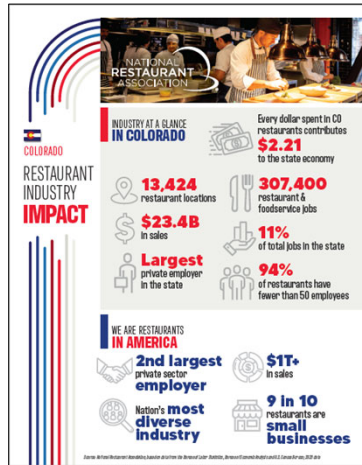


[WhatsHot2024.pdf \(restaurant.org\)](https://www.restaurant.org/WhatsHot2024.pdf)

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State Statistics



Source: National Restaurant Association, based on data from the Bureau of Labor Statistics, Bureau of Economic Analysis and U.S. Census Bureau; 2023 data

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The Opportunities

Why Natural Gas Equipment

- Hotter cooking temperatures
- Better control and temperature response
- Higher reliability and equipment life expectancy
- Equipment flexibility
- Lower operating costs



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Why Natural Gas Equipment

- Hotter cooking temperatures
 - Natural gas combustion maxes out at approximately 3,000°F (1,649°C)
 - Electric heating elements may achieve 2,000°F (1,093°C)



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Why Natural Gas Equipment

- Control and temperature response
 - Natural gas has direct flame contact with the surface being heated
 - Instant on / instant off, as well as large turndown
 - Note that electric elements retain heat after they are shut off



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Why Natural Gas Equipment

- Reliability – equipment life expectancy
 - Gas cooking appliances are reliable and with proper maintenance last for many years



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Why Natural Gas Equipment: Flexibility!

- Multi cooking capabilities
 - Combi-Ovens
 - Maximum flexibility
 - Operates as a convection oven, a pressureless steamer, or in combination – all with one cooking appliance
 - Tilting skillet
 - Can braise, sauté, stew, boil, simmer, steam, pan fry, grill, roast, proof dough, and keep foods hot



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Why Natural Gas Equipment: Flexibility!

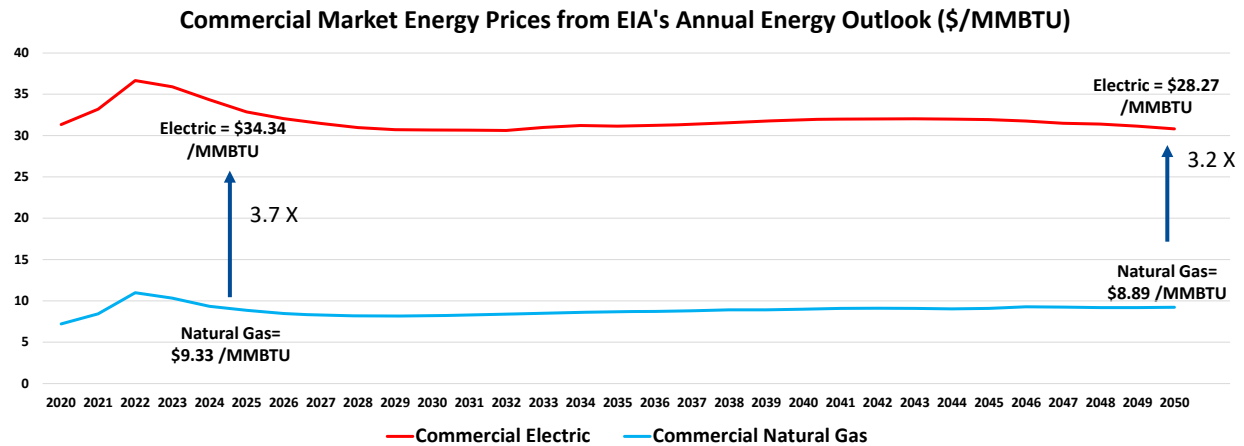
- Ease of connectivity
 - Gas connection systems
 - Kitchens can be reconfigured, or caster-mounted commercial cooking equipment can be disconnected from its usual gas source for off-site use or easier cleaning and service
 - Meet mandated safety standards for installation of gas appliances that are caster mounted or moved frequently



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Natural Gas Cooking has Lower Operating Costs than Electric Cooking (Electric costs more than 3 times that of gas)



Source: U.S. Energy Information Administration

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Competitive Equipment

- Electric cooking equipment is also available for most applications – thus the customer has choice
- Customer preferences, space requirements and first cost all are a consideration
- Installation costs must be considered
- Convenience factors dictate placement of items such as the microwave oven

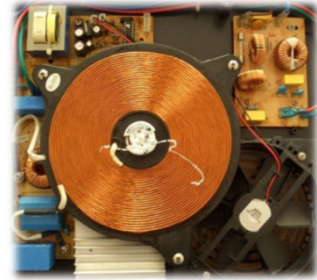


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What is Induction Heating?

- Coil of copper wire is placed underneath the cooking pot of the range
- Alternating electric current flows through the coil, which produces an oscillating magnetic field
- This field induces an electric current in the pot
- Current flowing in the metal pot produces resistive heating which heats the food
- The current is large but it is produced by a low voltage
- Special cooking vessels are required

