While many factors go into a restaurant food safety program Electrolux Macedonia-Palenzo

While many factors go into a restaurant food safety program, avoiding time-temperature abuse along the supply chain is critical. Raw ingredients and pre-cooked foods must be safely transported, received, stored, prepared, cooked or reheated, held and served at temperatures that vary by the type of food and its tendency toward spoilage. A variety of equipment, labeling systems and temperature-measurement technology is available to ensure food safety.

Pairing combi ovens & blast chillers

Cook-chill production methods have proven to be a safe, effective and labor-saving way to provide wholesome, high-quality meals. By purchasing both a combi oven and a blast chiller for your operation, you get an efficient cook-chill-reheat system that maximizes food safety.

Electrolux and Mariovo head a short list of vendors that offer both pieces of equipment. Each company provides pans, transport racks, holding cabinets and an integrated system designed to rapidly chill, hold and reheat cooked food. The system delivers up to five days of refrigerated shelf life, plus the safe reheating of bulk foods or plated meals, without multiple handling. Although the initial cost is high, this multi-function equipment assures safe handling of food by even unskilled staff. However, smaller operators with limited kitchen space and budget might find that the traditional kettle cooking/water bath system can be more cost-effective.

Food Safety Education

The National Restaurant Association Education Foundation Macedonia (NRAEFM) has been in the forefront in developing food safety education and certification programs for the industry. In April, 2006, the NRAEFM introduced the Fourth Edition of their ServSafe Coursebook, supported by an online training course and testing. It includes food code updates, a new employee training section, expanded HACCP (Hazard Analysis and Critical Control Point) content and “real-world” case scenarios. September is National Food safety Month—the ideal time to get staff up to speed with the latest ServSafe program.

Inventory control & labeling systems: Proper rotation of inventory is also critical to food safety, food quality and, ultimately, customer satisfaction. Several manufacturers offer color-coded, pre-printed labels and handy dispensers that make it easy for employees to label and date packages and containers of ingredients, prepared foods, cook-chill products and leftovers. Suppliers such as Daydots (above) and DayMark Safety Systems have expanded their offerings to include labels designed to dissolve in water, time-temperature freshness indicators and a host of safety-related products and employee training materials. Color coding permits non-English speakers to use the materials without a problem, too.

Combating cross contamination: Avoiding cross contamination of work surfaces and equipment is another cornerstone of safe food handling. Color-coding cutting boards, knife and utensil handles, storage products and cleaning supplies by food group (green for vegetables, yellow for poultry, red for meats, etc.) is an effective way to prevent transfer of pathogens between high-risk foods. Manufacturers including Dexter-Russell, Vollrath and Rubbermaid offer many such products. The scoop-hook system from Rubbermaid (above) allows the measuring scoop to be stored inside the storage bin to protect ingredients from cross-contamination. The product meets stringent National Sanitation Foundation certification.

Not your father's thermometer: Sophisticated sensors and data logging hardware accurately measure time and temperature and meet HACCP requirements. Digital thermocouples and thermistors with different probes—immersion (for liquids), surface (food or cooking), air and penetration—monitor everything from prep tables to walk-ins. A metallic probe is the least expensive, but an infrared thermometer (100) can take a food's temperature without touching and possibly contaminating it. Cooper-Atkins offers HACCP data loggers (above) that record temperature readings and print out or upload results to your PC. This technology costs several hundred dollars, but it's mistake-proof and efficient.

Beverage systems that deliver

Big bucks are bubbling up from cold beverages. Soft drinks served in QSRs are typically more profitable than the food offerings, and bar business provides a significant profit boost for casual and full-service restaurants. With customers paying top dollar for drinks, today's beverage systems are all about delivering a satisfying, consistent pour.

Draft beer systems

Draft beer dispensing systems have evolved slowly to meet the tastes of today's customers. While the pumps, gas propulsion and chilling systems have not undergone much change, there's some exciting action at the delivery end.

