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Phc News

plumbing & hydronic contractor news

2010 Top 100 Contractors

Cowboys Stadium



TD Industries



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Hydronic
Balancing



Hands-free
Technology



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Circle 2 on Reader Reply Card

Cover photos courtesy Jay Scott, TDIndustries.



On the Cover

It's no secret the past couple years have been rough sailing for the contracting industry. However, there is activity — TDIndustries, #10 on our listing of Top 100 Contractors, recently completed work on the 3 million-sq.-ft. Dallas Cowboys stadium and attributes its success to its fine employees, hard work and sound planning. The Top 100 Contractors section begins on page 34.

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42 Hydronic system balancing

Once an arcane art involving careful pipe sizing and reverse return piping, hydronic balancing now is a precise science using the many products manufactured specifically for the purpose.

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From simple water coolers of the 1930s to the sleek, health-preserving, multi-function units of today, drinking fountains are keeping up with the public's perceptions of what these ubiquitous fixtures should be.



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Tom M. Brown Jr., President

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The Isolator EXPIC3
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William North Co Inc., Jackson, MI

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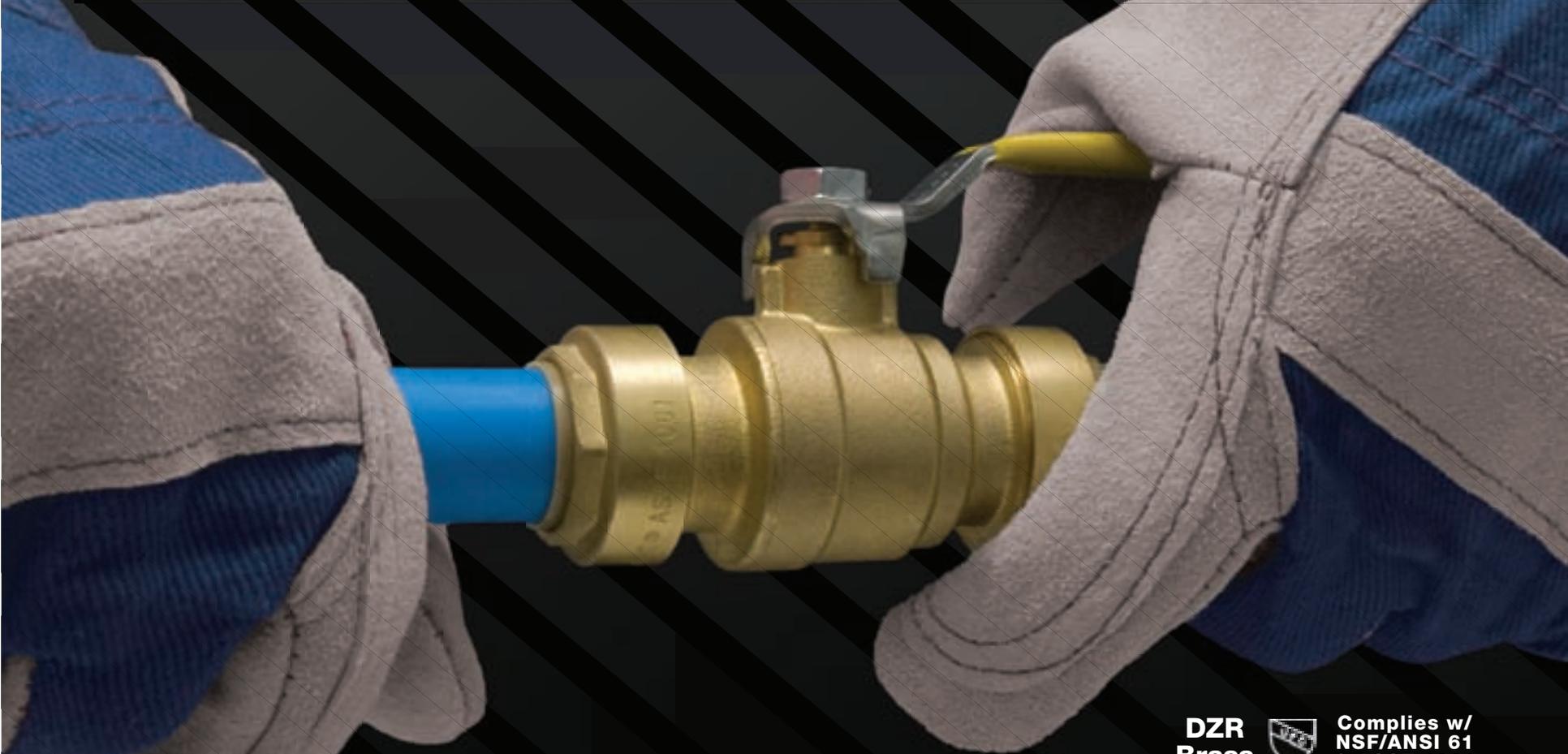
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PHCC vice president George Raburn passes away

GEORGE RABURN, vice president of the Plumbing-Heating-Cooling Contractors — National Association, passed away on Saturday, March 20, after a recurrence of cancer.

“We are extremely sad to lose such a wonderful man and supporter of our industry,” said PHCC — National Association President Skip Pfeffer. “He was always ready to make the extra effort to ensure an issue was heard or an event was a success.

George was a happy, positive-thinking southern gentleman that we are all going to miss.”

George and wife Karen Raburn founded Raburn & Raburn Plumbing Company, Inc., Stockbridge, Ga., in 1989. Raburn was a member of the PHCC Board of Directors from 2006-2009, representing Georgia, Kentucky, North Carolina, South Carolina and Tennessee. He was elected PHCC vice president in 2009.

He held several committee positions within PHCC — National Association, including the Insurance Trust, Retirement Plan Trust and 2008 Convention (Atlanta) Planning Task Force. He also was a member of the PHCC Educational Foundation Board of Directors and was the Invest in Your Future Committee co-chair.

At the state level, he was a member of the board of directors for PHCC

of Georgia since 1995 and served as state president in 1999-2000 and 2003-2004. He represented PHCC of Georgia on the Department of Community Affairs State Codes Advisory Committee from 1997-1999, served on the board of the Construction Education Foundation of Georgia from 1997-2000, and was chair of the PHCC of Georgia Plumbing Apprenticeship Program and Trade Council from 1998-2000. In 1998, PHCC of Georgia recognized their company with the Contractor of the Year Award.

Watts announces ‘Golden Regulator’ Representative of the Year

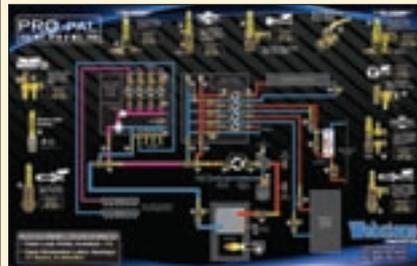
WATTS ANNOUNCED the recipient of its 2009 “Golden Regulator” Representative of the Year Award — Soderholm and Associates of Anoka, Minn. Soderholm exemplified in 2009 exactly what has made Watts a great company for many generations.

Soderholm and Associates represents all facets of the Watts product

offering with integrity, ingenuity and a level of professional that is second to none. They did this as the world fought off the worst economy since the great depression. “We are truly proud of what this group accomplished,” remarked Dave Johnson, senior vice president of sales.

Guide to heating system success

This convenient 11 × 17 laminated reference diagram depicts proper plumbing of systems and



easily highlights the amount of time and leak paths saved by using the proper Webstone products in hydronic heating systems. Call

800/225-92529 or visit www.webstonevalves.com.

Founded in 1954, Webstone is recognized as an industry leader for innovative design of residential and commercial valves used in plumbing, hydronic, radiant, solar and geothermal applications. These designs focus on time and space saving concepts that simplify future maintenance and upkeep of all piping systems. Some of Webstone's trademarked and patented items include; The Isolator®, Isolator® EXP™, Pro-Connect™ and Pro-Pal® step saving valves.

Charlotte Pipe launches RePVC™, only PVC pipe with recycled content

CHARLOTTE, N.C. — Adding to its list of environmentally friendly products, Charlotte Pipe has launched RePVC™, a PVC pipe that uses 100 percent recycled content as the center layer. RePVC™ is the newest member of Charlotte Pipe's True Fit System.

RePVC™ is a coextruded, solid-wall Schedule 40 pipe. Using recycled pvc expands the market for recycled materials, slows the consumption of raw materials and reduces the amount of waste entering landfills. It is a durable, cost-effective system that is simple to install. Recycled content makes up 30 to 80 percent of the



pipe's overall wall thickness, while the inner and outer skins of the pipe are made from virgin materials. RePVC™ is manufactured to ASTM D 4396, ASTM F 1760 and is NSF listed.

Benjamin Franklin Plumbing® Franchisees elect Keresa Richardson brand president

SARASOTA, FLA. — Clockwork Home Services, Inc. announced Keresa Richardson will serve as the first franchisee-elected president of Benjamin Franklin Plumbing®.

After weeks of campaigning and debating, Richardson, a pioneering Benjamin Franklin Plumbing franchise owner won the election. Richardson's passion, vision, and superior customer service were overwhelming factors among voters. As brand president, Richardson will be charged with continuing to build and protect the brand,

while assisting in the profitable growth of the individual franchise members.

Keresa Richardson recognizes the value of building a brand. Keresa and her husband, J. R., opened their first Benjamin Franklin franchise in 2000 with no employees and no service trucks. They now have 30 employees in their Dallas franchise and a record of successfully servicing more than 50,000 customers. The Richardsons also own the Benjamin Franklin franchise in San Antonio, and in April they will open one in Houston.

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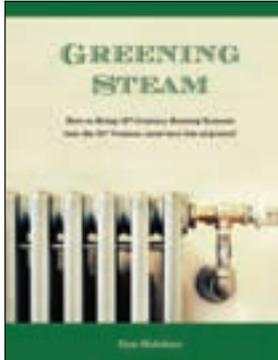
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Steam goes green with Holohan's new book

DAN HOLOHAN'S new book, "Greening Steam: How to Bring 19th-Century Heating Systems into the 21st Century (and save lots of green!)," is helping heating professionals and homeowners save energy and money. According to Holohan, author and president of HeatingHelp.com, "When it comes to saving money on heating, old steam systems are delicious low-hanging fruit. There is so much you can do to make them better, and most of what you do won't cost a fortune."

There are many steam systems in service today, and they'll be around for some time to come. It's not that easy (or inexpensive) to rip out a steam system and start

anew, and that's why so many of them are still around. Dan Holohan's *Greening Steam: How to Bring 19th-Century Heating Systems into the 21st Century (and save lots of green!)* walks you through your old steam heating system and shows you how to get the most out of it without putting a lot of money into it. It's an entertaining and informative book that will have you looking at steam heating in a whole new light. You'll be amazed at how small changes can make a big difference when it comes to efficiency and savings. Read this book and start greening your steam heating system (and your wallet) today!



Readers have given this book a consistent five out of five stars in reviews on HeatingHelp.com.

Daniel G. of Abilene, Inc. says the book "is packed with all of the information any heating professional or steam heat homeowner will ever need to get a steam system operating at peak efficiency." After applying knowledge gained from *Greening Steam* to a recent job, Bob L. of Guardian Heating said, "We have been in business for 57 years and I guarantee you we as a company were never prouder of a job."

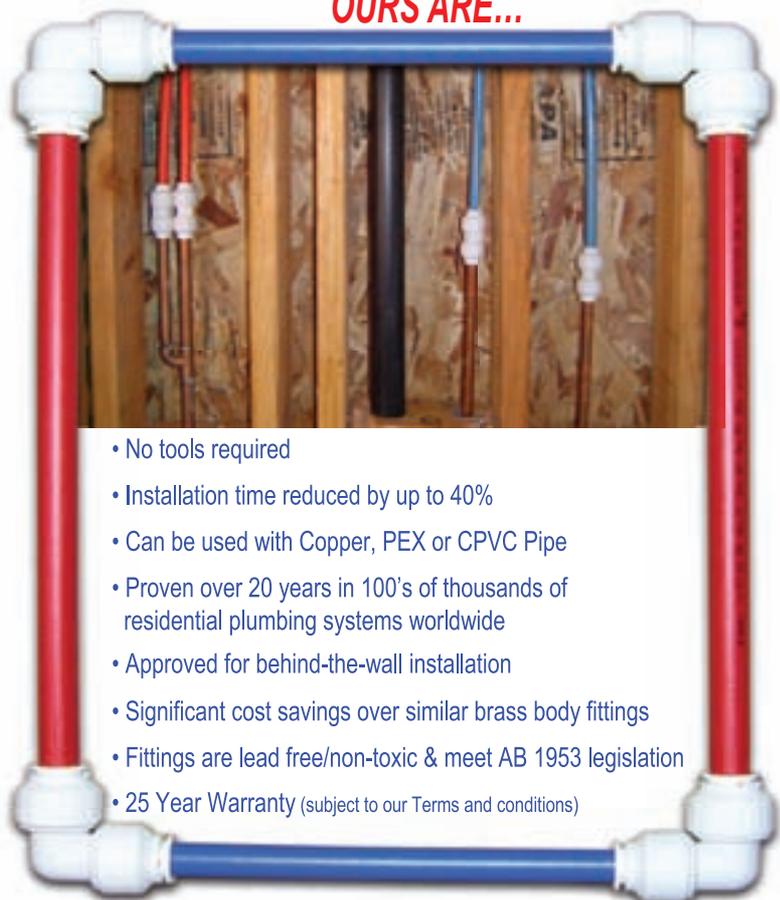
To purchase *Greening Steam: How to Bring 19th-Century Heating Systems into the 21st Century (and save lots of green!)* for just \$30.00 per copy, please visit www.heatinghelp.com or call 800/853-8882.