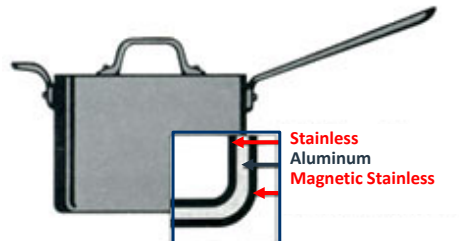


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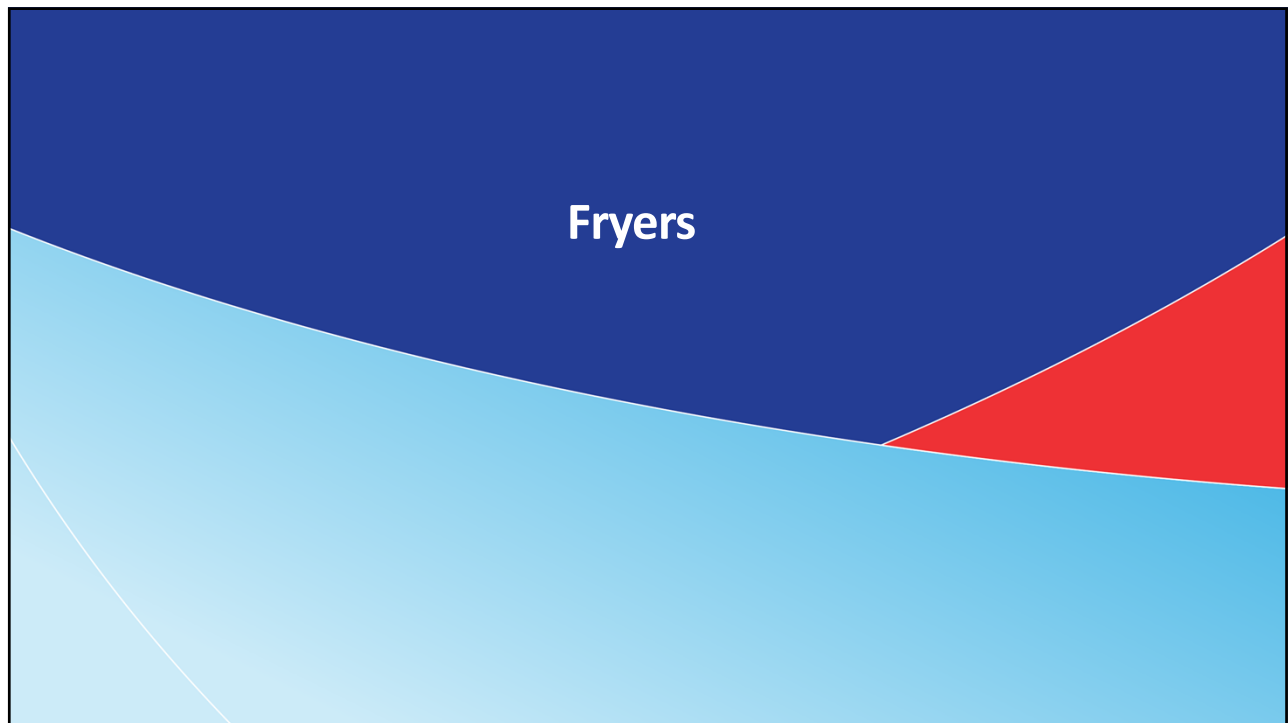
Cooking Vessels for Induction Heating

- Must be made of a ferromagnetic metal to accept magnetic waves
- Non-induction cookware can be placed on an interface disk which enables it to be used on induction cooking surfaces



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Fryers

- Used for deep-frying food items in oils
- Heat oil to a specific temperature
- Controlled by a thermocouple
- Quickly cooks frozen food items



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Fryers

- Gas fryers heat up more quickly and to a higher cooking temperature than electric fryers
- Electric restaurant fryers are popular in counter-top models because of their mobility
- Better heat transfer systems are providing improved energy efficiencies for gas fryers



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Fryers

- Tube fryers are often less expensive than their open fry pot counterparts
- Open fry pots have an external heat source, which makes them easier to clean and affords better access to the oil



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Natural Gas Fryers

- Provide reduced operating costs
- Quick recovery
- Computerized temperature and time control for perfect results
- Electronic ignition that saves energy
- New models use high-efficiency burners



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Natural Gas Fryers

- Available in floor models and space-saving counter-top styles
 - With fuel efficiencies exceeding 80%
 - Automatic basket lifts for consistent frying results, and
 - Built-in filter systems that make filtering easier and safer thus maximizing oil life



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Low Oil Volume (LOV) Fryers

- Natural gas fired LOV fryers are commercially available and are generally more efficient
- The use of more costly non-trans fat oils accelerated the development of LOVs
- They contain and use less oil
 - 30 pounds of oil versus typical 50 pounds of oil
 - A typical restaurant was using 7,000 – 8,000 pounds of oil per year

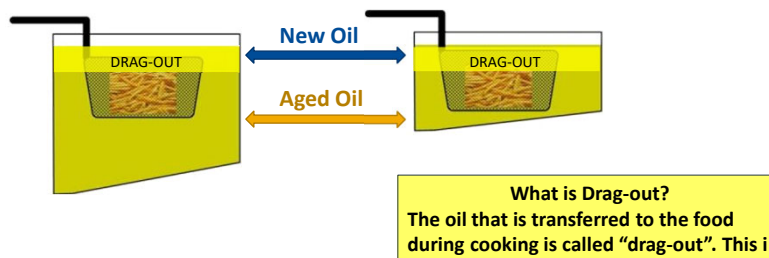


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LOV Fryers Reduce Oil Costs

- A higher percentage of new oil is added to a LOV fryer, thus oil 'ages' slower and lasts longer
- Note new oil replaces 'drag-out' losses



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Potential for Significant Savings Low Oil Volume vs. Standard Fryers

Oil Savings

- A drop of 20 lbs of oil capacity means 40% less oil is needed to cook the same amount of food
- That equates to \$5,000 in annual oil savings
- The \$5,000 savings has the same profit impact as increasing sales by \$100,000!

Better and More Consistent Product Quality

- Maintaining a constant level of oil allows a higher quality of fried coverage and a more consistent product

Ease of Use

- The push of one button allows oil to be filtered automatically in about 3 minutes
- Allows frying on other vats while one is filtering



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Energy Star® Fryers

- Energy Star® Fryers offer
 - Reduced energy consumption
 - Shorter cook times
 - Faster temperature recovery times
 - Higher Pound-per-Hour production rates
- Some products offer an insulated fry pot which reduces standby losses



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Commercial Fryers

- ENERGY STAR® certified commercial standard vat electric fryers are 14% more efficient than standard models
- On average save businesses \$2,600 on utility bills over the life of the fryer
- ENERGY STAR® certified commercial standard vat gas fryers are **30%** more efficient than standard models
- On average save businesses \$4,500 on utility bills over the life of the fryer



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Ovens

- A thermally insulated chamber used for the heating, baking or drying of food items
- Styles and sizes vary to fit a variety of menu options and facility designs
- Thermostatically controlled



Rack Oven

Natural Gas Ovens

- Advantages
 - More moist heat which is perfect for meats and other dishes cooked in sauces and broth
 - Uniform temperatures and superior cooking results
 - Lower operating costs
 - Faster pre-heat and cooking times
 - Use of infrared burners for some applications



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Different Oven Types

- Rack
- Convection
- Combination
- Conveyor
- Deck/Pizza
- Rotisserie



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Rack Ovens

- Single rack – one rack with multiple trays of food
- Double rack – one double rack or two single racks with multiple trays of food
- Mini-rotating rack – unmovable racks affixed to carousel mechanism into which pans of food are placed
- Rotating flow rack – larger version of mini-rotating rack



