

EQUIPMENT SOLUTIONS

Covering equipment
and trends
for successful
foodservice operations

DOING MORE... *With Less!*

Energy solutions in the kitchen

By Russell L. Bean, CFSP

There is no shortage of articles being written on reducing your carbon footprint, embracing environmental responsibility, searching for sustainable solutions, pursuing LEED building design certification and gravitating toward all things green. Like any good idea, there is also no shortage of consultants, associations and independent watchdog groups out there to help you go green.

Most foodservice equipment manufacturers know that designing and building equipment that does more with less is good for their customers, good for the environment and ultimately good for their bottom lines. These days it is easy to find equipment in virtually every category that is offering legitimate energy and water savings.

Savvy manufacturers are aggressively promoting their new green machines and many have embraced the U.S. Environmental Protection Agency (EPA) ENERGY STAR Program to add weight and credence to their energy saving claims. While the ENERGY STAR Program is currently undergoing individual category standards review to raise the bar and strengthening third party testing requirements, it remains a good baseline for performance comparison.

Eight 2012 KI Award Winners Deliver Water & Energy Savings

At the risk of going to the KI well once too often, one need look no

further than the 2012 National Restaurant Association (NRA) Kitchen Innovations Award program for new or improved energy and water saving equipment. Eight of this year's 21 KI Award honorees claim significant energy, water or energy and water savings, in addition to other desirable performance attributes.

CookTek's Waterless Food Holding System

The use of induction heating technology is on the upswing and Chicago-based CookTek is helping with the introduction of their SinAqua waterless food holding well. This fresh take on the old steam table totally eliminates the water, without compromising food quality and holding times, using a combination of induction heating, plus gentle infrared radiant heat and low-energy LED lighting. The bottom induction heating does most of the work, while the radiant top heat counters natural radiant cooling, without further cooking. The net result is SinAqua halves total energy consumption and doubles food holding times. With the elimination of all water use, it sounds like a win-win-win.

Frymaster's Large Vat Fryers

Bigger isn't always better but Frymaster's 1814 series large vat fryers are designed to maximize oil conservation and energy efficiency, while maintaining high production capability. These gas and electric

fryers have 18 by 14 inch frypots that can hold up to three baskets at the same time. They come with SMART4U three-lane controllers with ten programmable buttons and a 40 product library. All 1814 Fryers exceed current ENERGY STAR qualifications, use 11 percent less oil, 30 to 50 percent less energy and 10 to 15 percent less space, when compared to comparable capacity fryers. That really is doing more with less!

Garland's Induction Griddle

And, speaking of induction, Garland's new induction griddle can handle your grill work using less energy and radiating less heat into the kitchen, which reduces HVAC requirements and related energy costs. The company's induction grill plate has a special HPCR-Inox treated surface that reduces radiated heat; and a patented Realtime Temperature Control System (RT-CSmp), with multi-point, non-contact temperature measurement over the entire griddle surface. This advanced control technology provides instant response to changes in temperature setting and quick area recovery, without overshooting the set temperature.

Lang's On-Demand Burner

So simple and so smart, Lang began showing their on-demand burner control option last year and have been recognized for their efforts this year. Range top open burners are notorious energy wasters. Lang's



The SinAqua waterless food holding well from **CookTek** (888/266-5835 or cooktek.com) is a new spin on old steam tables because it eliminates the need for water.

on-demand burner option centers a rugged spring-loaded steel ball in the burner grate that connects to a gas valve/igniter system that turns on the burner when a pot or pan depresses the ball. Take the pot off and the burner turns off, saving energy and reducing waste heat into the kitchen.

Merrychef USA's Planar Plume Technology

Merrychef USA is all about doing things fast and fast that often translates into saving more than just time. A past KI Award recipient, this year they were recognized for their patented Planar Plume technology. This sophisticated air control system creates even impingement sheets of hot air inside the rapid cook ovens, delivering faster heat transfer and improved food quality, with a lower blower speed and increased energy efficiency. In addition, those sheets of air generate much less noise during operation, while providing more even browning. Planar Plume technology is



The air control system from **Merrychef** (800/221-4583 or merrychefusa.com) creates sheets of hot air to transfer heat faster.

now offered across the Merrychef rapid cook oven series.

Vulcan VTEC Infrared Charbroiler

Who better than Vulcan, the Roman god of fire, to rein in the energy usage of the charbroiler? The Vulcan VTEC Broiler takes infrared heat transfer to the next level with a patented stainless steel conversion burner design that is combined with a heavy gauge steel emitter panel under the cook grates. No fragile ceramic tile infrared burners here. The VTEC burners are corrosion resistant, impervious to spills and resistant to thermal shock. These broilers are said to use up to 50 percent less gas than similar size broilers, deliver more uniform cook surface temperatures and more long wave (frequency) infrared energy, ideal for cooking proteins.

Wells' Water-Saving Heated Disher Well

Wells Bloomfield, LLC, St. Louis, MI, earned KI Award recognition for doing what comes natural,

These broilers from **Vulcan** (800/814-2028 or vulcanequipment.com) are said to use up to 50 percent less gas than similar size broilers.



building a better well, specifically their Model HDW-2 water-saver heated disher well. This heated disher well safely holds utensils in water above 150 F, earning high marks for both food safety and for potentially savings. It can save up to 180 gallons of water each day and the related water-heating costs, when compared to standard dipper wells. Their HDW-2 is available with or without a faucet; and it can be clamped to a countertop or placed in a standard dipper well counter cutout.