Zurn receives WaterSense® label

ZURN INDUSTRIES, a market leader in high efficiency urinals, announced that they are the first manufacturer to receive the coveted EPA WaterSense® commercial urinal listing for The Pint® (0.125 gpf) Ultra Low Consumption Urinal Systems. Zurn Industries manufactures the largest product offering for 0.125 gpf HEU urinal systems. These systems include six models of high quality vitreous china and six models of manual, battery, and hardwired sensor flush valves. The complete line of Pint Urinal System models from Zurn are now EPA WaterSense listed. For more information on Zurn EcoVantage® Pint Urinal Systems, visit online at www.zurn.com

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Circle 7 on Reader Reply Card

Nexstar founder celebrates 50 years in plumbing industry

MILWAUKEE, WIS. — February marked 50 years of plumbing industry service for Nexstar® founder Frank J. Blau, owner of Blau Plumbing, Inc. of Milwaukee, the largest plumbing-heating-cooling service firm in the region and one of the largest in the United States.

In 1992, Frank Blau was the driving force behind the formation of Nexstar® (originally Contractors 2000), a business-development and best practices organization delivering comprehensive business training, systems and support to independent home service plumbing, heating and air conditioning professionals across the continent. Blau founded the organization with a group of business owners who strongly believed in the plumbing, heating, cooling and elec-

trical industry and wanted to bring leadership and support for best business practices delivered with the highest integrity.

Operating as "Blau Sudden Service," Frank Blau's business operates a fleet of 19 service trucks that deliver quick, comprehensive service spanning plumbing, heating, air conditioning, water softening, water filtering and well pump delivery systems, along with drain cleaning. Blau takes pride in being an environmentally conscious company that recycles and reclaims many of the materials and supplies of their trade.

Founded by Frank J. Blau in 1960, the company is now owned and operated by sons James "Jim" Blau, president, and Robert "Bob" Blau, vice president.

NAOPSP growing quickly

THERE ARE NOW more than 500 members that have joined the National Association of Plumbing Showroom Professionals Association (NAOPSP) (www.naosp.com). This is up from the original launch of 200 in June 2009. Two thirds of the members are showroom managers and salespeople. Don Devine, CEO of American Standard, Tim Murphy of Klaff's (CT) and Kip McFarland, sales manager of Oceania Baths, have made strong endorsements about the association. There are more prominent plumbing/bath manufacturers coming forward to participate as you read this.

The NAOPSP is open to the plumbing contractors, with showrooms across the United States and Canada. There are hundreds of plumbing contractors with showrooms that will gain great value from this free membership.

According to Steven Conneen and John Murphy, co-founders, the web site hits have been as much as 29,000 in one month. The NAOPSP website is a great tool for the showroom professional. Log in once a day and you have access to 90 websites. NAOPSP has sites on LinkedIn, Facebook, collectiveX, and their own site www.naosp.com.

BIGGEST RESIDENTIAL CONTRACTING EVENT EVER!

Dallas, Texas.....May 7, 2010
Baltimore, Maryland.....June 9, 2010
Los Angeles, California....June 25, 2010

Contractors from many different trades — Plumbing, HVAC, electrical, roofing, and more—are currently registering to attend one of these never before held events! They are...

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...from the big boys! Taking back business from BIG BOX retailers, UTILITY companies, and WALL STREET consolidators. They are being taught by experts how to:

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- Win \$1,000 credit to YOUR favorite parts store!
- Everyone receives a \$237 buying credit for attending!

PLUS: Just by registering, you enter a sweepstakes to:

- Win a brand new Chevrolet Silverado 2500 Extended Cab Truck... and gas for your new truck from Exxon Mobil for a year!*

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866-622-1073!



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that was easy.™

Everyone receives a \$237 buying credit just for attending!

*To enter the sweepstakes without registering for the event, call 866-622-1073 for an application and further details. No purchase necessary.

'Extreme Makeover: Home Edition' welcomes Zoeller Pump Co. as preferred vendor

LOUISVILLE, Ky. — "Extreme Makeover: Home Edition" has selected Zoeller Pump Company as a preferred vendor to work with on upcoming build projects for the ABC reality show.

The Emmy Award winning reality

series has selected to use a Pro Pak 53, sump pump and battery backup pump combination, on a recent home built in Bloomington, Ill. Zoeller Pump Company is proud to donate product for a family in need and hopes to con-

tinue this affiliation in the future.

Each episode of "Extreme Makeover: Home Edition" is self-contained and features a race against time on a project that would ordinarily take at least four months

to achieve, involving a team of designers, contractors and several hundred workers who have just seven days to totally rebuild an entire house — every single room, plus the exterior and landscaping. More importantly, the lives of the lucky families are forever changed when they learn that they have been selected to have their home walls moved, their floors replaced and even their facades radically changed.

Lochinvar announces winner of SHIELD promotion

LEBANON, TENN. — Lochinvar Corporation announced the grand prize winner of its recent promotion surrounding the SHIELD Commercial Water Heater. The promotion, which ran from June through December 2009, invited contractors to receive a \$50 rebate for every SHIELD Commercial Water Heater they installed; upon registering for the rebate at <http://shield.lochinvar.com>, each participant was then entered into a grand prize drawing. As the winner of the grand prize, Brad Vines, president and owner of John's Plumbing in Birmingham, Ala., received a PowerMate Stair Climbing System, which is valued at more than \$4,000 and designed to



provide a smart, cost-effective and safe way to move heavy products.

John's Plumbing has been servicing customers in Birmingham and surrounding areas since 1984. Founded by Vines' father, John Vines, the company has grown from its humble beginning with just one employee and one truck to 25 employees and 12 trucks today.

Bell & Gossett announces BIM library featuring Revit®

MORTON GROVE, ILL. — ITT Bell & Gossett announced an extensive online library of 3D building information modeling (BIM) content files in Autodesk® Revit® 2010. A total of 113 Revit families and 5,252 types have been created for the following HVAC lines: • Pumps: VSX, Series 1510, 1531, 80, 80-SC, 60, and 90; • Pump accessories: suction diffusers triple duty valves; • Engineered specialties: Rolairtrols and B expansion tanks; and • U-tube heat exchangers.

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Flow-Aide is non-corrosive, safe to handle and biodegradable with a BOD value of 16 mg/l. This normally allows the solution to be water-flushed down sewers and through septic systems. Check local ordinances and regulations prior to disposal.

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Circle 9 on Reader Reply Card

Independent contractors leverage premium buying power

SARASOTA, FLA. — Thanks to the launch of the BuyMax Alliance™, a powerhouse Web-based business-to-business buying site, 2010 promises to be a record-setting year for independent contractors in the HVAC, plumbing, electrical and roofing industries.

The site allows businesses to lever-

age the buying power of their larger peers, thereby reaping huge savings on operating expenses such as office supplies, equipment, materials and human resources services. Not only does the site provide its owners with increased profitability and competitiveness; it also saves them critical hours, better used to focus on busi-

ness development and family time.

Rebecca Cassel, president, Consumer Services Group commented, "By negotiating with premier industry suppliers, our members are benefiting from supplier partnerships at prices they would have previously been unable to find." Numerous testimonials to the BuyMax buying

power show individual company savings of up to \$42,388.

Members of BuyMax pay a monthly fee to compete against the "Big Box" retailers on exclusive, high quality, "can't-be-price-shopped" private label products.

For a limited time the company is offering a 90-day free trial.

ENERGY STAR® brand value stays high

Survey shows sustained brand equity

WASHINGTON — Nearly four in five U.S. households recognize the ENERGY STAR® label says the National Awareness of ENERGY STAR® for 2009: Analysis of CEE Household Survey. This just-released EPA analysis of the CEE ENERGY STAR household survey shows that with recognition at consistently high levels across the country, ENERGY STAR is a truly valuable asset. Despite the emergence of multiple environmental brands, ENERGY STAR continues to command high recognition, convey its meaning, and influence purchasing decisions for high efficiency products. For info, www.cee1.org/eval/00-new-eval-es.php3.

Taco's charitable foundation gets new name, announces recent grants

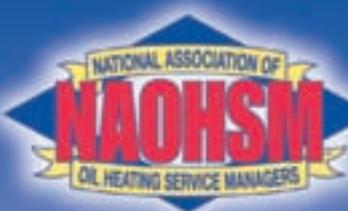
CRANSTON, R.I. — Taco, Inc.'s John & Happy White Foundation is now the White Family Foundation. The non-profit charitable foundation, established in 2000, recently received permission for the name change from State of R.I.

John Hazen White, Jr. President and CEO of Taco, Inc., commented that the name change is a reflection of the Foundation's continuing efforts



Taco president & CEO John Hazen White, Jr. poses with Candy Castaldi, senior V.P., Circulator Division, Taco, Inc., and with Jean Johnson, executive director of House of Hope Community Development Corp. House of Hope, along with the RI Free Clinic, received a \$10,000 grant recently from the White Family Foundation.

as it enters its second decade of gift-giving. "My late parents established the John & Happy White Foundation to benefit worthy community-based organizations operating here in R.I. for the benefit of Rhode Islanders. While we have altered the Foundation name slightly to reflect where we are today, the mission they established remains the same."



CONVENTION & TRADE SHOW

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Trade Show Days Tuesday & Wednesday

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THE ANNUAL NAOHSM CONVENTION AND TRADE SHOW MOVES TO PROVIDENCE, RI. YOU'LL FIND NEW IDEAS, NEW LEARNING OPPORTUNITIES AND LOTS OF NEW PRODUCTS TO HELP YOU BECOME A SUPER HERO OF SERVICE.

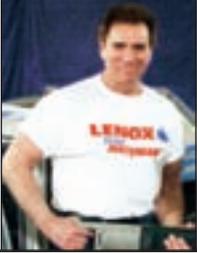
...Super-Sized Trade Show: The industry's largest gathering of heating and cooling service and installation suppliers. Now featuring ALL fuels!

...Super Career Builder: Free NORA Certification Testing.

...Super Education: Free NORA and NATE CEU's - Learn in the morning and visit the trade show in the afternoon.

...Super Dan Holohan X 2: Everyone's favorite presenter will offer two unique seminars.

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TOOL TIPS with Hackman

Demolition blades

Tool Tips feature trade tips from Lee "HACKMAN" Breton, marketing services manager for LENOX, team hackman event

manager and car cutter extraordinaire. Every month, HACKMAN shares insight from his 25+ years in the tool industry.

Over the years, reciprocating machines have become more powerful with higher amps and greater strokes per minute. Because of all of this added power, workers in the professional trades have been asking for thicker and wider demolition style blades to keep up with the increased muscle of the machines.

The latest and greatest demolition blades on the market are engineered to cut through a wide variety of materials. They can get through structural steel, lumber, pipe and nail embedded wood with ease. The newest metal cutting blades must be up for the unique challenge of vehicle extrication. First responders don't have time for blade changes, so it really isn't an option — these blades need to last!

To find a blade that will last, always look for a wider and thicker design which makes the blades stand up better to the brutal conditions in demolition applications. A shatter resistant, bi-metal design



Demolition blades are engineered to cut through a wide variety of materials.

provides the flexibility and durability that single metal blades can't. They are also available in standard tooth form and gold titanium coating — making the teeth wear-resistant to stay sharp and provide quicker cutting.

Demolition blades are engineered to rip through a variety of materials with ease and can be used for lots of tough projects like cutting walls out for adding sliding glass doors, cutting old windows out to replace with new ones and straight cuts on beams, angle iron and pipe.

In the very near future the demolition blades will be available with a higher level of performance when the teeth are upgraded to the T2 design. ■

PEX Pipe and Murray Clamps

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John Guest USA – the ‘Art’ of a successful business

BY JOHN MESENBRINK,
chief editor

Success is measured by positive results. And to reach a level of success, hard work, a clear vision, unwavering determination and dedication, a great product, and the right people are needed in the mix. Add in strong branding and promotion — and a steadfast leader — and you have the right formula to create a thriving business.

John Guest USA is one such company, and it doesn't rest on its laurels. The family-built com-

pany was built on the foundation of strong business values and offering the best quality and value solutions. With 40 U.S. full-time employees and 1,200 worldwide employees, the John Guest Group of Companies is the world's leading manufacturer of high quality push-in fittings, pipe and plastic plumbing systems to a

wide variety of air and fluid handling solutions. Known worldwide as a provider of product to a very wide range of markets, including home building/plumbing systems, beverage dispense, fiber optics and automotive, John Guest USA is delving, successfully, into the American push-fittings market. John Guest now offers a comprehensive range of more than 3,000 products addressing virtually every tubing and pipe connection requirement imaginable.