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Convection Ovens

- Can bake, roast or heat foods up to 20% faster than conventional ovens
- Mechanical blowers circulate heat quickly and evenly
- Circulated air rapidly strips outer layer of cold air from surface of food
- ENERGY STAR® qualified convection ovens typically save \$140 annually in gas costs



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Convection Ovens

- Cooking Energy Efficiency Rate
 - Standard gas convection oven 30%
 - Energy Star® minimum specification 49%
- Idle Efficiency Rate
 - Standard gas convection oven 18,000 Btu/h
 - Energy Star® minimum specification 9,500 Btu/h



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Combi Ovens

- A blend of conventional, convection and steam heat technologies
- Can operate as a convection oven, a pressureless steamer, or in combination
- Combi mode combines hot air and superheated steam providing faster cook times than convection alone

**Greater Yields (less shrinkage) – Moister Meals –
Faster Cook Times!**



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Combi Oven Capabilities

- Combi Ovens typically cook most menu items 30 to 50% faster and hold humidity levels to within 1 to 2%
- They have touch screens and chip memory that hold up to 500 recipes – and feature Wi-Fi connection to corporate servers
- Some have a feature that turns the oven into a cold or hot smoker
- Many models feature auto-deliming
- Many design changes have made the ovens more compact for the same capacity



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Conveyor Ovens

- Designed for quick serve chains, and similar high-volume operations
- Heating modes include:
 - Infrared
 - Natural convection with ceramic baking hearth
 - Forced convection (air impingement type)
 - Combination of infrared and forced convection
- New high efficiency units regulate burners using optical sensors. Turns burners off when no food is being cooked



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Conveyor Ovens

- Motorized, automatic, horizontal cooking chamber with openings at either end
- Food moves through at constant, controlled speed and temperature on continuous loops, stainless steel belt or wire mesh conveyor
- Food is cooked simultaneously on the top and bottom with minimum handling and no turning
- Delivers fast and consistent results
- Cook times 3-5 minutes



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Deck/Pizza Ovens

- Basic sizes include:
 - Standard/full-size - high volume operations
 - Countertop - lower volume; ideal for mobile catering
 - Vaulted Cavity - designed for front-of-the-house providing an attractive view for customers
- Motorized Convective – uses blower system to control and force heat flow evenly throughout the oven cavity



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Deck/Pizza Ovens

- High-production ovens
- Usually containing two or more decks at heights appropriate to the foods being cooked; 12 in. (0.3 meter) or less for pizza, and for baking applications when greater than 12 in. (0.3 meter)
- Food items placed directly on the oven deck
- Rotating turntable decks ensure even baking
- Display cooking units provide attractive views
- Combo Wood & Gas models are available



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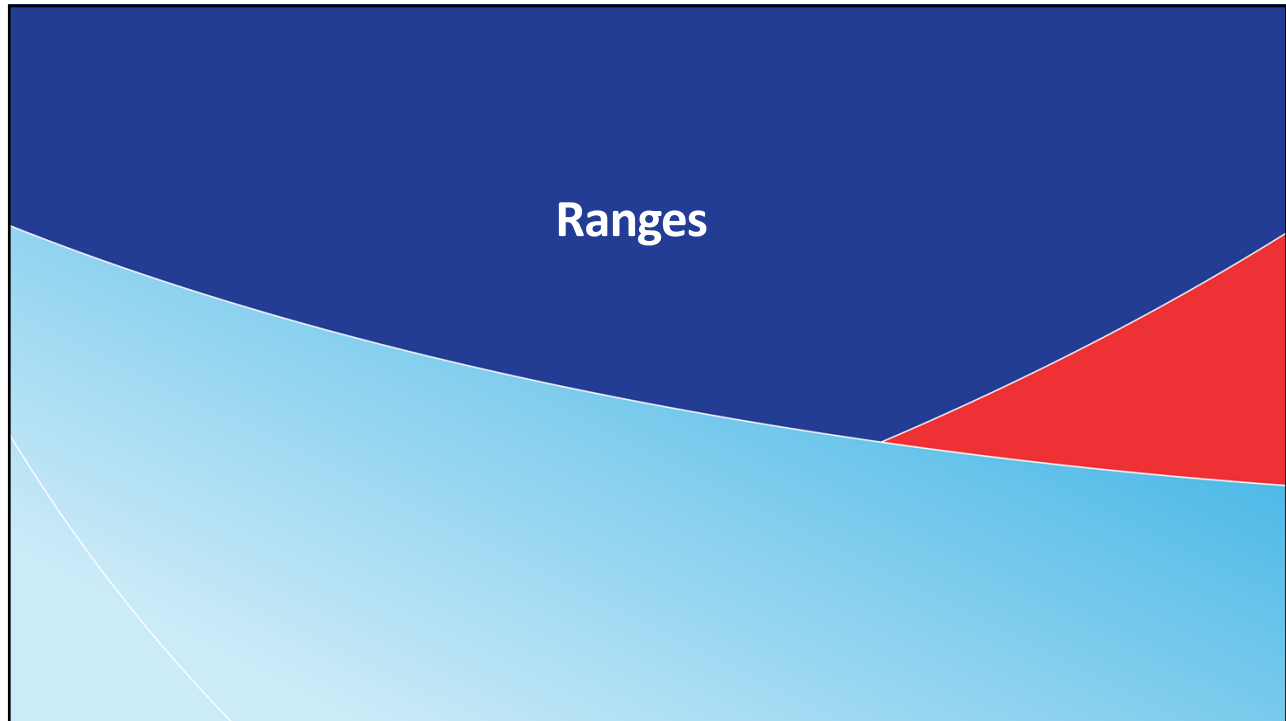
Combo Pizza Ovens

- Two independent flame sources
- Quick, and uniform heating of the entire oven dome and floor
- Oven temperature is controlled electronically
- Easy control over cooking temperatures



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Ranges

- Ranges are the most common and multipurpose cooking appliance in foodservice kitchens
- Cooking suites are centered around a range which may also contain an oven for baking



Natural Gas Ranges

- Natural gas ranges offer
 - Instant-on, instant-off flame control
 - Precise variable temperature control
 - A very wide range of temperature levels
 - Efficient and economical – about half the operating cost of electric models
 - Environmentally friendly