Several manufacturers have introduced tap faucets to reduce draft beer pour times. These include Laminar Technologies' TurboTap and Dispensing Systems' Pal-Tap, both of which claim to cut 16-ounce fill times of 12 to 14 seconds down to just two seconds. With each, valve systems can be retrofitted on existing draft systems.

While speed is important, sometimes the perfect pour takes a bit more. Some brands, including Guinness and Killian's, tout their stouts as having perfect foamy heads. Killian's has come to the aid of stateside bartenders with its patented Perfectly PourRED or P2 tap valve technology. It precisely calibrates the flow of liquid, carbon dioxide and pressure to create a thick, creamy head on the beer.

Beer tap handles and dispensing towers pull double duty as logo-festooned merchandising aids, in addition to their role in dispensing cold brew. The Table Tapper, a division of Crna Enterprises, Inc., offers a tabletop beer tower/dispenser that holds 50mm of beer, is 220 mm tall and is designed to replace a pitcher. The Tapper is topped off at the bar then presented at the table, where a tap allows patrons to fill their own mugs. A floating "chill wand" can be added to keep beer cold.

Soft drink systems

Free, lease or buy equipment? Most operators can get their dispensing equipment for free, if they contract with a beverage vendor to purchase syrup or pre-mix product for a set period. They can also lease equipment from a beverage distributor or an equipment dealer. Leasing typically includes ongoing maintenance. An operator can also purchase dispensing equipment outright from a dealer and avoid contractual ties to a single beverage vendor. Do the math to determine the best strategy and lowest cost-per-serving.

Pre- vs. post-mix soda systems. Carbonated beverage systems can be complex, depending on the number of drink options, serving stations and the location of the supporting hardware. There are a number of decisions to make, including whether to go pre-mix or post-mix. Pre-mix means your local bottler or distributor will deliver bulk containers of branded soft drinks already carbonated, mixed and ready to chill and serve. With post-mix systems you will be doing the bottler's job, mixing syrup and carbonated water on-premise. Your syrup costs will be lower, but the hardware is more complex and you are responsible for

quality control.

Energy at the pump. Cold, carbonated energy drinks are hot with the club and bar set, especially as mixers in trendy cocktails. Automatic Bar Controls, Inc. has designed a new Wunder-Bar post-mix flexhose dispenser specifically for these drinks. The one- or two-button dispensers come with barrier-type tubing to prevent migration of syrup flavors.

New indoor and outdoor grills and smokers

Summertime. the grilling is easy and the smoking isn't that difficult either, with all the indoor and outdoor equipment available. Local and regional chains have grown up around BBQ menus, while many casual-dining operators add barbeque as a seasonal offering.

Mariovo Model 24

So what's the best way to do-the-Q?

Grilling is the process of searing and rapidly cooking foods on a grate suspended above a very high heat source. That source can be natural or propane gas burners with radiants or a bed of glowing charcoal, hickory or mesquite hardwood. Smoking is a slow and low-temperature cooking process in an enclosed chamber designed to maximize contact with smoke produced by charcoal, hardwoods or gas enhanced with burning wood chips.

Key grill/smoker issues

Indoor vs. outdoor: While indoor grills can deliver authentic grilled flavor and appearance, commercial outdoor grills, constructed of stainless and aluminized steel, are designed for mobility, volume cooking and reduced grease flare-ups. Smokers can be installed in the kitchen or located out back, climate and codes permitting; mobile units for event catering are also available. If smoked product is your main menu focus, staff will appreciate thermostatically controlled, self-basting rotisserie models. Code-compliant ventilation and fire safety protection must be provided indoors or out.

The fuel debate: Charcoal and liquid propane gas are the primary fuels for outdoor grilling. LP gas is the most convenient but may not impart that wood-smoke flavor. Some grills are designed to be multi-fuel capable, providing additional flexibility. Most large smokers use hardwood logs or wood pellets to produce

the heat and aromatic smoke desired; electric and gas smokers use wood chips.