John Guest's Speedfit Push-Fit fittings are manufactured in Great Britain by John Guest Ltd. of Middlesex, England, a BS EN ISO9001 certified facility. The company operates multiple locations worldwide. John Guest USA, located in Fairfield, New Jersey, distributes products for the plumbing, water filtration, marine, facilities maintenance and a variety of OEM applications across North, Central and South America, the Caribbean, and the U.S. Virgin Islands.

No sweating or soldering required, the push-to-connect fittings can be used with PEX,

CPVC, copper, for instance, in 1/2", 3/4" and 1" sizes. Push fitting's real truth is in the time-saving methods of on-the-job performance. All components are pressure tested against metal competing products, and John Guest products meet or exceed all standards as measured by independent testing agencies: NSF, ANSI, ASTM, etc.

John Guest's U.S. headquarters, based in Fairfield, N.J., serve as the distribution center for products for the plumbing, water filtration and automotive industries.

pany was built on the foundation of strong business values and offering the best quality and value solutions. With 40 U.S. full-time employees and 1,200 worldwide employees, the John Guest Group of Companies is the world's leading manufacturer of high quality push-in fittings, pipe and plastic plumbing systems to a

The proof is in the product — Speedfit® Slip Tee Connector

John Guest® USA has introduced a new Speedfit® Slip Tee Connector as an add-on element to an existing plumbing/heating piping system. The new Slip Tee Connector provides a simple way to

Installation is easy: Pipes must be cut square and be free of burrs and the relevant pipe insert must be used to fit to plastic pipe. To make a connection, the tube is pushed in by hand; the unique patented John Guest collet locking system holds the tube firmly in place without deforming or restricting the flow.

John Guest USA's Speedfit Push-Fit system is an advanced push-fit fitting featuring secure twist and lock technology suitable for use in normal domestic hot and cold water plumbing systems, including pressurized and combination systems.

Speedfit Fittings have been designed for use with copper pipe, Speedfit PEX pipe, CPVC and PEX pipe conforming to U.S. Plumbing Standards. They require no tools or blowtorches, reducing installation time, and can be disassembled without damage to pipe or fittings. They are easy to use in confined spaces.

Like all Speedfit Push-fit products, corrosion free Slip Tee Connectors are constructed of high quality engineered plastic and are totally lead free.



break into and branch off from a rigid pipe run without altering the existing pipework.

This new addition to John Guest USA Speedfit Push-Fit Solution family is available in one-half inch and three-quarter inch copper tube sizes (CTS).



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Stan Artman

John Guest USA's steadfast leader is Stan Artman, president of sales and marketing. With 25 years of experience in the plumbing industry with stints at Kohler, Delta and a manufacturer of push-to-connect fittings, Artman has the company's compass headed in the right direction.

Armed with 40 employees and 20 hired rep agencies, Artman believes in a strong business philosophy: work through distribution channels utilizing a seasoned team of regional managers and top rep agencies; greatly accelerate new customer growth; and drive toward aggressive market share gain. Also, delivering the right product message and telling the John Guest story — highest quality, performance and consistency — is key. "Our customers can take comfort in knowing that our products perform to a very high standard whether it's one produced or one million. Customer confidence is critical with a push-to-connect fitting. John Guest USA has proven itself over 25 years in the American market," said Artman.

Since taking the helm at John Guest USA in February 2009, Artman's biggest attributes implemented have been a constant evaluation of the business to eradicate complacency and creating new product opportunities. Having that good process in place — planning, executing, meeting with his team and evaluating, as well as hiring and working with high quality rep agencies to leverage John Guest Speed-fit's strong brand and breadth of products, are the cornerstones of John Guest USA market approach. Coupled with aggressive contractor outreach and wholesaler support, John Guest USA enjoyed strong

growth. "We are seeing greater buy-in each month from the wholesale and contracting community," said Artman. Under Artman's leadership, the goal of John Guest is to see positive growth by reorganization leveraged against markets that want to be penetrated. With the market's growing use of non-metals and environmentally sound and lead-free products, John Guest will emerge as

the brand of choice for push-fit solutions. "Shame on us if we aren't the leader," said Artman.

Artman is confident John Guest will emerge as the brand of choice for push-fit solutions. "It is up to us to plan and execute in order to earn this leadership position," said Artman.

"Strong brands will win battles," Artman continued. And with a

strong board of directors in the UK dedicated to the continued growth of JG USA, "We will continue to see reinvestment in our market as our board is focused on continuing to build our global business by managing and growing for the next generation and not simply for the next quarter," said Artman.

For more information on John Guest, www.johnguest.com. ■

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Navigating K/BIS 2010 – A look at getting better show results

There is no doubt that 2010 is a challenging year for all of us in the showroom industry. It is a year that requires more focus and going back to basics of what

K/BIS 2010 – slim pickin's require smart choices

worked in the past.

The Kitchen and Bath Industry Show (www.kbis.com) April 16-18, 2010 in Chicago is expected to draw about 30,000 people. The show hours are Friday and Saturday, 10:00 a.m. to 5:00 p.m.; and Sunday 10:00 a.m. to 3:00 p.m. This show will have about 500 exhibitors covering around 300,000 square feet of exhibit space.

There are only two halls this year.

The much smaller turnout by the luxury bath, plumbing, kitchen and decorative companies at K/BIS 2010 has been in the works for many years despite the recession. The truth is that K/BIS is not an "all industry event." The "exclusive" show partners: K/BIS, the show educational arm; KBB, show magazine, and



BY PETER SCHOR

Nielsen, the show itself, have made this into a show for the K & B dealers. Yes, the larger plumbing/bath and kitchen manufacturers like Kohler, Moen, Delta, TOTO USA, and many others have worked the downline K&B dealers and professional trades deeper than most manufacturers do.

Educational venue

The Opening ceremony, Friday, April 16, 8:15 a.m. – 9:30 a.m., is called "Disregard All Previous Instructions" by Sergio Zyman, author/consultant, who discusses "How today requires a completely new set of rules, competitive factors and unique propositions. Previous practices or instructions are obsolete in today's marketplace and economy." This sounds like a good one!

The educational venue operated by NKBA at K/BIS 2010 has always been held for the K & B dealers excluding the bath/plumbing and decorative hardware dealers and distributors. This year, due to losing DPH manufacturers and decreased attendee market share and the exceptional efforts of Ken Rohl, Hall of Famer; Rohl LLC,

The much smaller turnout by the luxury bath, plumbing, kitchen and decorative companies at K/BIS 2010 has been in the works for many years despite the recession.

has sponsored two great programs for product selling showrooms. Thursday, April 15th, 8:00 a.m. – 2:30 p.m. there is a pre-show seminar called "Decorative Plumbing: A Systems Approach." This is given by Paul Greenspan who has 25 years of decorative plumbing showroom experience. Friday, April 16, 12:00 p.m. – 1:45 p.m. there is a "Trends and Insights" program given by Robert Tietze from The Portland Group, which owns SPLASH, SPRITZO, and other

(Turn to Schor, page 64.)

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2 : produced in or indigenous to a particular country

3 : Indigenous to or produced or made within one's own country; not foreign, native: domestic goods

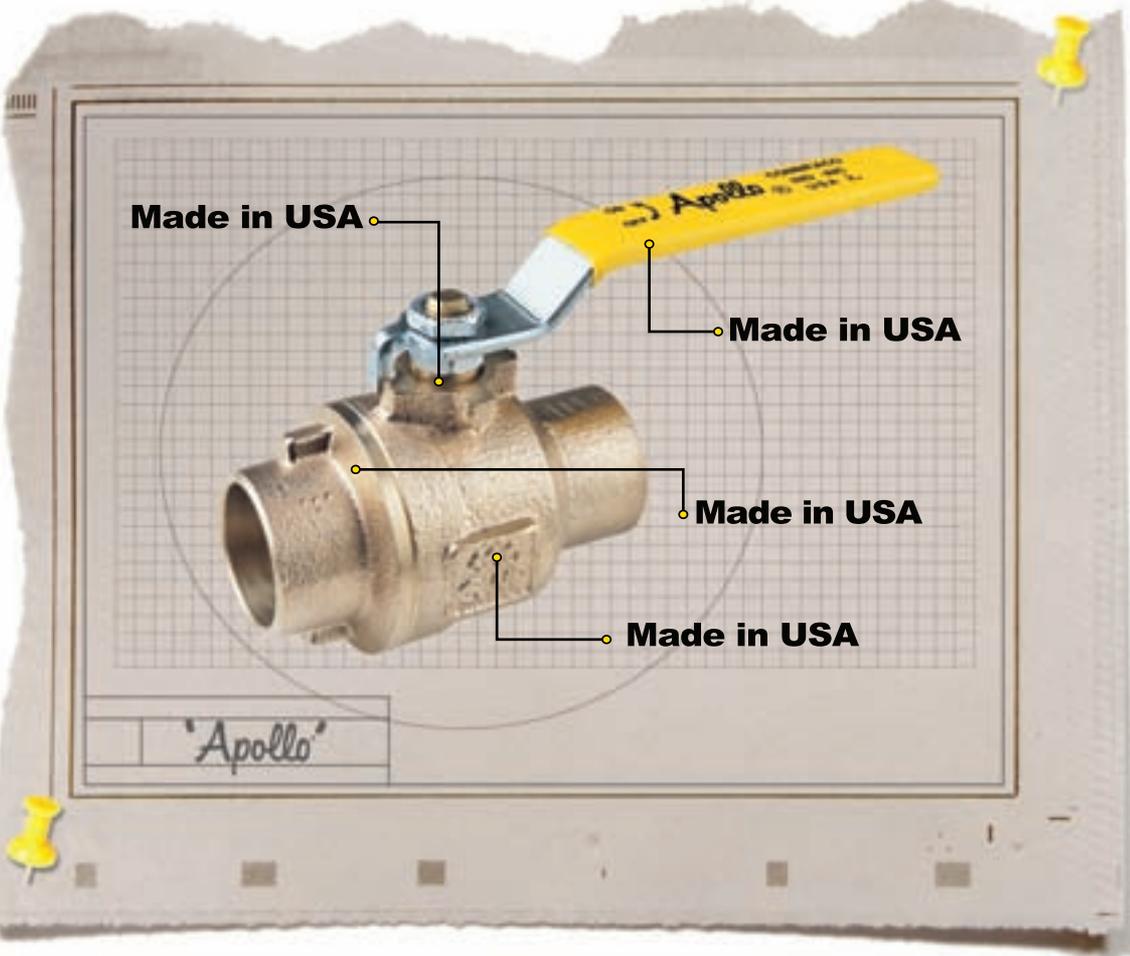
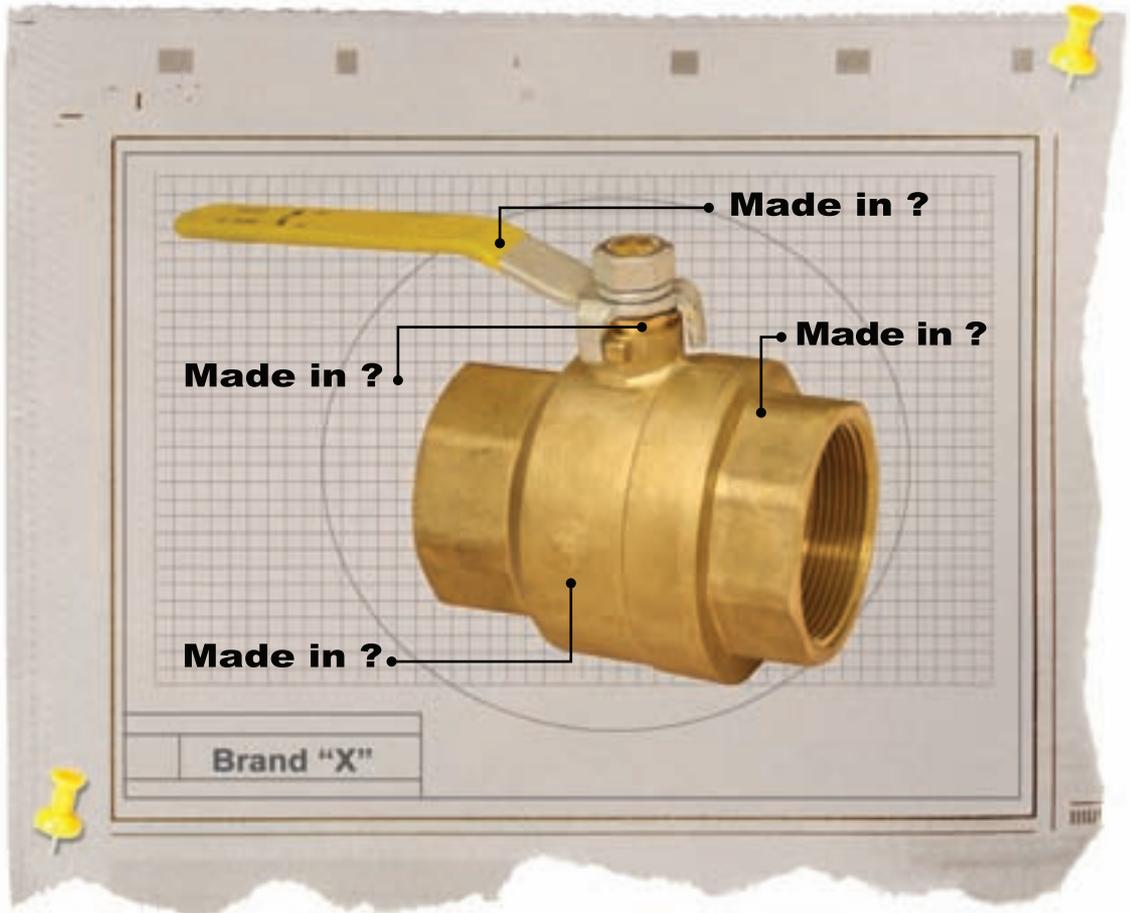
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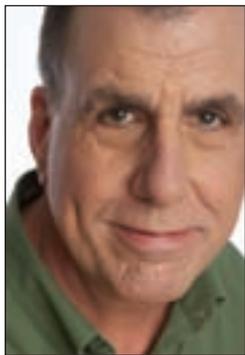
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Circle 16 on Reader Reply Card



BY DAN HOLOHAN
contributing writer

Wholesale or no sale?