Rational USA's whiteefficiency, HiDensity Control

Rational earned another KI Award for the introduction of their SelfCookingCenter, with whiteefficiency and HiDensityControl, a next generation combi control technology delivering 30 percent more production capacity in the same size oven. In addition, they claim resource consumption (energy and water combined) is 20 percent lower, when compared to conventional combi-steamers.

This teutonic control package smorgasbord also includes Efficient LevelControl, which shows the user which (different) products can be cooked simultaneously, so food can be produced up to 30 percent faster. Each pan of food is individually monitored and cooking time adjusted, depending on the volume and how long the door is left open. A new CareControl feature also increases operating efficiency by identifying how dirty the oven is and how much compartment cleaning is required. This can save an operator up to 40 percent a year in cleaning-related energy, water and chemicals.

A 2013 KI Award Product Preview

Typically, KI Award nominations must be submitted by the



Rational USA (888/320-7274 or rational-usa.com) created combi control technology delivering 30 percent more production capacity in the same size oven with the company's SelfCookingCenter.

end of the previous year, so they often reflect one-year-old technology. Worthy energy and water saving products introduced at or around this year's NRA Show may become the KI Class of 2013. Let's prognosticate who future energy and water saving honorees may be?

Vulcan PowerFry VK Series Fryer

After a sneak peak at last year's NRA show, Vulcan introduced its new PowerFry VK series fryers that they claim will increase production by 25 percent or more, while using up to 50 percent less energy. At the heart of their design is a patent-pending five pass heat exchanger that transfers more heat energy by passing it through and then around the outside of the oil vat, a total of five times. Independent testing has shown these fryers have 78 percent thermal efficiency and an idle energy rate of 4250 to 6300 BTU/hr., while maintaining a 350 F oil temperature, easily meeting category EPA ENERGY STAR qualification standards.

In spite of what appears to be manifold-filled oil vat, VK fryers have a larger cold zone than so-called oil-saving models, which means longer oil life and oil cost



premium sous vide collection

Fully Integrated HACCP Compliant Software



High-Precision Immersion Circulators

- For container volumes up to 15 gallons
- Many accessories to choose from

Please find more information, videos, recipes, restaurants and cookbooks on www.fusionchef.us

fusion Chef™
by **Julabo**

DOING MORE... With Less!

savings to boot. The VK Series is available in 45 to 50, 65 to 70 and 85 to 90 pound models; and can be equipped with Vulcan's KLEEN-SCREEN PLUS oil filtration system.

American Range GREEN FLAME Range Line

Pacoima, CA-based American Range has introduced a line of energy-saving ranges designed specifically for lighter-duty and intermittent use, by operators such as churches, retirement homes and fire stations. Their GREEN FLAME Ranges have electronic burner ignition to avoid the energy wasted by standing pilots. Even the oven burner has a spark ignition system, similar to residential models. Like most restaurant ranges, they are available in 24, 30, 36, 48, 60 and

72 inch widths; with a six inch wide plate rail and porcelain coated oven interior for easy cleaning.

Putting Energy and Water Savings ... on Ice

Scotsman Prodigy Advanced Sustainability

Prodigy Advanced Sustainability is now available in Scotsman cubers, flakers and nugget ice machines. This new ice making technology delivers an average of 10 percent higher ice-making capacity

ity, while consuming less water and energy. The secret is ice-level management. They use ultrasonic ice-level sensors to regulate production based on demand, which

eliminates unnecessary ice production and waste. Larger operators can use this technology to monitor multiple machines remotely.

All Prodigy Advanced Sustainability machines come standard with AutoAlert, a simple light system that commu-



This new ice making technology from **Scotsman** (800/726-8762 or scotsman-ice.com) delivers an average of 10 percent higher ice-making capacity.

nicates the machine's operational status; a diagnostic code display to help with trouble-shooting; and built-in antimicrobial protection. Cuber models have an automatic, time-adjustable purge cycle that helps reduce scale buildup and extend cleaning intervals.

Follett Energy Efficient Outdoor Condensing Units

Easton, PA-based Follett Corporation has introduced a three phase remote, outdoor condensing units for their Horizon line of ice machines. Remote condensing units mean the heat-producing coils are outside the building, reducing their exhaust heat impact on indoor air conditioning and lowering utility bills. Three-phase machines can save 20 percent over a single-phase unit and have a lower AMP load requirement, which means they operate on smaller circuits, which can reduce up-front installation costs. These new outdoor condenser units are available on Horizon 1000, 1400 and 1650



Follett Corporation (800/523-9361 or follettice.com) has introduced outdoor condensing units for it's Horizon Line of ice machines.

series ice machines and produce the same high quality chewable Chewblet ice.



The freedom to locate small cooking appliances where you need them!

Introducing the SA Vent small appliance ventless hood

With no installation, minimal assembly, and 120V power, the SA Vent allows foodservice operators to use it in locations where it's impossible or not economical to install a regular vented hood. Portable and universally applicable for various appliances. Ideal for contract feeders, restaurants and institutions with new menu items or action stations.

sodir

EQUIPEX

800.649.7885
www.equipex.com



Scan Code
for more information.

Manufacturers Directory

- American Range
818/897-0808 or americanrange.com
- CookTek Induction Systems
888/266-5835 or cooktek.com
- Follett Corporation
800/523-9361 or follettice.com
- Frymaster LLC
800/221-4583 or frymaster.com
- Garland Group
800/424-2411 or garland-group.com
- Lang Manufacturing
800/264-7827 or langworld.com
- Merrychef USA
800/221-4583 or merrychefusa.com
- RATIONAL USA
888/320-7274 or rational-usa.com
- Scotsman
800/726-8762 or scotsman-ice.com
- Vulcan
800/814-2028 or vulcanequipment.com
- Wells-Bloomfield
888/356-5362 or wellsbloomfield.com