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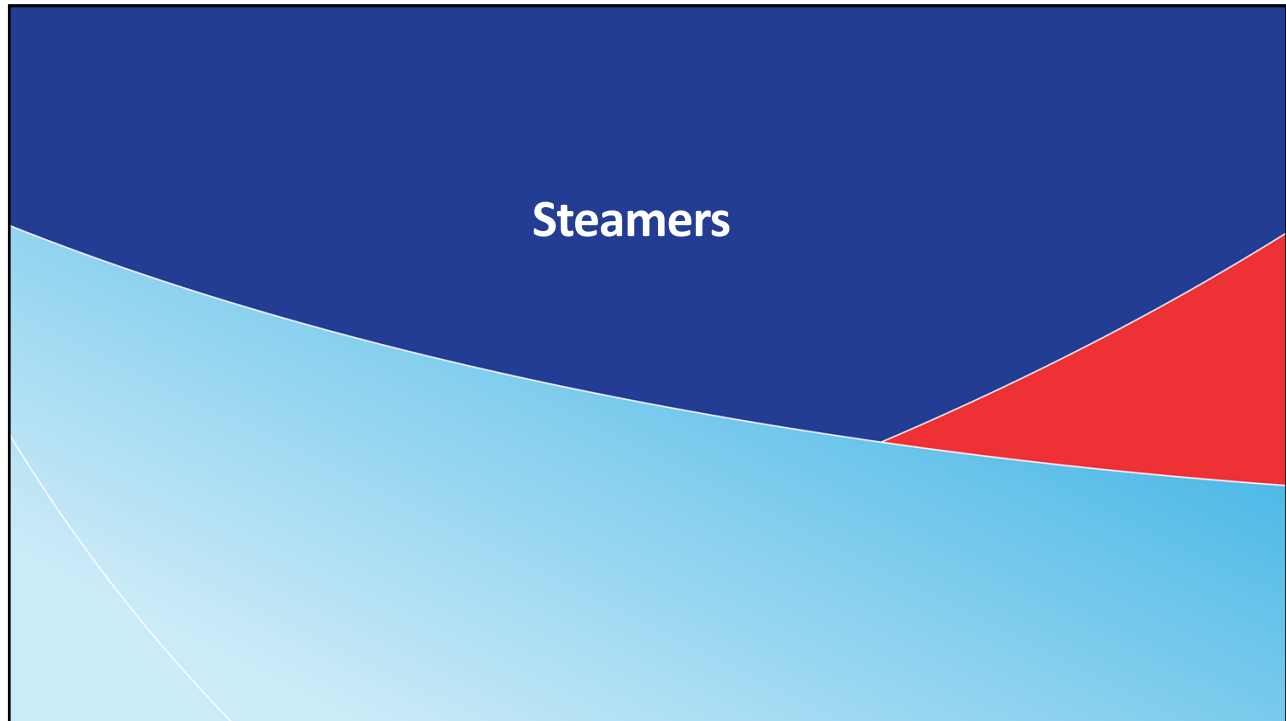
Range Specifications

- Natural gas ranges
 - Typical sizes from 24" to 72" (0.6 to 1.8 meters) wide and 36" to 42" (0.91 to 1.1 meters) deep
 - Open burners from 15,000 to over 40,000 Btu
 - Low-temp burners for simmering
 - Sealed burners for easy clean-up
 - Options for ethnic specialties
 - Automatic relight available on some models



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Steamers

- Used to prepare various foods in a sealed compartment that uses steam to evenly heat a product – they may be atmospheric or pressurized
- They may have one or several compartments that each cook a different menu item
- Ideal for cooking small quantities or a variety of different foods
- Steamers, given the closed environment generally release less heat to the kitchen space



Boiler vs. Boilerless Steamers

- Steam can be generated in a number of ways:
 - A steam generator located within the compartment, which usually produces steam at or slightly above the compartment pressure
 - By manually pouring water directly into the cooking compartment before operation (these units are often called “connectionless” or “boilerless” steamers)
 - Through an external electric, gas, or service-steam powered boiler, also known as “direct steam” and /or “steam coil”



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Steamers

- Advantages:
 - Foods retain color, texture, moisture and nutrients
 - No transfer of food flavors in pressure-less steamers
 - Fast, high-volume production with pressurized steamers
 - Greater food yield
 - Natural gas units produce steam in an efficient and energy-wise manner



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Steamer Types

- Pressureless (atmospheric) Steamers
 - Cook without using pressure making them especially suited to frozen foods and on-line cooking
 - Cooking begins after the steamer defrosts the food
 - Cooking starts and stops automatically, without depressurization
 - Constant exchange of fresh steam allows dissimilar foods to cook at the same time because there is no transfer of flavors



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Steamer Types

- Pressurized Steamers
 - Achieves higher production by employing pressurized steam, which raises internal food temperatures 3°F (-16°C) above 212°F (100°C) for every pound of pressure
 - Requires depressurization



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Kettle Steamers

- Kettle steamers cook fast without scorching or hot spots
- Suited to many food varieties, great for boiling pasta, simmering sauces and preparing soups and stews
- Many equipment options to meet virtually any cooking need



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Braising Pans & Skillets

- Most versatile appliances found in the commercial kitchen. They are used to braise, sauté, broil, roast, boil, fry, griddle, proof, hold, simmer, melt and steam. They can also be used as a steam table to hold warm foods.
- Maintain constant cooking temperatures and reduce total cooking time up to 25%. Thermostatic controls provide greater energy efficiency
- Manual or power tilting makes transferring food, straining liquid, and cleaning easier



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Commercial Steamers

- ENERGY STAR® certified commercial steamers:
 - are up to 60% more energy efficient than standard models
 - are up to 90% more water efficient than standard models (on average 3 gallons/hr versus 40 gallons/hr)
 - on average save businesses \$12,000 on utility bills over the product's lifetime



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Broilers

Broilers

- Gas is by far the most common fuel source
- Broilers give food an appealing appearance and flavor
- Foods cook by direct intense heat
- Infrared burners reduce cooking time and keep kitchens cooler
- A wide variety of sizes and types are available to suit different the kitchen designs



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Broilers

- Types of Broilers
 - Underfired
 - Overfired
 - Cheesemelters
 - Salamanders
 - Conveyor