I was in a supply house once when a contractor cut ahead of a homeowner who had been waiting patiently. The homeowner said something and the contractor told the guy what he could go do with himself.

The counterman waited on the contractor.

The homeowner then took note of the company name on the contractor's jacket and said that he would never hire his company, and that he would tell everyone he knew what had happened that day, and that he would also put it on the Internet. The contractor asked the homeowner why he was still there, and why hadn't he yet done with himself what the contractor had suggested he do with himself.

That dance is timeless in the supply houses of America, especially these days when business is the way it is.

A homeowner posted this on the Wall at HeatingHelp.com the other day:

"I am looking for some honest opinions from contractors about why wholesalers either don't want to sell to the homeowner, or are unwilling to help them out with items. I perfectly understand not selling natural-gas appliances, gas valves, gas water-heater parts, etc. to a homeowner, who may or may not know how to install and test such items. I have no experience with oil or propane appliances, but I would assume the wholesalers would have the same no-sale attitude.

"One contractor I dealt with last week said that the wholesalers do not want to sell to homeowners because it takes bread out of the contractors mouth. Fair enough. I understand and appreciate that. But we all have mechanics, and we all have auto-parts stores that sell to the public, which take money away from mechanics. Should Home Depot not sell hammers, so you have to hire a trim carpenter?

"Another point: Everyone is scared of the recession. Why would a business, HVAC/plumbing wholesaler or not, turn away money coming their way, and risk poor word-of-mouth advertising while they're at it?

"As a homeowner, I am not allowed to purchase a vaporstat from one wholesaler locally (depending on the counterperson) because it is attached to a gas appliance. The cost to me quoted to purchase was \$215 from two different wholesalers. I asked my HVAC tech if it was possible to rebuild mine. He called today and said he couldn't, and that a replacement would cost me \$350. Now, is that fair, to pay another \$135, plus \$100 labor to install it? Again, I understand markup. I would expect 10%-30% markup is fair.

"What about radiator vents? Main line vents? Low-pressure gauges? A 0-2-psi gauge was quoted today at \$200, same HVAC company, before installation. And I know people will jump in here and say that you can go online, or go to another city, or use a different company. Luckily, I found a wholesaler who deals with steam air vents. He will sell to my HVAC company or sell to me direct. He doesn't care who installs them. Six adjustable steam air vents will cost me \$300, plus tax.

"It's just frustrating. I don't understand it. I'm hoping someone will chime in here and enlighten me. I even had to argue with one company to let me special-order a radiator union valve. I offered to pay upfront and said that I would not return anything. They wouldn't do it.

"Any thoughts?"

I posted, reminding this gent that we have a policy on our site of not discussing pricing because there are too many variables from job to job and town to town. I did this because I didn't want the contractors to get into a war with the guy over what stuff should cost. I also mentioned that most wholesalers favor contractors because

contractors buy from them every day. It's just a matter of good business.

Not surprisingly, a contractor then wrote, You complain about the mark-up for the vaporstat and say that a 10%-30% mark-up is fair. Do you really think that covers the gasoline, insurance and a service tech's time to go get the part? And if he has it on his truck, or in inventory, do you really feel he's covering all his overhead at 10-30 percent?

"There are also liability issues with selling to the public. I can see scenarios where a customer comes in and is slightly wrong in explaining what he's looking for, or just paints a bad picture to the counterperson and gets the wrong part, along with terrible consequences. Then the homeowner is just going to point the finger at the supply house because that's what they gave him.

"Our industry has so many parts, many of which can be used properly in many different scenarios, but if used wrong, the same parts can lead to very bad results. If I were a wholesaler I wouldn't want that on my head, not to mention upsetting your biggest customers, the contractors, along the way."

All good points, to which another contractor added, "Wholesale is just that. It's wholesale TO THE TRADES. If you want something, go to a retailer. There is a difference. I actually take offense when a wholesaler sells retail. The wholesaler is OUR supplier, not yours. I don't mean to come off as being rude, but don't get mad when a wholesale house actually does what they are supposed to do."

Which inspired a different homeowner to post, "I have trouble with this. About 30 years ago, I did some plumbing work in my house (installing a photography darkroom). I did go to a retailer, of the Big Box variety, and they had really crappy stuff that mostly failed soon after (gate valves, especially), and they did not even know what a vacuum breaker was.

"I then discovered a plumbing supply house, and they had no problem selling to me, provided I got there in the morning. I think they closed about lunchtime, because by then, the professional plumbers were done buying stuff for the day. They knew perfectly well what vacuum breakers were, and they even sold high-quality parts for less than the Big Box places sold their junk. So it is all very well to recommend a retailer, but around here at least, there are none that I would wish to purchase from."

And then another contractor had this to say:

"With rare exception, the average homeowner has no idea what he wants. Most non-contractors that come into a supply house are carrying a handful of who-knows-what and trying to describe where it came from, as if the guy behind the counter speaks another language. It's a waste of everyone's time. And I don't think the policy will change for the few people who actually do know what they need and how to ask for it. Maybe there's a solution that the Big Box stores tried to pick up on and failed at. You don't go to them because of their great selection or knowledge base. You go there because it's cheap and easy."

This played back and forth for a while and then we heard from a wholesaler, and what this guy had to say really made me think. Listen:

"I am a wholesaler and I do sell retail. The main reason is that I have a showroom and there are no local hardware stores (thanks HD and Lowes). The showroom gives me an opportunity to educate consumers as to the reasons why they need a professional. Let's face it, a lot of consumers can change a flush valve, a flapper, under-the-sink components, install a faucet or a toilet. So why should I turn that business away? The consumer pays retail

(Turn to Contractors vs. homeowners... page 24.)

"I am a wholesaler and I do sell retail. The main reason is that I have a showroom and there are no local hardware stores [thanks HD and Lowes]. The showroom gives me an opportunity to educate consumers as to the reasons why they need a professional."

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Circle 17 on Reader Reply Card



BY BRISTOL STICKNEY
contributing writer

Solar thermal collector tilt

Flat plate solar heat collectors are most often mounted facing the sun at some fixed tilt and orientation. The tilt angle must allow the collector good exposure to the most useful altitude angles of the sun, while the orientation is chosen to provide good exposure to the solar azimuth angles (the sun path from east to west). For most common heating loads in the northern latitudes, the best orientation angle is true south and small variations to the east or west (plus or minus 10 degrees or so) will produce only a minor impact on the annual performance. The tilt angle, however, can be altered to produce widely different annual results, and so it is important to understand the consequences when choosing a fixed tilt.

Monthly solar climate data

To understand the solar heating climate at any location, it is helpful to inspect it month by month. A good resource for this kind of climate data is the National Renewable Energy Laboratory (NREL) website. Their “Solar Radiation Data Manual for Flat-Plate and Concentrating Collectors” contains a handy summary for each of 239 locations across the U.S. Even though it is out of print, it can be obtained free on the web at <http://rredc.nrel.gov/solar/pubs/redbook/> in PDF format, as well as ASCII Data Files (comma delimited) that can be copied into spreadsheets for solar calculations.

Each data page describes the location, presents average solar radiation values month by month for flat-plate and concentrating collectors, and gives average climatic conditions such as temperatures, heating degree-days and humidity. Data are presented by NREL for five tilt angles from the horizontal: 0°, latitude minus 15°, latitude, latitude plus 15°, and 90°. Data for a tilt of 0° (referred to as global horizontal solar radiation) show how much solar radiation is received by a horizontal surface such as a solar swimming pool cover.

The Solar Data Manual states that the maximum yearly solar radiation can be achieved using a tilt angle approximately equal to a site's latitude and to optimize performance in the winter, the collector can be tilted 15° greater than the latitude. To optimize performance in the summer, the collector can be tilted 15° less than the latitude. Data for a tilt of 90° apply to collectors mounted vertically on south-facing walls (primarily for winter space heating) and also apply to south-facing windows for passive solar heated designs.

Consider the heat load profile

Residential domestic hot water (DHW) can often be characterized as a constant load each month when the residence is continuously occupied. For example, if 80 gallons per day are consumed with a 70° temperature rise required from the water heater, then around 46,000 BTUS are needed per day with little variation from month to

month. This idealized hot water load is shown on Figure 1 as a horizontal line that does not vary from month to month for a sample retrofit project near Sterling, Virginia.

The residential space heating load is another matter. The 2,000 square foot house near Sterling requires 400 BTUS per hour per degree F of difference (delta T) between indoors and outdoors plus some extra heat loss due to air infiltration. So, the heat load is far from constant over the year, rising dramatically in winter and dropping to nothing but the water heater load in summer. Everybody in the heating industry knows this, of course, but when you graph it as shown in Figure 2 you begin to see the picture from the solar heating perspective. The space heating load is not a straight line like the DHW, but wildly fluctuating over the year with a shape not unlike the “big dipper” constellation without the handle. And, to make things even more challenging, if you choose the wrong collector tilt, the need for space heat can be perfectly out of phase with the solar heat available, off target by six months.

Matching the heat load to the solar heat source

The NREL solar climate data described above has been plotted on the Figures 1 & 2 for our sample project in Sterling, Virginia (except that I have omitted latitude minus 15° and added a steep tilt of 72°). These five curves show how much solar heat is available on a typical day each month at different tilts for solar collectors of a reasonable size for the heating job. This can be compared to the heat load on a typical day each month, plotted as a red line marked with circles.

In the case of a simple solar water heater in Figure 1 the comparison is straight forward. The typical daily DHW heating load is seen as a horizontal line from month to month. The collector tilt that provides solar heat that most closely follows the load is the winner. Just as NREL predicts, the Latitude plus 15° collector tilt tends to match the load better in both winter and summer, providing a better match than the Latitude tilt curve which produces more excess heat in summer and a bit less heat in winter. In this example, the 64 square feet of collectors could be installed with a 100 – 120 gallon DHW storage tank to absorb the extra heat in summer while providing 80 gallons of hot water to the faucets each day.

The same choices are compared in Figure 2 but this time applied to a much larger collector array (320 square feet) which is big enough to make a significant contribution to the space heating as well as the water heating load for this house. Notice that the familiar horizontal line from the DHW is visible in summer as a constant load. The area above this line and below the solar collector tilt line is extra summer heat, not really needed, but available for summer pool heating if a pool is nearby. In our sample project in Sterling, there is no pool, so the design becomes
(Turn to Solar collector tilt... page 24.)

A perfect match is not always easy or economical, which is why solar heating systems are commonly designed to take up a significant amount of the annual heating load, but not all of it.

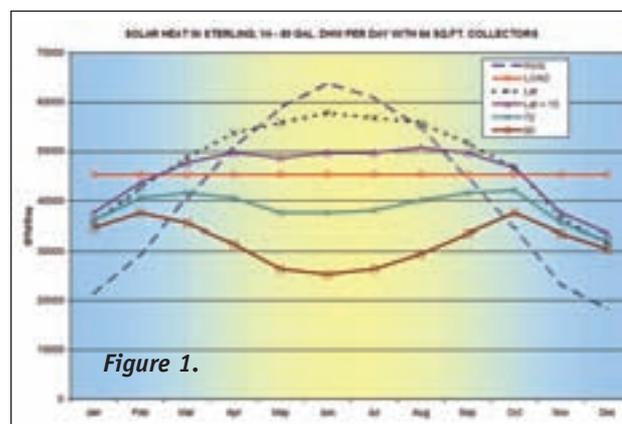


Figure 1.