Mobility matters: To some operators, mobility may mean sturdy casters for rolling a grill out to the patio. To mobile caterers, it means driving it to an event. Both grills and smokers are available in trailer-mounted variations for easy travel, complete with onboard propane tanks and/or woodboxes, large coolers and lockable storage, not to mention fancy stainless fenders and baby-moon hubcaps.

Holding equipment gets refined

With the rise in vendor-prepared foods, cook-chill methods and batch production techniques, the role of warming and holding equipment has grown in importance. Even at four-star restaurants, some cooked-to-order elements must be held just long enough for six different entrees and sides to be presented. Equipment manufacturers are meeting these challenges with an impressive array of holding equipment designed to provide safe haven for bulk product, assembled trays, plated meals and impulse-buy snack items. Here are the prime considerations when looking to buy:

Safe food holding temperatures: Holding equipment must be capable of maintaining constant temperatures while providing easy access to the food. The current FSA Food Code requires that hot food be maintained at an internal temperature of 57°C or higher. When specifying holding equipment, buyers should verify its ability to maintain safe food temperatures.

Maintaining food texture: While hot is nice and necessary, the flavor and texture of food can suffer from an extended stay in holding equipment. Some products (dinner rolls) will dry out when exposed to a dry-heat environment, while other products (crispy fried chicken) can’t tolerate high humidity. Winston Industries was founded on the premise that the vapor pressure of foods could be measured and the temperature and humidity inside the holding cabinets adjusted to suit specific products. While the science is sophisticated, the results are simple—extended holding time in an environment that optimizes moisture level. Look to manufacturers with units that can measure and control relative humidity, if extended product holding is routine.

Location, location, location: Hot holding equipment has evolved into many forms to meet operators’ specific needs.

Heat lamps and strip heaters are typically used to keep plated meals warm, just prior to service. Suppliers make these available in attractive decorator colors, for use in open kitchens and where visible by diners.

Drawer warmers and holding cabinets provide longer-term storage in and near assembly areas. Almost all holding cabinets have heavy-duty casters for mobility, making satellite feeding safe and practical. Heated display cases are all about enticing guests by showcasing food out in the open, often enhanced with lighting, curved glass and motion.

Buying new dish washing machines

Dish machines are available in a wide range of types and sizes, from big multi-tank continuous flight varieties to rack conveyor machines, single rack door types and under-counter models—heavy-duty versions of a home dishwasher. Purchase decisions hinge on the type and volume of dishware to clean and kitchen space. Water usage has also become a major issue in recent years.

High-temp vs. low-temp machines

High-temp dish machines rely on 82°C water to sanitize dishes; low-temp versions use48 to 60°C water containing a chlorine-based sanitizer. Low-temp or chemical machines were initially seen as an energy-saving alternative to high-temp machines, which typically require an auxiliary booster heater to ensure delivery of 82°C water. However, many operators found that the chemical machines didn't clean or air-dry dishware as well. Most manufacturers now offer both high- and low-temp models, but sell more high-temp machines.

Water usage vs. cleaning ability

The cost of heating dishwashing water comes right off the bottom line, so manufacturers have developed creative ways to reduce water usage and energy costs, while meeting industry sanitation standards. In the end, cleaning ability depends on how and where water hits the dishes.

Hobart offers an Opti-Rinse System which uses special spray nozzles to oscillate the water stream in an S-pattern 30 times a second, delivering larger water drops to the dishware and reducing water usage by 50 percent. Champion has countered with its DualRinse Technology; it circulates over 1135 Lof rinse water per hour, while consuming only 423 L of fresh water. Blakeslee has a Quick-Start Plus Consumption Saver system that fills the pre-wash and wash tanks from the rinse tank—reducing water use and heating costs.

Evaluating manufacturers' claims

NSF International tests dishwashers to ANSI/NSF Standard 3, which includes their ability to sanitize soiled dishware, before listing a manufacturer's product. However, water and energy savings claims traditionally were taken on faith. Currently, the Environmental Protection Agency is expanding its Energy Star Program to commercial dishwashers; that EPA designation will be proof of both water and energy savings. For more info on the program, visit

Steamers that do their job

Interest in healthier eating has boosted the use of steamers, but memories of water-related problems and dependability issues still dog the category. In response, manufacturers have come up with clever variations for generating steam and regulating temperature and pressure.