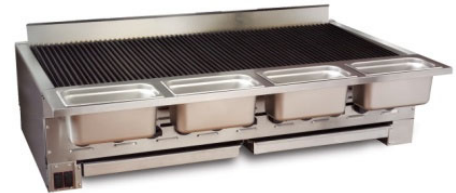


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Underfired Broilers

- Resemble the backyard barbeque having a heat source below a sturdy metal grid, thus cooking food by a combination of radiant, conduction, and convection heat
- Flames are diffused with the use of a bed of rocks, ceramic briquettes or a metal shield
- They produce smoke and flare-ups that are both a selling point to customers and an issue of concern to operators
- They also release a significant amount of heat to the kitchen space



Source: Foodservice Technology Center

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Overfired Broilers

- High input units may broil large steaks while low input units are designed to warm food, melt cheese toppings or finish dishes by browning the top.
- Cheesemelters may be countertop or installed above a range top
- Salamander Broilers span the range between cheesemelters and high input broilers. They are usually mounted at eye level above a range top



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Conveyor Broilers

- Conveyor or “chain” broilers employ both an overfired and an underfired heat source, thus cooking both sides of the food product at once
- These broilers are ideally suited to broiling hamburger patties in large quantities
- Model sizes range from small, tabletop broilers favored by convenience stores to large-capacity broilers for fast-food operations

• Source: Foodservice Technology Center



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Griddles

Griddles

- Natural gas griddles are the energy-wise choice
- Lower cooking temperatures save energy and money
- Models may have manual or thermostatic controls
- Precise temperature control and edge-to-edge heat increase production and improve quality
- Steel or chromium-plated steel surfaces (cleaner and less heat radiation)
- Smooth or grooved cooking surfaces



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Griddles

- Natural Gas Griddles
 - Freestanding and counter-top models available
 - Sizes from 24" to 84" (.6 to 2.1 meters)
 - Infrared models offer faster cooking and quick recovery



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Griddle Types

- Direct Fired Gas
 - The griddle plate is heated from underneath by gas burners with typically one control per burner along the front of the appliance
 - High-efficiency gas griddles are thermostatically controlled
 - Can be open flame or infrared burners



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Griddle Types

- Steam Heated
 - Cooking surface temperature is extremely uniform: $\pm 3^{\circ}\text{F}$ ($\pm 16^{\circ}\text{C}$)
 - Near instant heat recovery
 - Uses steam to heat the cooking surface
 - Hermetically sealed chamber mounted below griddle plate surface



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Commercial Griddles

- To meet Energy Star® specifications:
 - use highly conductive or reflective plate material
 - Use thermostatic controls
 - Strategically place thermocouples
- ENERGY STAR® certified griddles are 10% more efficient than standard models
- Compared to standard griddles, an Energy Star® gas griddle saves about \$95 annually in gas costs



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Specialty Equipment

Specialty Equipment

- Natural Gas Specialty Cooking Appliances
 - Stock Pot Ranges
 - Woks
 - Rice Cookers
 - Pasta Cookers
 - Tandoor Ovens
 - Turbo Pots
 - Plancha



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Numerous Options Exist



Woks



Rice Cookers



Stock Pot Ranges



Pasta Cookers



Tandoor Ovens



Turbo Pots



Plancha



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Stock Pot Ranges

- Used to cook and warm stews, soups, sauces, and other dishes
- Typically features cast iron two ring burner with individual manual controls, and cast-iron top grate



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Woks

- Burners focus intense heat at the bottom of conical pans
- Offer either a cast iron burner shaped to fit the bottom of a wok or a raised ring burner
- Surfaces can be water cooled due to intense heat



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Rice Cookers

- Cooks rice in large or small quantities
 - Cook from 25 to 55 cups of rice
- Automatic two-stage burner
- Provides automatic simmer



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Pasta Cookers

- Self-contained work center for pasta
- Separate rinsing/hold tanks equipped with drains and overflows
- Available automatic basket lifts and
- Electronic time controls

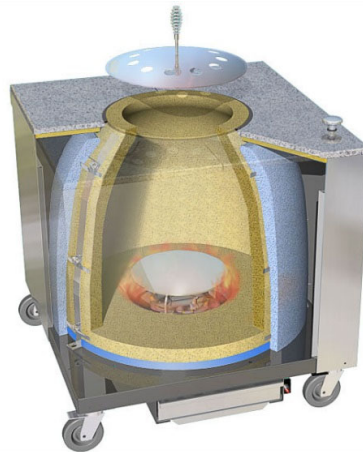


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Tandoor Ovens

- Cylindrical clay oven used in cooking and baking
- Very high temperatures achieved in oven
- Food cooked on a rod



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Turbo Pots

- Up to 30% more efficient than standard pots



Fins improve
heat transfer
from a hot flame

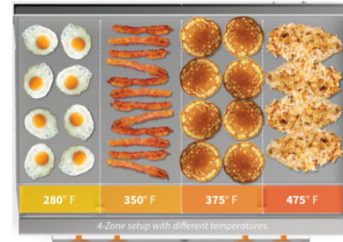


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Plancha

- Alternative to a standard flat top griddle and a gas charbroiler
- Adjustable temperatures from 150° - 650°
- Quick heat up and recovery
- Thermostatically controlled and individually
- Adjustable zones



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Ancillary Equipment

Ancillary Equipment



Infrared



Fire Pits & Log Sets



Gas Lights



Quick Connects



Patio Heaters



Water Heaters

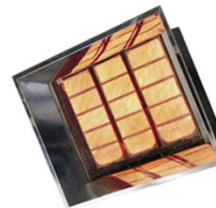


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Infrared Equipment

- High and low intensity (tube style) heaters available
- Heat objects not air
- Ideal for open air and outdoor venues
- Extend use of outdoor dining facilities



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Quick Connects

- Coated, flexible stainless-steel tubing and fittings comprise main components of system
- Allows for quick removal of equipment for reconfiguring
- Caster-mounted equipment can be disconnected from its usual gas source for off-site use



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Fire Pits & Logs

- Adds ambiance to dining areas
- Expands dining area in cooler months
- Highly efficient – Instant-on, instant-off push-button convenience
- Realistic appearance – without the work and mess of a wood-burning fireplace
- Easy to install and maintain – install virtually anywhere
- Safe – no flying sparks or popping embers, no creosote buildup
- Requires no electricity



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Gas Lights

- Attractive designs and versatile installation options, including post, pier and wall-mounted styles that enhances décor
- Soft, pleasant glow with no harsh glare
- Stays lit even during power outages
- Improves safety and security around driveways, walkways, entries and patio
- Doesn't attract flying insects
- Adds charm, ambiance and value