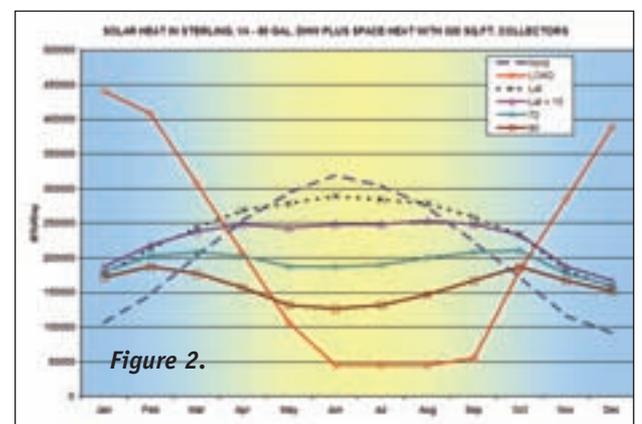


Figure 2.

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Circle 18 on Reader Reply Card

Solar collector tilt a compromise among factors

(Continued from page 22.)

a balancing act of reducing the summer excess heat while maintaining the solar heat available in winter as much as possible. The data in Figure 2 shows that the solar collector tilt that best fits the “dipper” shape of the annual heating load is the vertical collectors (90° tilt). But when you look at the solar heat available in the spring, the Latitude plus 15° tilt works much better. Perhaps the happy medium is around 72° where heat is not cut off too drastically in the spring but does cut off pretty well in the summer.

A perfect match is not always easy or economical, which is why solar heating systems are commonly designed to take up a significant amount of the annual heating load, but not all of it. In this example it looks like 320 square feet of collectors may provide over half of the annual heating load. The size of the solar heat contribution shown here

is typical of solar heating retrofits, but keep in mind this is only one example. Solar heating systems can be designed for higher or lower solar contributions depending on climate, economics, heat storage schemes, controls and many other factors.

Practical considerations

The solar tax credits and other incentives may alter the economics in favor of more collectors. When more collectors are deemed affordable, the designer must take more care to avoid overheating during the warm seasons. See earlier issues of this column for previous discussions about designing to prevent overheating.

Some vacuum tube collectors have a tilt limit, and may not function properly if they are tilted too close to vertical or too close to horizontal. Consult the installation manuals to be sure the solar collectors are right for the job.

Drainback collectors must be in-

stalled so they drain properly by gravity, so keep in mind that creative piping and unconventional tilts may interfere with that.

When a steep tilt is required, a low profile collector may be preferable to overcome the aesthetic problem of free standing tall collectors. For example, Solar Skies and Viessmann both make low-mount collectors with internal horizontal headers.

Snow drainage takes longer at a shallow tilt and this can be a problem in some installations when collectors become covered with snow with no practical way to clean them off.

• Special thanks to Dr. Fred Milder at SolarLogic for the solar climate data graphs presented here. ■

Bristol Stickney, partner and technical director at Cedar Mountain Solar Systems in Santa Fe, N.M., has been designing, manufacturing, engineering, repairing and installing solar hydronic heating systems for more than 30 years. He holds a Bachelor

In this series of articles, I have been making the case that the key ingredients for solar/hydronic design and installation can be divided into six categories, listed below, roughly in order of their importance:

**1. RELIABILITY 4. ELEGANCE
2. EFFECTIVENESS 5. SERVICEABILITY
3. COMPATIBILITY 6. EFFICIENCY**

The success of any solar hydronic home heating installation depends on the often-conflicting balance between any of these six principles. Finding the balance between them defines the art of solar heating design.

of Science in Mechanical Engineering and is a licensed Mechanical Contractor in New Mexico. He is the Chief Technical Officer for SolarLogic LLC and is involved in training programs for solar heating professionals (visit www.cedarmountain-solar.com or www.solarlogicllc.com for more information.)

Contractors vs. homeowners at the counter

(Continued from page 20.)

pricing, not wholesale pricing. He's either going to purchase what he needs from HD, Lowe's, the Internet or from me. So if he wants to support his local community's business people, it might as well be me.

“Here have been many times where a consumer has come to the counter for help and left with a contractor in tow. Why wouldn't you go to the place the pros go to when you're looking for professional help? Most contractors who come to me don't feel threatened or turn red when a consumer comes in here. Nine out of ten times, the contractors try to help out the consumer. The contractors I see that do complain about homeowners are the same contractors that shop you from supply house to supply house, beating me over the head on price, and seem to have no loyalty.”

Loyalty. Now, there's a word for you. I'll bet that wholesaler hooks up those visiting homeowners with the contractors who buy from him all the time. I can't imagine him making business connections for the price-shoppers. Human nature, right? And just smart business.

This whole thing made me think about the way things are these days, and the way they might be (especially in this economy). It made me think about friends helping friends by bringing them together with opportunity. It made me think about the way we all do business, and, yes, it made me think about loyalty.

I'd like to see more of that. ■



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BY ELLEN ROHR
contributing writer

Your messy shop will repel “right stuff” people. No world-class companies of any kind celebrate [or even tolerate] a stinking mess of a shop, truck, toolbox. When it comes to business: Clean is good. Dirty is bad.

Clean the place up!

I'm so excited! One of my favorite business builders, Brian Scudamore, is going to be my guest on our BlogTalkRadio show on April 27th. He is the founder of 1-800-GOT JUNK. He started the company at 18 years old — just him and one truck. Now, he has more than 250 locations and the company is a media darling and a rockstar in the franchise world. At 1-800-GOT JUNK they get their customers to pay to haul their unwanted stuff away, even though they can put it on the curb and the garbage man will take it away for free. (Join in the fun at <http://www.barebonesbiz.com/radio.html>)

Brian and his franchisees understand the power of publicity and clever marketing. Perhaps you've seen blue-wigged, 1800-GOT JUNK team members waving their logoed signs on a busy street? Brian and his junk removers have been the subject of more than 5,000 news stories and magazines articles. Another marketing coup? 1-800-GOT JUNK is the official clean-up team of the wildly popular TV show, “Hoarders,” on The Learning Channel (TLC). <http://tlc.discovery.com/tv/hoarding-buried-alive/>

Have you seen this show? Wow, I didn't realize what a problem hoarding is for some people.

NOTE: Could you be a hoarder? Is your shop a disaster? Are you squeezing through a maze of your “collec-

tions” or “inventory”? Is your spouse or partner threatening to throw things out? Throw you out? If so, read on.

NOTE: Are you a neatnik? Is your shop pristinely clean? If so, no need to read further. If you are concerned about someone you love who is buried under clutter, read on.

A serious hoarding problem is a challenge outside of my professional realm. I didn't realize how sensitive this issue can be. I am a “throw-it-out-er.” If I am not using it, it's gone. I put my wedding dress in a garage sale. I have seen some tragically messy shops. I always suggest that the owners, “Clean the place up!” I now understand that for many folks it is not as easy as, “Let's just throw everything away and start fresh!” I once told a Plumber there was no need for 50 shelf feet of parts manuals now that you can find that information on the internet. He promptly escorted me to the door, and claimed that I failed to appreciate, “the biggest collection of manufacturers' literature east of the Mississippi.” Who knew?

It's up to you to decide if your life has gotten out of control. If so, you may need spiritual or professional help.

Perhaps you have just gotten lax and it's time to raise the standards of cleanliness at your place of business? If

so, I encourage you to clean it up. Know this: Your messy shop will repel “right stuff” people. No world-class companies of any kind celebrate (or even tolerate) a stinking mess of a shop, office, ship, truck, factory floor, restaurant kitchen, storefront, handcart, toolbox or surgical instrument. When it comes to business: Clean is good. Dirty is bad.

Ready to clean the place up? Here's a handy checklist for getting it done!

- Put someone in charge. Could be you. You can always hire a professional organizer to help. Check out the National Association of Professional Organizers <http://www.napo.net/referral> Meet with him or her to plan the Clean Up Day.

- Learn what you MUST save as far as records go. Ask your accountant for a list of items or search <http://www.sba.gov> or <http://www.irs.gov>

- Meet with team members in appropriate groups to get a plan and a lay out for each area of the shop and office.

- What functions need to happen there? What's needed in that space? What's getting in the way?

- You could create a space for a company “museum.” This would be a special area where, for instance, you display your daddy's first business license from 1935. Neatly framed, of course. Before Clean Up Day, round up treasured items and make arrangements to display them properly.

- There might be disagreements (Turn to This place... page 30.)

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Circle 22 on Reader Reply Card



BY RICHARD DiTOMA, L.M.P.
contributing writer

What you need to succeed

Contractors often cheat themselves, their families, employees, creditors and clientele by fooling themselves into believing they are on the road to success. But, in reality they aren't even going in the right direction because moving money is not the same as making money.

I have provided many contractors who sought my help with solutions to their business problems. As their coach, I have developed a simple, comprehensive, confidential and easily understood customized plan for each contractor so they could have the opportunity to reach their goals. Each who understood and properly implemented my theories and methods increased their annual revenues. They can now afford to deliver excellence to their clientele; lower their own stress and frustration; spend more time with their families; guarantee full employment to their staff; pay their creditors in a timely manner; and attain the reward they deserve for the value they deliver.

The following is a true account of "John" (a fictitious name), a contractor, who most recently began to implement the new plan I designed for him.

The first step

Because John wasn't receiving the reward he deserved for the excellence he delivered to his clientele, he gave me a call for assistance. After a brief telephone discussion regarding his situation, I pinpointed the cause of his problems and prescribed a list of remedies. Like many contractors, he didn't know his operational cost and charged an hourly rate which was below his true cost. His business protocols did not afford him the ability to succeed at a level commensurate with the value delivered to his clientele. I explained the ways I could help him to solve his problems. To get John started, I suggested that he purchase my book *Solutions Management Theories and Methods for the Contracting Business*®. It's a road map that would show John the fundamentals and requirements needed for his journey on the road to success. Next we proceeded to set up a series of phone conferences.

Turning ignorance of numbers into the proper use of numbers

The first issue I tackled was to show him how to calculate his tangible and intangible expenses, item by item. This would establish his bottom line. His prices would have to be above his bottom line in order to have a chance at profitability. This step allowed him to discover that the hourly rate he was charging was below his true cost. (That's the root cause of all contractor problems.)

With the knowledge of his true hourly cost, John could now focus on his profit margin. I explained the points to consider in the selection of a proper profit margin which would address the effects of everyday circumstances upon his true costs.

Next, I showed him how to correctly apply his chosen profit margin to his true costs to develop properly profitable selling prices. And, I offered him his own customized (to his labor/overhead factors and profit margin) copies of my *Readily Available Pricing Information Digest*® for the plumbing heating cooling contractor to make the quoting of prices easy for his technicians.

Avoiding fear by building confidence

Since he was already charging more per hour than his competitors, he became apprehensive about the prices he would have to charge. I assured him that if he didn't charge proper profitable selling prices, the alternative would be to lose more money, which would only increase

his stress and frustration.

To alleviate his fears, I provided John with rapid, sound solutions to each of his questions and "what if" problematic scenarios including those pertaining to questions his technicians and clientele might ask. The solution to his concerns about his hourly rate was simple. I suggested that he stop charging by the hour.

Charging by the hour puts all contractors at the same level in the mind of the consumer. But, all contractors are not created equal. To think they are is an erroneous assumption on the part of the consumer. Arguments between T&M contractors and consumers arise when the bill for a three-hour job becomes a shocking surprise to the consumer who assumed it should have only taken 10 minutes.

I suggested that he change to a contract pricing method. This way the consumer would know the price before any task began. This, in turn, would relieve the pressure put upon Johnny's technicians and his clientele since there would be no need to continually check the length of time the tech was taking to perform the service.

Then, I designed new invoices for him inclusive of those terms and conditions that he wanted his company to use in dealing with consumers. I also created a promotional brochure his technicians could give to his clientele. It highlighted his business' history, the services he offered, and service agreement plans (customized to his requirements). The plans would give its members priority service scheduling and discounted prices. One of the plans offered equipment checkups. Each plan still gave John the opportunity to succeed.

Even with my assurances I sensed John was still fearful but he knew four things. He did not have an alternative. He was not happy with the results he was getting with his old T&M pricing method. I would be available for continued support. And, he would not know if the plan would work without trying it. So John decided to give it go.

The dream becomes reality

He just started the implementation of his new procedures as of this writing. John and I have tracked the first 60 hours and 35 minutes of services performed. The work performed in that time period would have brought in \$10,681.80 using his old and flawed pricing methods and procedures which did not cover his true cost. He was losing money on each job. That was the cause of his stress and frustration for which he called me.

But, due to my coaching and his understanding, determination and courage to try, he brought in \$22,878.23 for those services. That's \$12,196.43 more than his old and erroneous T&M prices. And John's business brought in that amount in the current bad economy. All it took was my helping him put his numbers in a range where they should have been in the first place combined with the sound business protocols I suggested to him.

What's ahead?