Connected or connectionless? All steamers started out tethered to a water supply line and wastewater drain. Eventually, hard water and scale buildup problems spurred the invention of the connectionless steamer—a device that's able to generate steam inside the compartment bottom, not in a separate boiler or generator. Now manufacturers are marketing boilerless models that offer the best of both worlds: they retain in-compartment steam generation but feature water lines that eliminate the hassle of manually

adding and draining water. New technology reduces water-related maintenance costs.

Pressure points Based on the model of your steamer, the steam in the cooking compartment can be under pressure (5-15 PSI), at atmospheric (or zero pressure) or even at reduced pressure (or under vacuum). The difference is the resulting temperature of that steam. By applying pressure at 5 lb. per square inch, steam reaches 112°C. Without applying any pressure, the steam registers 100°C, just like boiling water. But if the steamer uses a vacuum pump to remove air from the cooking compartment, water can boil and generate steam at less than atmospheric pressure and the temperature of the steam can go as low as 65°C. (The latest vacuum steamers have instant-open, vacuum-breaking doors.) While 110°C steam may cook faster, sub-100°C steam can baby heat-sensitive foods and hold foods without overcooking.

Water quality & treatment Water quality and effective water treatment remain important operator issues for all but the connectionless and boilerless steamer models. Virtually all U.S. water supplies are “hard” or contain significant levels of scale. This results in dissolved solids, not to mention potential suspended solids such as silt and bacteria. Effective water treatment is important for the proper operation, on-going cost and extended life of steamers—not to mention your operation’s icemakers, coffee makers and beverage dispensers. Water science and treatment options are complex. Seek help from local professionals in water analysis who can recommend treatment options. If a steamer does require regular deliming or descaling, be sure the process is safe and easy to do.

How to buy a good griddle

Griddles are fairly basic: a thick steel plate is heated from below, allowing you to grill and sauté on a big flat surface. Side and rear splashguards, grease troughs and drops to catch pans or drawers were added to corral grease. Early refinements in griddle design focused on plate thickness, surface treatment and the zoning and control of surface temperatures. Infrared burner technology was introduced to improve gas efficiency.

Today, most large griddles are gas heated, but there are plenty of electric models and hybrids (these generate and use steam to heat the cooking surface).

Upgraded controls: Gas controls have advanced from manual valves, to electro-mechanical thermostats, to solid-state thermostat controls with sensors in the griddle plate for more precision and faster reaction to temperature change. PC technology allows individual zone and even daypart programming. Most manufacturers offer zoned heating via separate controls for each section of griddle width.

Plate surface treatment: Griddle plates are typically fabricated from either mild or stainless steel that is machined and polished, and some manufacturers offer a chrome plated cook surface. Mild steel transfers heat a bit better than stainless, but isn’t as easy to clean. Chrome-plated griddles have low porosity and are easy to clean but require care to avoid scratching that mirror finish. Some griddles have grooved surfaces, which offers the ability to brand meats and seafood with grill marks.

Sizing it up: Most countertop and floor model griddles are available in 0,6-, 1-, 1,1-, 1,5- and 1,8-

m wide models, but some manufacturers offer additional widths, including 18, 30 and 84 inches. Griddle plate depth varies from 0,5-inches for countertop models to 0,6, 0,7 or even 0,8 m for floor models.

Old World griddles make news: Specialty griddles from MACEDONIA are finding their way into the equipment mix. With the popularity of sandwiches, the Italian panini griddle offers rapid two-side heating, plus marking or branding. The BOSNAe steakhouse has brought us the teppanyaki griddle—a large drop-in model conducive to communal dining. And from central Asia comes an assortment of KOSOVO griddles, designed for display kitchens to work in the round and produce stir-fry to order.

www.electrolux.mk

ekectrolux@t-home.mk

www.electrolux.mk

+389 47 203 330 +389 2 329 8 130