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Patio Heaters

- Quick disconnect connectors let heaters move when and where needed
- Increases seating area without a costly expansion
- Push-button ignition – ready-to-use
- Convenient and clean burning
- Weatherproof – corrosion-resistant stainless-steel construction
- Adjustable heat controls and 100% safety shut-off
- Requires no electricity



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Water Heaters

- **Tank Style Heaters** - heat water 3 times faster than electric, available up to .80 UEF
- **Tankless Water Heaters** - heat water on demand, multiple units for high flow rates, wall mounting saves space, available up to .82 UEF for non-condensing units and up to .96 UEF for condensing units



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Water Heaters

Booster Water Heaters

- Clean and sanitize with 180°F (82.2°C) water
- Shorten drying time
- Kills bacteria and destroys greasy substances such as lipstick and animal fat
- Eliminates rewashing, chemical sanitizers and unsightly water spots
- Safer than chemicals for fine china and silver
- Compatible with most warewashing machines
- Units can be hung on wall, fit under a counter, or located remotely from the warewasher



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Ventilation

- Ventilation hoods exhaust air including undesirable products of cooking and combustion
- Makeup air equipment replaces exhausted air with clean, fresh and, if desired, heated air
- Two basic types
 - Type I for capturing smoke and grease fumes
 - Type II where only heat and moisture are produced in the cooking process



Hood Types



Exhaust Hood



Back Shelf



Recirculating



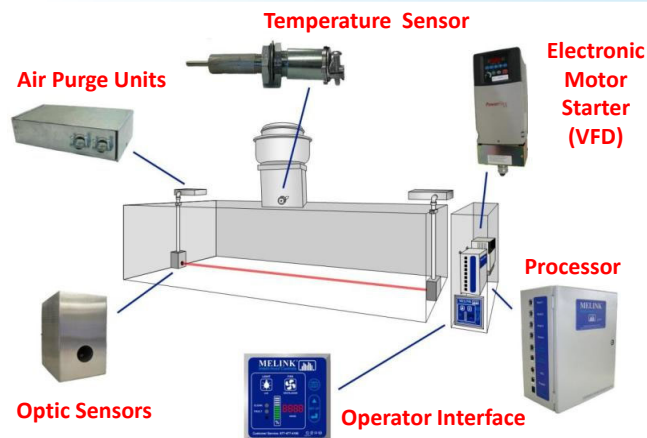
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Demand Ventilation High Tech Hoods



Ensure good indoor air quality and save money by operating only when needed!



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Demand Ventilation Hoods

- Sensors detect temperature and smoke and regulate exhaust system
- Can cut HVAC energy use by 60% or more
- Can reduce average exhaust fan speed by 26%
- Can reduce total fan power by 57%
- Can significantly reduce make-up air energy use and costs
- Reduce daily operating hours of fans by about 50 %



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Cost Analysis Tools

Energy Savings Calculators

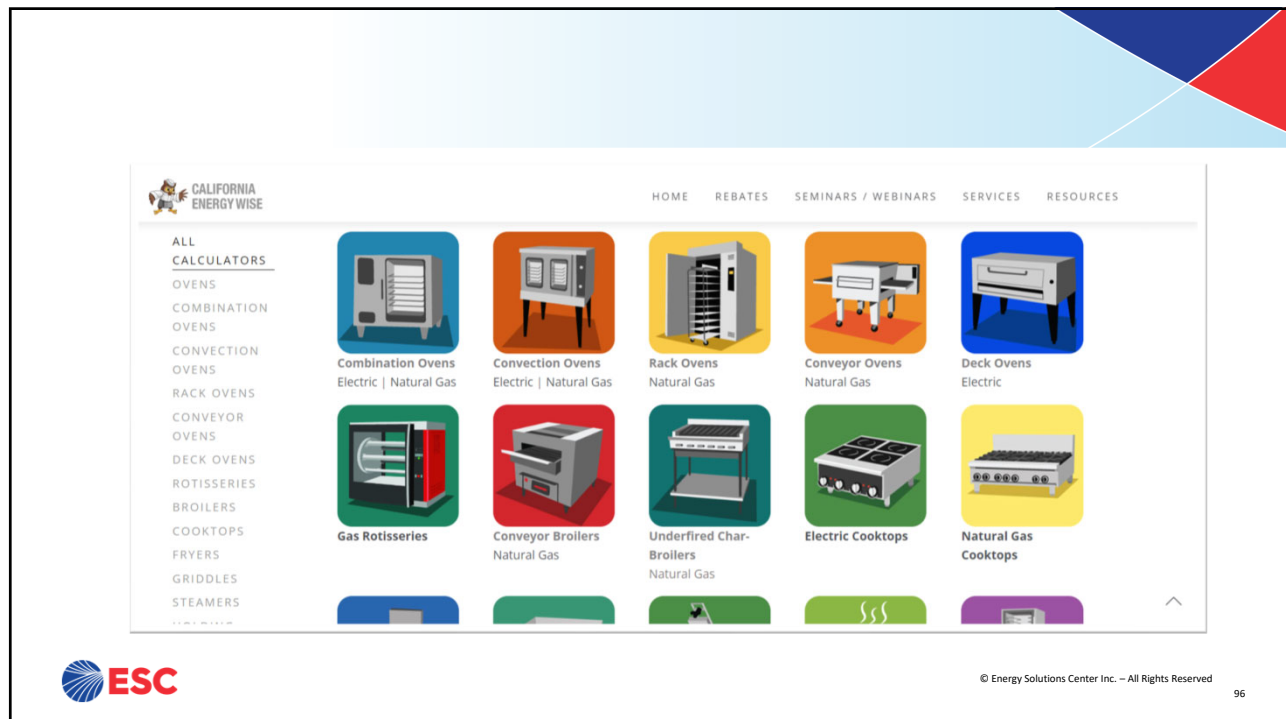
- Various tools for analyzing:
 - Combination Ovens
 - Convection Ovens
 - Gas Conveyor
 - Fryers
 - Griddles
 - Rack Ovens
 - Steamers
 - Pre-Rinse Spray Valves