There are only a maximum of 1708 annual available revenue producing hours per technician after taking in to consideration 40 hour work weeks, vacation, holidays and lost technician preparatory time. That means that those 60 hours and 35 minutes can occur 28.19 times per tech per year. If you do the math, John now has the opportunity to bring in for the same work \$343,817.36 more per technician per year than he did with his time & material pricing, wrong numbers and flawed business plan.

Of course, it's not a perfect world. No contractor sells
(Turn to Charge a fair price... page 30.)

Arguments between T&M contractors and consumers arise when the bill for a three-hour job becomes a shocking surprise to the consumer who assumed it should have only taken ten minutes.

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Circle 23 on Reader Reply Card

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This place is a mess!

(Continued from page 26.)

about what goes where as you may out each space. As the owner or the manager, you make the final call.

- Pick a day and put it on your Calendar. "Clean Up Day!" Alert all team members. Let them know when you will start, when you'll stop and that you will be cleaning and organizing the shop and office.

BONUS! You could add an extra day to paint and recarpet. It is amazing what a coat of paint and new floor covering can do for the shop, and your frame of mind.

- Alert employees that if there is anything that they own personally that they want to take home prior to the Clean Up Day, they should do so.

This is a mandatory, on-the-clock day and employees will be paid for it. You will be closed for business, except for emergency calls. Assign the "emergency responders."

- It's an "old clothes" day. You are all going to get messy as you clean so dress appropriately and comfortably.

- Arrange to rent and pick up a power washer, unless you have one.

- Have buckets, rubber gloves, eye protection and cleaning supplies on hand.

- Assign someone to call out for food and drinks to be delivered. Your treat.

- Put names in a hat and assign clean up spaces (areas of responsibility) for the day.

- You have to clean the area you

draw unless someone else agrees to a trade. Teams of two are good.

- The outside of the building, the landscaping, the parking lot, these can be areas of responsibility, too.

- The basics of clean up are:

- Take everything you can safely move with two people out of the space.

- Put things straight in the dumpster, the recycle bins or in a "Junk" pile. Or, put it in the "Keep" pile. Be very selective about what you keep. Even if it is brand new, if you don't need it, you can throw it out or recycle it.

- Clean everything in the space, from ceiling to floor, with an appropriate cleaner. When it doubt, use vinegar or water. Don't be afraid of elbow grease.

- Use the power washer whenever possible. (I love power washing!)

- Going to paint and redo the floors? Do it now.

- Refer to the plans you made prior to Clean Up Day. Lay out the space and arrange the furniture. Consider what work goes on in the area and how you can best arrange the "real estate."

- Put the "Keep" stuff back in the space, cleaning every item as you do.

- Arrange to have the Junk hauled off. Whoever you use, ask if they can help you recycle what's recyclable, too.

- When it doubt, throw it out. Yep. Do it. Really. You can always

buy another one. (If you resist too hard here, I will ask you to watch an episode of Hoarders.)

- Arrange for flowers to be delivered to every space the day after the Clean Up Day.

- Lead the charge! Bring your energy to the party and have some fun!

At the end of Clean Up Day, take pictures. This is your new standard. This is how your shop should look every day. Nice!

- Assign areas of responsibility for who will make sure the place is clean at the end of the day. You can make a map of the shop, and laminate it. Use a grease pencil to write the responsible person's name on each area of the building. Rotate people so that no one person always gets the kitchen or the bathrooms.

- You can also enlist a profes-

sional cleaning company to do the bathrooms and floors. It's a nice perk. Raise your prices so that you can afford it. Even with a cleaning service, the employees can keep the place neat and tidy between professional cleanings.

- Create written procedures for daily maintenance and clean up. Put the procedures and the pictures in your operations manuals.

Ahhh. Good work! Now, time to plan a Clean Up the Trucks Day! ■

Comments? Questions? Challenges? Reach me at 417.753.1111 or contact@barebonesbiz.com. Join in on our Bare Bones BlogTalkRadio show! <http://blogtalkradio.com/barebonesbiz> And, if you are ready for business to be easy and profitable, check out www.StepByStepBusinessBuilding.com.

Charge a fair price; even your customers will appreciate it

(Continued from page 28.)

all their available hours all the time. But, if he only sold 75% of his available hours, he would still have \$257,863.02 more annually per tech than his old way produced. At 50% of his available time sold, he would have \$171,908.68 more annually per tech. And, at 25% of available time sold, he would have \$85,954.34 more annually per tech. No matter how you slice and dice it that's more money for the same proportionate workload. That would certainly relieve, if not remove, his stress and frustrations.

To add to John's delight, his technicians have told him that they feel relieved because the customers aren't constantly checking their watches. His clientele have not said anything negative about his prices (other than those consumers who would complain at any price including his former pricing structure). As a matter of fact, his technicians have signed up many of them for future discounted service through the service plan we customized. That's a positive sign that his clientele prefer his new procedures.

John now has a new lease on life. In addition to easing his stress and frustration these results also served to alleviate John's fear of losing business. He is excited about his business again. Because of his wise decision to seek my assistance, I had the opportunity to show him how to turn adversity into success and fear into confidence.

Of course, no one is guaranteed success. It takes intelligence and

courage to get over self-denial and realize the way you are doing something doesn't produce proper results. Change requires a human to put aside his/her ego and learn how to do things correctly rather than foolishly. But, with understanding, proper implementation, and a good coach who really understands that which contractors encounter, any contracting business can have the opportunity to succeed. Results may vary, but, the opportunity to succeed will be present.

Keep in mind the fact that I am not only a consultant, I am a contractor. I feel what you feel. That's what makes me good at consulting. I address problems with good sound solutions. If you wish to avail yourself of my coaching skills and turn the nightmares you may be experiencing into your American dream like John, give me a call at 845-639-5050. I wish you well. ■

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Richard P. DiToma is a business consultant and contractor with 36 years of experience in the PHC industry. He conducts seminars, evaluates business operations, publishes customized price guides for contractors and offers continuing support.

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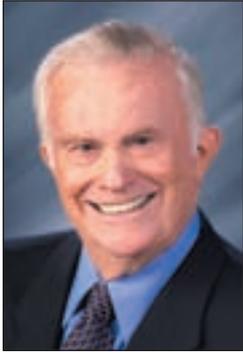


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BY MORRIS R. BESCHLOSS
PVF & economic analyst emeritus

Commercial real estate loan bombshell ready to hit 3000 small banks

Three thousand small banks, which are holding veritable tens of millions of dollars of commercial development loans, may be on the verge of severely curtailing their lending activities, because of their massive involvement in that sector during the last decade.

A Congressional Oversight Panel analyzing the optimum use of TARP (troubled asset relief program) funds are seriously pointing to the overextended commercial sector as yet another time bomb ready to explode, if remedial action is not taken expeditiously.

These local and regional banks' involvement in massive loans to developers of shopping centers, offices, hotels, and apartment buildings, could threaten the creditworthiness of such banks and bankrupt developers not able to pay off or roll over the loans due to come to fruition later this year.

Such a wave of credit crises could generate the double whammy of a great number of local and some regional banks down the tubes, or at the least unable to make additional loans when constrained by these circumstances. If such a calamity reaches its full extent by mid-year, it could even eclipse the spate of residential foreclosures and the advent of troubled large banks, beset by greatly overvalued mortgage derivatives in 2008.

Although a commercial sector tsunami has been expected by mid-summer this year, the TARP oversight panel warns that literally hundreds, if not thousands of small businesses, such as developers, could be cut off from their lending sources, in addition to putting the banks themselves under severe duress.

This could be tantamount to creating another major dip in the tenuous economic recovery, as commercial developments wither on the vine, putting the commercial sector on the edge of a financial precipice, not to mention job losses and growth opportunities that would have to be mothballed.

Since 40% of America's 8,100 banks are involved in this forthcoming collapse, it's expected that major amounts of TARP money will likely be directed to undergirding these banks from financial disaster. Whether such a move can constrain a commercial sector blowup remains to be seen.

Small-business sector continues paring inventories as jobless claims stagnate

Most recent statistics validate the conclusion that the bulk of America's small business sector, which employs 65% of the overall U.S. worker potential, is still reducing its inventory positions despite an upward thrust in sales throughout most sectors in December. This is supported by an inventory to sales ratio of 1.12, well below December 2008's 1.32, and even last November's 1.14. A ratio of 1.12, for instance, means that it would take 1.12 months to clear the shelves of existing inventory.

This is the lowest point reached since mid-year 2008, when the worldwide business boom had reached the highest point in recent history. Much of the continued inventory shrinkage has been driven by the fear of illiquidity, as small businesses continue to face concerns with credit availability and slow demand growth.

Despite the more propitious outlook in stemming the Obama Administration's perceived anti-business initiatives, business in general continues to concentrate on maximum productivity. Generally speaking, based on my continued communications contacts, the industrial manufacturing and distribution sectors are becoming more in-

censed at the growth of the national debt and the runaway deficit, with little to show for it.

The historical evidences of expanded demand, job creation and innovative opportunities are conspicuous by their absence. "The lack of understanding by the Federal Government as to what makes business tick has taken its expenditures into areas of non-productivity," according to many influential business decision makers.

At this stage, it looks as if demand must first assert itself before the productive sectors will extend risk capital for future growth.

Thursday's continued jobless claims and the ongoing extension of continuing claims are further proof that the unemployment overhang continues to act as a deterrent to the creation of new jobs necessary to stimulate further economic recovery. The Federal Reserve Board's discount rate raise today may signal first step in future monetary tightening.

Triple D not in cards for U.S. economy

Despite a spate of demoralizing statistics released at the end of February, which pundits seized upon to warn of a double dip recession and deflation, such a pessimistic conclusion is fallacious.

Some of the gloomier analyses even predict a return to the Great Recession's rock bottom, which hits its low point late in 2008 and the first quarter of 2009. Even though I have often emphasized the undertow of current economic weakness, I expect the latter part of 2010 to shine brighter than the cloudy business skies we're witnessing today. My multi-fold reasons for greater buoyancy are as follows:

1) The Washington, D.C. impact of crushing debt engendered by the Obama initiatives will have been dissipated. The tidal wave of anti-incumbency popular reaction coming in November will neutralize any shred of dominance that the White House is asserting on the survival of independent businesses.

2) The amazingly strong recovery by the world's emerging nations—China, India, Taiwan, South Korea, Brazil, Russia, etc.—are already eclipsing the U.S. comeback. This will have a salutary effect on America's exports, which are rapidly becoming a lead sector in the U.S. recovery.

3) The liquidity generated both internally and through investment input into U.S. businesses is on the uptick, warding off a repetition of the mid-2008 financial meltdown crisis.

4) Even a pending commercial development disaster will be moderated by combined actions taken by the Federal Reserve Board and the U.S. Treasury. This will protect a majority of the banks that could have gone under without remedial action being taken.

5) Deflation, which has stratified the Japanese recession for the past decade will not be repeated in the U.S. Despite an inflationary stasis within the American economy, general business will be on the upswing, even if ever so slowly at this time. By the second half of 2010, inventory liquidation will have ended as overall demand will force tens of thousands of companies to expand their activities, even cutting into unemployment ever so slightly.

6) If there is an expected super reversal in the U.S. Congress' political composition in November, expect a business boom to be rekindled, setting off the first real forward motion the American business sector has witnessed since 2007. ■

By the second half of 2010, inventory liquidation will have ended as overall demand will force tens of thousands of companies to expand their activities, even cutting into unemployment ever so slightly.

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- NexPress™ Available
- 1/2" – 2 1/2"



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Circle 26 on Reader Reply Card

Decreased margins have contractors hoping for economic turnaround

BY JOHN MESENBRINK,
chief editor

When the editors of *Phc News* prep for the Top 100 Contractors Listing, part of the process is asking contractors to submit their total income for 2009. Let's face it: Who really wants to divulge *that* information? *Phc News* would like to thank all of those

Some relatively fortunate contractors were hunkered down in some impressive jobs. Take, for instance, Dallas-based TDIndustries' work on the new Cowboys Stadium. What had been nearly five years in the making — with the assistance and coordination from Texas-based All-Tex Pipe & Supply — culminated in the construction of the 3-million-square-foot stadium. TDIndustries'

bracing for tough times and wondering from where the next big job was/is going to come. Now the backlog seems to be thinning, construction funding appears to be nonexistent and the economy has produced tighter margins, fewer jobs to bid, project delays and cancellations and, ultimately, slowed growth. "It's a buyers market; margins are down. We have had to make big changes to operate on a leaner level. We have diversified our services and customer base to keep in stride with the changing needs of our customers," said Olwyn Palmer, **MacDonald-Miller Facility Solutions**, Seattle — No. 44 on Top 100 Listing.

Michael P. Johnson of **Johnson and Jordan**, Scarborough, Maine — No. 86 listed — attributes 2009's roller coaster stock market as the culprit. "The drop in stocks have lowered the value of most hospital and university portfolios, and, in turn, put most projects on hold."

Creating a cutthroat atmosphere in the industry, "Fewer opportunities have led to greater competition," said Erica Rogers, **BCH Mechanical**, Largo, Fla. — No. 65 on Top 100.