<https://caenergywise.com/calculators>



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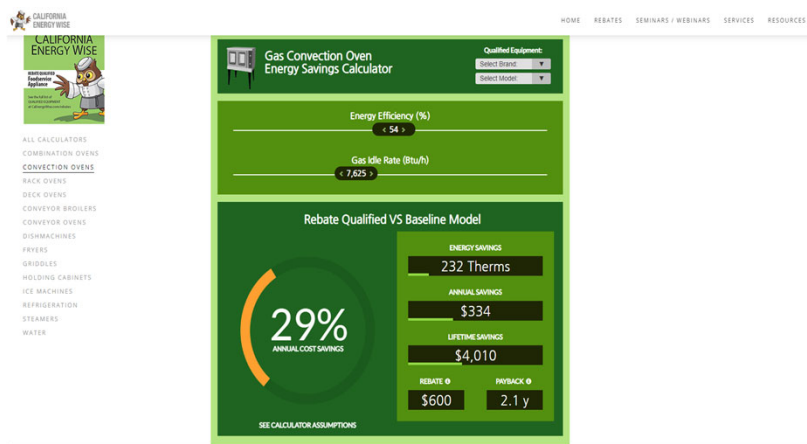


The screenshot displays the California Energy Wise website interface. At the top, there is a navigation bar with links for HOME, REBATES, SEMINARS / WEBINARS, SERVICES, and RESOURCES. Below this, a grid of calculator icons is shown, each with a corresponding label and fuel type. The calculators include:

- Combination Ovens (Electric | Natural Gas)
- Convection Ovens (Electric | Natural Gas)
- Rack Ovens (Natural Gas)
- Conveyor Ovens (Natural Gas)
- Deck Ovens (Electric)
- Gas Rotisseries
- Conveyor Broilers (Natural Gas)
- Underfired Char-Broilers (Natural Gas)
- Electric Cooktops
- Natural Gas Cooktops

A sidebar on the left lists all available calculators: ALL CALCULATORS, OVENS, COMBINATION OVENS, CONVECTION OVENS, RACK OVENS, CONVEYOR OVENS, DECK OVENS, ROTISSERIES, BROILERS, COOKTOPS, FRYERS, GRIDDLES, and STEAMERS. The ESC logo is visible in the bottom left corner, and the copyright notice "© Energy Solutions Center Inc. – All Rights Reserved" is in the bottom right corner.

Sample Calculator



<https://caenergywise.com/calculators>



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Associations and Resources

Numerous Trade Associations and web resources are available to assist and provide you additional market information and resources.

Associations & Resources

- Blue Flame Alliance (BFA)
 - Located in Washington, DC
 - Promotes natural gas foodservice equipment options
 - Listing of all gas foodservice equipment
 - BFA is a consortium effort of the Energy Solutions Center Inc.
 - www.blueflamealliance.com



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Associations & Resources

- DOE* – EPA Joint ENERGY STAR® Program
 - Established in 1992 to identify energy efficient products and reduce carbon emissions
 - www.energystar.gov



*Part of the Office of Energy Efficiency and Renewable Energy (EERE)



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Associations & Resources

- Food Service Technology Center
 - Part of Frontier Energy
 - Nationally recognized for its expertise in foodservice energy and water efficiency education, training and testing
 - Acquired by GTI International (subsidiary of GTI)
 - FSTC tests appliances to verify qualification for utility rebate programs (CA Energy Wise) and Energy Star certification
 - <https://frontierfstc.com/fstc/>



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Associations & Resources

- NAFEM – North American Association of Food Equipment Manufacturers
 - Located in Chicago, IL
 - Sponsor the biennial NAFEM trade show
 - Membership: 550 foodservice equipment and supplies manufacturers
 - www.nafem.org



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Associations & Resources

- NRA – National Restaurant Association
 - Located in Washington, DC
 - Sponsor the NRA trade show
 - Restaurant industries leading trade organization
 - Represents, educates and promotes the restaurant industry
 - www.restaurant.org



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Manufacturers

Manufacturers

- Numerous manufacturers exist for each foodservice technology
- Listed on the following slides are some of the major manufactures by technology type and websites for additional reference



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Fryer Manufacturers

- Alto-Shaam - <http://www.alto-shaam.com>
- American Range - <http://www.americanrange.com>
- Anetsberger Brothers, Inc. - <http://www.anets.com>
- Bakers Pride - <http://www.bakerspride.com>
- Dean - Frymaster - <http://www.frymaster.com>
- Henny Penny - <http://www.hennypenny.com>
- Pitco - <http://www.pitco.com>
- Royal Range - <http://www.royalranges.com>
- Ultrafryer Systems - <http://www.ultrafryer.com>
- Vulcan - <http://www.vulcanequipment.com>



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Low Oil Volume Fryer Manufacturers

- Frymaster - <http://www.frymaster.com>
- Henny Penny - <http://www.hennypenny.com>
- Pitco - <http://www.pitco.com>



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Oven Manufacturers

- Alto-Shaam - <http://www.alto-shaam.com>
- American Range - <http://www.americanrange.com>
- Attias - <http://www.attiasco.com>
- Cleveland Range - <http://www.clevelandrange.com>
- Garland Commercial - <http://www.garland-group.com>
- Henny Penny - <http://www.hennypenny.com>
- The Montague Company - <http://www.montaguecompany.com>
- Southbend - <http://www.southbendnc.com>
- Vulcan - <http://www.vulcanequipment.com>
- Wolf - <http://www.subzero-wolf.com>



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Rack/Tray Oven Manufacturers

- Baxter - <http://www.baxtermfg.com>
- Blodgett - <http://www.blodgett.com>
- Doyon - <http://www.doyonbaking.com>
- Fish Oven - <http://www.fishoven.com>
- Nu-Vu - <http://www.nu-vu.com>
- Picard - <http://www.picardovens.com>



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Combi Oven Manufacturers

- Alto-Shaam - <http://www.alto-shaam.com>
- Blodgett - <http://www.blodgett.com>
- BKI Worldwide – <http://bkideas.com>
- Convotharm – <http://convotherm.com>
- Doyon - <http://www.doyonbaking.com>
- Electrolux - <http://www.electroluxprofessional.com>
- Eloma - <http://www.eloma.com/us>
- Groen - <http://www.unifiedbrands.net>
- Henny Penny - <http://www.hennypenny.com>

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Combi Oven Manufacturers

- Hobart - <http://www.hobartcorp.com>
- Rational USA - <http://www.rational-online.com>
- Unox – <https://www.unox.com>
- Vulcan – <http://vulcanequipment.com>



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Convection Oven Manufacturers