The good with the bad

And yet a small percentage of others viewed 2009 as a good year. "2009 was a good year for us. In 2010, we see fewer large commercial projects. If bank lending loosens up, we believe the construction market will return strong," said Daryld Karloff, **Baker Group**, Des Moines, Iowa — No. 53 on Top 100.

For those poised in the service and repair market, things could be

worse. For third-ranked **ARS/Rescue Rooter**, Memphis, Tenn., with residential emergency demand business its core service offering, homeowners don't have the luxury of delaying necessary plumbing/HVAC repairs or replacements.

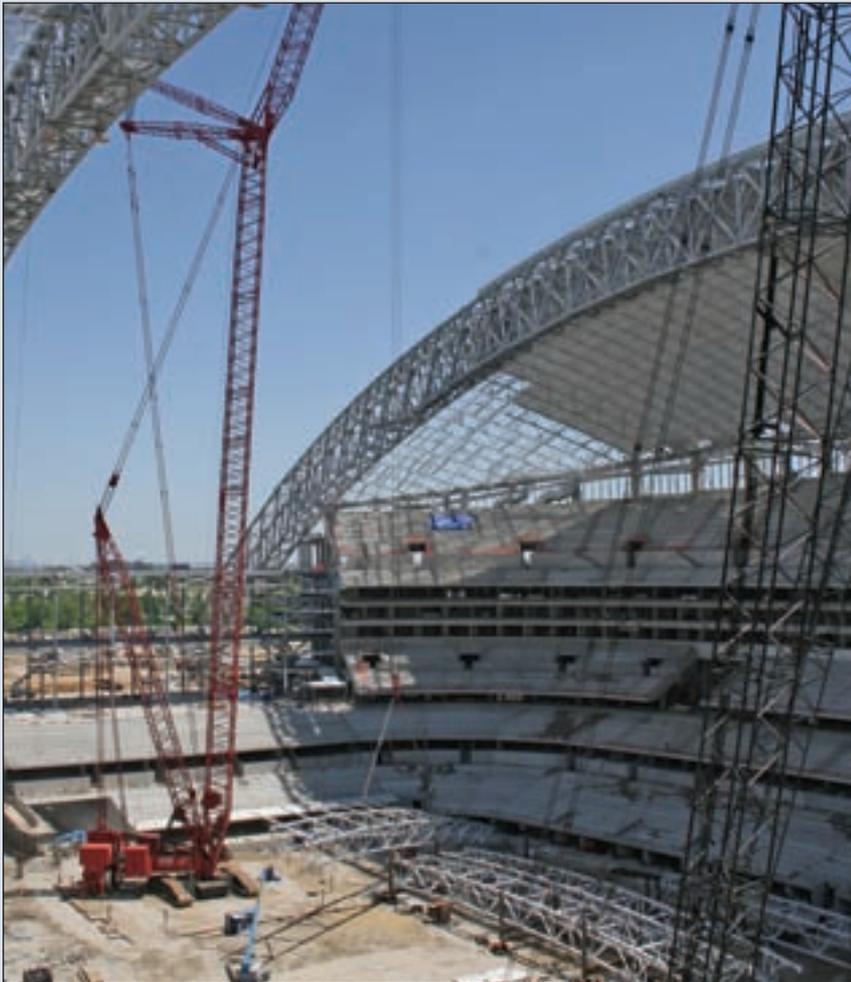
And, it was noted that some contractors will have to travel farther to farm out work. When asked how the economy has affected his business, Cliff Nash of **Nash Inc.**, Coleman, Fla. — No. 85 on the List — said, "It is a very difficult environment and we are finding that we have to travel more to secure work."

So how do contracting businesses hold a level of sanity throughout all of this? According to the majority of respondents, the employees make all the difference. Joseph R. Harold III, CEO of **Sagamore Plumbing & Heating, Inc.** — No. 80 on the List — said, "The Sagamore team of employees are our valued asset and they are committed to the company's priorities."

Let's not forget about company loyalty and word-of-mouth business. Thirteenth-ranked **Mr. Rooter** franchise, Waco, Tex., believes that while customers have been more conservative in discretionary spending, more property maintenance companies have reached out to them because of their reputation.

"Building and growing a solid team of leaders is the key to our business success," said Greg Hosch, **Harris Companies**, Saint Paul, Minn. — No. 20 on Top 100 Contractors Listing.

With depressed margins, less volume and total revenue down, not to mention lenders locking funds, the economy ultimately comes down to unemployment. When we see the jobs aspect of the economy start to turn for the better, we all might be breathing a collective sigh of relief. ■



In 2009, Dallas-based TDIndustries, No. 10 on the Top 100 Contractors Listing, completed work on the 3-million-square-foot Cowboys Stadium.

who voluntarily participated in this year's listing. We know it has been a tough year; but perhaps we can glean something from those who did well or stood the test of time.

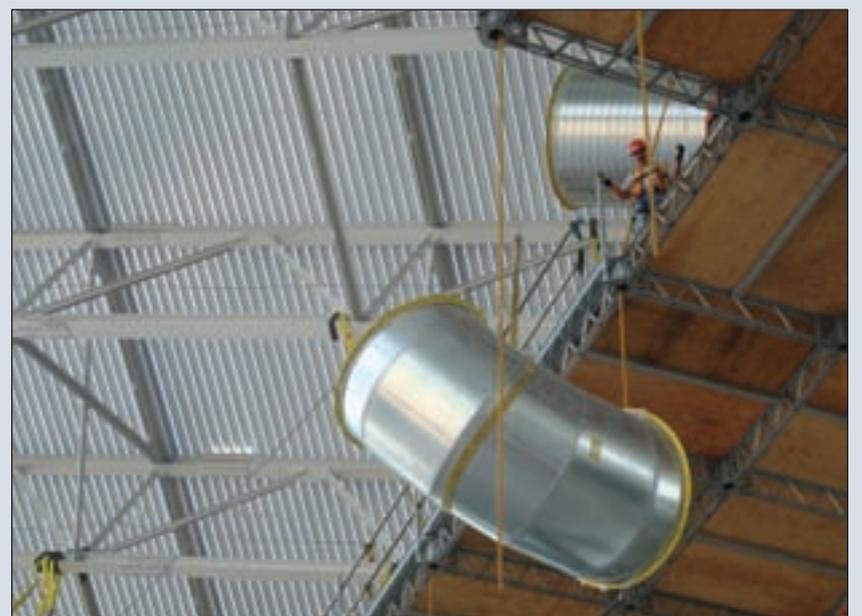
The pulse of the industry

Residential work is down, commercial is unsteady, but military and federal and state government work, green jobs, service and repair, and a strong backlog in 2009 kept some companies above tide through some rocky waters. "As a result of having a nice backlog of work, we have not been hurt by the economy yet," said Kenneth A. Durr, **Durr Mechanical Construction, Inc.**, New York (No. 58 on Top 100 listing — see page 36).

work on the project included 60 miles of piping, 2.5 million pounds of sheet metal, nearly two miles of ductwork, more than 3,450 plumbing fixtures and 2,600 food service equipment connections. Harold McDowell, CEO of **TDIndustries**, admits, however, "We are seeing more public work and it has been harder to sell work, but hiring and retaining the best people, our company's culture and planning work well are the keys to success at TDIndustries."

Roger Jones, **Campito Plumbing & Heating Inc.**, Latham, N.Y. — No. 93 on Top 100 Listing — agrees, in part, with that assessment, "An important part of our business, the private sector has shut down."

Yet other contractors were/are



The Cowboys Stadium project produced 2.5 million pounds of sheet metal and two miles of ductwork.

(Top100 continues on page 38.)

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Circle 27 on Reader Reply Card

	COMPANY	City, State
\$1b+	1. EMCOR Group, Inc.	Norwalk, CT
	2. Comfort Systems, USA	Houston, TX
	3. ARS/Rescue Rooter	Memphis, TN
	4. Southland Industries	Dulles, VA
	5. McKinstry	Seattle, WA
	6. ACCO Engineered Systems Inc.*	Glendale, CA
	7. Harder Mechanical Contractors	Portland, OR
	8. Kinetics*	Union City, CA
	9. Roto Rooter*	Cincinnati, Ohio
	10. TDIndustries	Dallas, TX
\$300 million+	11. Murphy Company	St. Louis, MO
	12. Limbach Facility Services	Pittsburgh, PA
	13. Mr. Rooter	Waco, TX
	14. ColonialWebb Contactors	Richmond, VA
	15. Midwest Mech. Group, Inc.	Kansas City, MO
	16. John E. Green Co.	Highland Park, MI
	17. U.S. Engineering Co.	Kansas City, MO
	18. J.F. Ahern Co.	Fond Du Lac, WI
	19. Hill Mechanical Group	Franklin Park, IL
	20. Harris Companies	Saint Paul, MN
\$200M to \$299.9M	21. Titan Contracting/Horn Industrial Services	Owensboro, KY
	22. Metropolitan Mechanical Contractors*	Eden Prairie, MN
	23. Fire & Life Safety America	Richmond, VA
	24. RK Mechanical Inc.	Denver, CO
	25. BMW Constructors Inc.	Indianapolis, IN
	26. Ivey Mechanical*	Kosciusko, MS
	27. Sauer Holdings, Inc.*	Pittsburgh, PA
	28. J.H. Kelly LLC	Longview, WA
	29. Murray Company	Rancho Dominguez, CA
	30. Corval Group	St. Paul, MN
\$100 million to \$199.9 million	31. Snelson Companies Inc.*	Sedro Wooley, WA
	32. Coastal Mechanical SVC	Melbourne, FL
	33. AZCO Inc.*	Appleton, WI
	34. Brandt Engineering*	Dallas, TX
	35. Fresh Meadow Mechanical Corp.*	Fresh Meadows, NY
	36. John W. Danforth Co.	Tonawanda, NY
	37. W.E. Bowers*	Beltsville, MD
	38. McKenney's Inc.*	Atlanta, GA
	39. University Mechanical Contractors Inc.	Mukilteo, WA
	40. Joule' Industrial Contractors	Gibbstown, NJ
\$30 million to \$59.9 million	41. EGAN Company	Brooklyn Park, MN
	42. VSC Corp.	Ashland, VA
	43. A.O. Reed & Co.*	San Diego, CA
	44. MacDonald-Miller Facility Solutions	Seattle, WA
	45. Benjamin Franklin Franchise	Sarasota, FL
	46. J.C. Cannistraro, LLC	Watertown, MA
	47. Critchfield Mechanical Inc.*	San Jose, CA
	48. Mechanical Inc.	Freeport, IL
	49. Corrigan Co.	St. Louis, MO
	50. Letsos Company	Houston, TX

	COMPANY	City, State
\$60 million to \$99.9 million	51. Dorvin D. Leis Co. Inc.*	Kahului, HI
	52. Nashville Machine Co.Inc.	Nashville, TN
	53. Baker Group	Des Moines, IA
	54. Jarrell Contracting	Earth City, MO
	55. Herman Goldner Co. Inc.	Philadelphia, PA
	56. Lee Company	Franklin, TN
	57. Monterey Mechanical Co.	Oakland, CA
	58. Durr Mechanical Construction, Inc.	New York, NY
	59. Environmental Air Systems	Greensboro, NC
	60. Pierce Associates Inc.*	Alexandria, VA
\$30 million to \$59.9 million	61. Great Lakes Plumbing & Htg	Chicago, IL
	62. W.G. Tomko Inc.	Finleyville, PA
	63. Hill York Corp.*	Fort Lauderdale, FL
	64. Scheck Industries*	Countryside, IL
	65. BCH Mechanical Inc.	Largo, FL
	66. RCR Plumbing and Mechanical, Inc.	Riverside, CA
	67. McDaniel Fire Systems Inc.*	Porter, IN
	68. Rock Hill Mechanical Corp.	Saint Louis, MO
	69. CCI Mechanical Inc.	Salt Lake City, UT
	70. Delcard Assoc. Inc/Mechanical Contractors	New Castle, DE
\$13 million to \$29.9 million	71. Martin Petersen Co. Inc.*	Kenosha, WI
	72. Wayne Automatic Fire Sprinklers Inc.	Ocoee, FL
	73. Advance Mechanical Systems*	Arlington Heights, IL
	74. Western Allied Corp.	Santa Fe Springs, CA
	75. Postler & Jaeckle Corp.*	Rochester, NY
	76. Beutler Heating & Air Conditioning	McClellan, CA
	77. Freitag-Weinhardt Inc.*	Terre Haute, IN
	78. Gem Plumbing & Heating	Lincoln, RI
	79. DECCO, Inc.	Brookline, NH
	80. Sagamore Plumbing & Htg. Inc.	Weymouth, MA
\$13 million to \$29.9 million	81. Upchurch Plumbing Inc.	Greenwood, MS
	82. Goyette Mechanical Co.	Flint, MI
	83. The DiGesare Group	Schenectady, NY
	84. R M Mechanical Inc*	Boise, ID
	85. Nash Inc.	Coleman, FL
	86. Johnson & Jordan	Scarborough, ME
	87. Cullum Constructors Inc.	North Charleston, SC
	88. R. T. Moore Company Inc.	Indianapolis, IN
	89. H & H Industries Inc.	Madison, WI
	90. CJ Erikson Plumbing Co.	Alsip, IL
\$13 million to \$29.9 million	91. Wayne Crouse Inc.	Pittsburgh, PA
	92. Comfort Engineers Inc.	Durham, NC
	93. Campito Plumbing & Heating Inc.	Latham, NY
	94. W.O. Blackstone & Co.	Columbia, SC
	95. My Plumber Heating & Air	Manassas, VA
	96. Caguas Mechanical Contractors	Caguas, PR
	97. Dinamek Industries	Austin, TX
	98. Ewing-Doherty Mechanical Inc.	Bensenville, IL
	99. Associated Mechanical Contractors	Shakopee, MN
	100. Peed Plumbing Inc.	Manassas, VA