- Alto-Shaam - <http://www.alto-shaam.com>
- American Range - <http://www.americanrange.com>
- Bakers Pride - <http://www.bakerspride.com>
- Baxter - <http://www.baxtermfg.com>
- BKI - <http://www.bkideas.com>
- Blodgett - <http://www.blodgett.com>
- Doyon - <http://www.doyonbaking.com>
- Hobart - <http://www.hobartcorp.com>

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Convection Oven Manufacturers

- Lang - <http://www.langworld.com>
- Moffat - <http://www.moffat.com>
- Montague Company - <http://www.montaguecompany.com>
- Royal Range - <http://www.royalranges.com>
- Southbend - <http://www.southbendnc.com>
- U.S. Range - <http://www.garland-group.com>
- Vulcan - <http://www.vulcanequipment.com>
- Wolf - <http://www.subzero-wolf.com>



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Conveyor Oven Manufacturers

- Holman - <http://www.star-mfg.com>
- Lincoln - <http://www.lincolnp.com>
- Middleby Marshall - <http://www.middleby.com>
- Picard - <http://www.picardovens.com>
- XLT - <http://www.xltovens.com>



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Deck/Pizza Oven Manufacturers

- Attias - <http://www.attiasco.com>
- Bakers Pride - <http://www.bakerspride.com>
- Doyon - <http://www.doyonbaking.com>
- Hickory – <http://www.hickorybbq.com>
- Marsal - <http://www.marsalovens.com>
- Montague Company - <http://www.montaguecompany.com>
- Rosito Bisani - <http://www.rosito-bisani.com>
- Roto-Flex - <http://www.rotoflexoven.com>
- Wood Stone - <http://www.woodstone-corp.com>



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Range Manufacturers

- American Range - <http://www.americanrange.com>
- APW Wyott - <http://www.apwwyott.com>
- Bakers Pride - <http://www.bakerspride.com>
- Electrolux - <http://www.electroluxprofessional.com>
- The Montague Company - <http://www.montaguecompany.com>
- Royal Range - <http://www.royalranges.com>
- Southbend - <http://www.southbendnc.com>
- Star Manufacturing - <http://www.star-mfg.com>

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Range Manufacturers

- Viking – <http://www.vikingrange.com>
- Vulcan – <http://www.vulcanequipment.com>
- Wolf – <http://www.subzero-wolf.com>



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Steamer Manufacturers

- AccuTemp Products, Inc. – <http://www.accutemp.net>
- Cleveland Range – <http://www.clevelandrange.com>
- Groen – <http://www.unifiedbrands.net>
- Vulcan – <http://www.vulcanequipment.com>



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Broiler Manufacturers

- American Range - <http://www.americanrange.com>
- Anetsberger Brothers, Inc. - <http://www.anets.com>
- Attias - <http://www.attiasco.com>
- Bakers Pride - <http://www.bakerspride.com>
- Connerton - <http://www.connertoncooking.com>
- Electrolux - <http://www.electroluxprofessional.com>
- Eagle Group - <http://www.eaglegrp.com>
- Emberglo - <http://www.emberglo.com>
- Garland Commercial - <http://www.garland-group.com>
- PITCO/Magikitch'n - <http://www.magikitchn.com>

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Broiler Manufacturers

- Montague Company - <http://www.montaguecompany.com>
- Star Manufacturing - <http://www.star-mfg.com>
- Southbend - <http://www.southbendnc.com>
- US Range - <http://www.garland-group.com>
- Viking - <http://www.vikingrange.com>
- Vulcan - <http://www.vulcanequipment.com>
- Wells Manufacturing - <http://www.wells-mfg.com>



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Cheese Melter/Salamander

- American Range - <http://www.americanrange.com>
- Montague Company - <http://www.montaguecompany.com>
- Southbend - <http://www.southbendnc.com>
- Therma-Tek - <http://www.therma-tek.com>
- Vulcan - <http://www.vulcanequipment.com>



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Braising Pan Manufacturers

- Cleveland Range - <http://www.clevelandrange.com>
- Groen - <http://www.unifiedbrands.net>
- The Montague Company - <http://www.montaguecompany.com>
- Southbend - <http://www.southbendnc.com>
- Vulcan - <http://www.vulcanequipment.com>



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Griddle Manufacturers

- AccuTemp Products, Inc. – <http://www.accutemp.net>
- Anetsberger Brothers, Inc. - <http://www.anets.com>
- Garland Commercial - <http://www.garland-group.com>
- PITCO/Magikitch'n - <http://www.magikitchn.com>
- The Montague Company - <http://www.montaguecompany.com>
- Vulcan - <http://www.vulcanequipment.com>
- Wolf - <http://www.subzero-wolf.com>



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Turbo Pot

- Eneron, Inc. - <https://turbopot.com>



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Ventilation Equipment Manufacturers

- Avtec - <https://www.unifiedbrands.net>
- Captive Aire - <http://www.captiveaire.com>
- Greenheck – <http://www.greenheck.com>
- Halton – <https://halton.com>



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Tank Water Heater Manufacturers

- A.O. Smith Water Products Co. - <http://www.aosmith.com>
- American Standard Water Heaters -
<http://www.americanstandardwaterheaters.com>
- American Water Heater Co. - <http://www.americanwaterheater.com>
- Bradford White Corp - <http://www.bradfordwhite.com>
- GSW - <http://www.gsw-wh.com>
- Lochinvar - <http://www.lochinvar.com>
- Rheem - <http://www.rheem.com>



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Tankless Water Heater Manufacturers

- A.O. Smith Water Products Co. - <http://www.aosmith.com>
- Bradford White Corp - <http://www.bradfordwhite.com>
- Navien America Inc. - <http://www.navieninc.com>
- Noritz America - <http://www.noritz.com>
- Paloma - <http://www.palomatankless.com>
- Rheem - <http://www.rheem.com>
- Rinnai - <http://www.rinnai.us>
- Takagi - <http://www.takagi.com>



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Booster Water Heater Manufacturers

- Bradford White Corp - <http://www.bradfordwhite.com>
- Hatco - <http://hatcocorp.com>
- Precision Temp, Inc. - <http://www.precisiontemp.com>
- Vanguard Technology - <http://www.vanguardtechnologyinc.com>



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A graphic for a 'Thank you' slide. It features a dark blue rectangular background. The bottom half of the slide is divided into two sections by a white curved line. The left section is light blue, and the right section is red. The text 'Thank you ...' is centered in the dark blue area in a white, sans-serif font.

Thank you ...