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WATER CONNECTORS

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Top contractors by region

West	
COMPANY	CITY/STATE
1. McKinstry	Seattle, WA (5)
2. ACCO Engineered Systems Inc.	Glendale, CA (6)
3. Harder Mechanical Contractors	Portland, OR (7)
4. Kinetics	Union City, CA (8)
5. RK Mechanical Inc.	Denver, CO (24)
6. J.H. Kelly LLC	Longview, WA (28)
7. Murray Company	Rancho Dominguez, CA (29)
8. Snelson Companies Inc.	Sedro Wooley, WA (31)
9. University Mech. Contractors	Mukilteo, WA (39)
10. A.O. Reed & Co.	San Diego, CA (43)

South	
COMPANY	CITY/STATE
1. Comfort Systems USA	Houston, TX (2)
2. ARS/Rescue Rooter	Memphis, TN (3)
3. TDIndustries	Dallas, TX (10)
4. Mr. Rooter	Waco, TX (13)
5. Titan Cont/Horn Industrial	Owensboro, KY (21)
6. Ivey Mechanical	Kosciusko, MS (26)
7. Coastal Mechanical SVC	Melbourne, FL (32)
8. Brandt Engineering	Dallas, TX (34)
9. McKenney's Inc.	Atlanta, GA (38)
10. Benjamin Franklin Franchise	Sarasota, FL (45)

Biggest Gainers	
Company	%/change
1. Durr Mechanical	.143%
2. University Mech.	.50%
3. Murray Company	.41%
4. Harder Mechanical	.38%
5. The DiGesare Group	.36%
6. Corrigan Co.	.31%
7. R.T. Moore Co. Inc.	.15%
8. Letsos Company	.14%
9. Murphy Company	.14%
10. U.S. Engineering	.13%
11. Fire & Life Safety Am.	.12%
12. Baker Group	.11%
13. ARS/Rescue Rooter	.10%
14. ColonialWebb	.9%
15. John W. Danforth	.9%
16. RK Mechanical	.9%
17. Western Allied	.6%
18. Nashville Machine	.5%
19. Campito Plg. & Htg.	.4%
20. Nash Inc.	.4%

Midwest	
COMPANY	CITY/STATE
1. Roto Rooter	Cincinnati, Ohio (9)
2. Murphy Company	St. Louis, MO (11)
3. Midwest Mech. Group, Inc.	Kansas City, MO (15)
4. John E. Green Co.	Highland Park, MI (16)
5. U.S. Engineering Co.	Kansas City, MO (17)
6. J.F. Ahern Co.	Fond Du Lac, WI (18)
7. Hill Mechanical Group	Franklin Park, IL (19)
8. Harris Companies	Saint Paul, MN (20)
9. Metropolitan Mech. Cont.	Eden Prairie, MN (22)
10. BMW Constructors Inc.	Indianapolis, IN (25)

East	
COMPANY	CITY/STATE
1. EMCOR Group Inc.	Norwalk, CT (1)
2. Southland Industries	Dulles, VA (4)
3. Limbach Facility Services	Pittsburgh, PA (12)
4. ColonialWebb Contractors	Richmond, VA (14)
5. Fire & Life Safety America	Richmond, VA (23)
6. Sauer Holdings Inc.	Pittsburgh, PA (27)
7. Fresh Meadow Mech.	Fresh Meadows, NY (35)
8. John W. Danforth Co.	Tonawanda, NY (36)
9. W.E. Boxers	Beltsville, MD (37)
10. Joulé Industrial Contractors	Gibbstown, NJ (40)

(Numbers in parentheses denote overall ranking in Top 100 Contractor Listing)

Revenue spent by category

Based on voluntary responses

Rank	Plumbing	Revenue
1. EMCOR Group, Inc.		\$2,027,000,000
2. Mr. Rooter		\$210,300,000
3. Comfort Systems, USA		\$169,588,000
4. Southland Industries		\$146,000,000
5. Benjamin Franklin Franchise		\$112,000,000
6. Murray Company		\$80,000,000
7. Midwest Mechanical Group, Inc.		\$75,100,000
8. Associated Mechanical Contractors		\$65,000,000
9. RCR Plumbing and Mechanical, Inc.		\$62,000,000
10. ColonialWebb Contractors		\$61,500,000

Rank	Hydronics	Revenue
1. Mechanical Inc.		\$76,398,000
2. Harder Mechanical Contractors		\$55,000,000
3. RK Mechanical Inc.		\$51,500,712
4. Midwest Mechanical Group, Inc.		\$50,300,000
5. Hill Mechanical Group		\$38,000,000
6. John W. Danforth		\$35,000,000
7. Cullum Constructors Inc.		\$22,600,000
8. Durr Mechanical Construction, Inc.		\$22,600,000
9. Campito Plumbing & Heating Inc.		\$20,650,000
10. Delcard Associates Inc./Mech. Contractors		\$20,000,000

Rank	Piping	Revenue
1. Harder Mechanical Contractors		\$297,000,000
2. Murphy Company		\$154,136,740
3. Southland Industries		\$151,000,000
4. U.S. Engineering Co.		\$111,074,607
5. BMW Constructors Inc.		\$93,000,000
6. Corrigan Co.		\$80,000,000
7. John E. Green Co.		\$80,000,000
8. Hill Mechanical Group		\$76,000,000
9. ColonialWebb Contractors		\$74,700,000
10. Midwest Mechanical Group, Inc.		\$57,800,000

Rank	Waste/Wastewater Treatment	Revenue
1. Monterey Mechanical Co.		\$62,500,000
2. Durr Mechanical Construction, Inc.		\$44,580,000
3. J.F. Ahern Co.		\$31,899,000
4. Corval Group		\$28,250,000
5. John W. Danforth		\$22,000,000
6. John E. Green Co.		\$20,000,000
7. University Mechanical Contractors		\$20,000,000
8. Murray Company		\$14,000,000
9. Titan Contracting/Horn Industrial		\$13,000,000
10. Corrigan Co.		\$10,000,000



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NEW Bradford White **ICON System™** Accessory Packages - Up to 50% more hot water, up to 36% higher energy savings, leak protection and full programmability.

1 ACCESSORY MODULE

The module powers and monitors the Accessory Packages and features an audible alarm and a multi-color LED display to signal the status of the control valve, Leak Detection Sensor and Inlet Shut-Off Valve.



2 ELECTRONIC LEAK DETECTION SENSOR

The sensor will trigger the Accessory Module alarm in the event a leak is detected and confirmed. It will also send a signal to the Accessory Module to interrupt main burner operation. Once the leak is corrected the system automatically silences the alarm and resumes normal operation.*



3 INLET SHUT-OFF VALVE

The Inlet Shut-Off Valve closes the cold water inlet when a leak is detected and confirmed. The Accessory Module will automatically re-open the Shut-Off Valve once the leak is corrected.*



4 FULLY PROGRAMMABLE LCD DIGITAL CONTROL

The control offers full 7-day, 4 period/day control of the water heater. Now customers can program their water heater based on their usage patterns and save up to 36% on energy costs. This easily installed control can be attached directly to the water heater or mounted remotely.



5 INTEGRATED MIXING DEVICE**

The Integrated Mixing Device allows water in the tank to be stored at higher temperatures, but delivers a safe and comfortable outlet temperature by blending in cold water. This increases usable hot water by as much as 50% or more. Bradford White's unique design reduces installation time to as little as 15 minutes and incorporates contractor-friendly features such as a cold water outlet, an alternate hot water outlet and a recirculation port inlet.



RUBBER DAM

If there is no drain pan, Bradford White has provided a Rubber Dam to encircle the water heater. The dam will hold enough water to activate the sensor in the event of a leak.



*In the event that a water heater must be replaced, all components are re-usable and can be installed on a new water heater.

**The Integrated Mixing Device is ASSE and UPC (IAPMO) certified and complies with applicable CSA/NSF standards.

NOTE: Bradford White **ICON System™** Accessory Packages are meant to complement the water heating system and do not replace existing National/State/Local code(s) and/or manufacturer's installation instructions.

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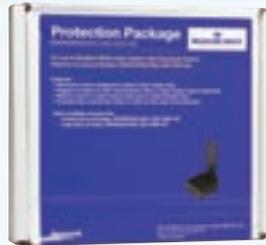


All accessory packages are compatible with any Bradford White ICON System™ equipped water heater. The packages are also compatible with any Bradford White models using the Honeywell® WV4460 control valve.



ACCESSORY MODULE PACKAGE

The package includes the Accessory Module, wiring harnesses, and a transformer that plugs into a wall outlet. One Accessory Module is required to operate any or all of the Accessory Packages.



PROTECTION PACKAGE

The primary component in the Protection Package is the Electronic Leak Detection Sensor. The Protection Package also includes the Rubber Dam to encircle the water heater and a wiring harness that connects the sensor to the module.



INLET SHUT-OFF VALVE PACKAGE

The Inlet Shut-Off Valve Package is an added layer of leak protection for your customers. The package includes an automatic Inlet Shut-Off Valve, an integrated wiring harness for connection to the Accessory Module, and two 3/4" x 1" brass connection fittings.



PERFORMANCE PACKAGE

The Performance Package includes the Fully Programmable LCD Digital Control with junction box, wiring harnesses, and batteries for backup capabilities. Package also includes the Integrated Mixing Device with push-to-turn hand wheel, stainless steel flexible connectors, and Thermo-Strip.

Bradford White's new **Homeowner Accessory Package Brochure** is an easy-to-understand guide that explains each component and its benefits to your customers. See your wholesaler or contact your Bradford White representative to get a supply of these helpful and informative brochures. Remember to watch for more tools from Bradford White that will help you build your business.



Modeling hydronic efficiency

BY PETER BIONDO

System efficiency in a hot water heating system or chilled water system is best carried out through the balanced distribution of energy. Water, in this case, is the carrier of energy. Therefore, to balance the energy within a building is to control the flow rate of water through the production side, starting at the power plant, and to manage the proportional flows through the distribution of sub mains, branches, and ultimately through the terminal units. The benefits of calibrating flow are comfortable and even temperatures throughout the building, plus energy efficiency at the production plant and throughout all parts of the system is maintained. Distributing energy within a hot or chilled water system is often referred to as “hydronic balancing.”

Without hydronic balance, underflow or overflow within piping distribution can undermine the performance and efficiency of a system by up to 40%. Without balanced flow, temperatures are difficult to control. Boilers and chillers may short-cycle or run more often. As a result, some rooms may have considerable temperature swings, while other rooms farthest from the boiler or chiller may not get the energy required to meet thermostat demand. Balancing can correct the problem that some troubleshooters might regard as an issue of boiler sizing.

Uneven temperatures are compounded, especially during low load conditions in spring or fall when controls work to strike a balance between heating and cooling. Even the slightest swings of temperature can lower operating efficiencies significantly. If the average temperature in



Calibrated balancing valves provide the ability to preset the valve for the desired flow rate, and then to adjust and measure the precise flow rate within 3% measuring accuracy.



Hydronic balancing isn't just a good idea, it is good practice. Balancing valves are an important component throughout the hydronic system to evenly distribute the energy for heating or cooling a building.

a building exceeds the nominal value by 2°F, energy consumption is increased by 6 to 10%. In cooling systems, temperatures that are 2°F too low will result in an increase in energy consumption of about 15%.

Hydronic balancing is an energy-saving feature carried out through the use of balancing valves. ASHRAE recommends placement of a balancing device at the following locations: pump discharge, chillers, cooling towers and boilers, risers and branch circuits, and the emitters or fan coils. Balanced distribution was once painstakingly engineered and constructed by tapering down pipe diameters and also through reverse return piping. The designer still has to work with correct pipe sizing, but with the use of balancing valves, pre-setting and measuring make it possible to ensure energy balance throughout the entire system.

Balancing flow begins at the power plant. The boiler or chiller will not operate at its rated efficiency and output if the flow rate is not calibrated to design. Balancing at the boiler or chiller eliminates the problem of overflow, which can cause short cycling and loss of performance. Regulating flow is particularly important for multiple chillers or boilers controlled for staged operation. Balancing valves would correct the problem of one unit robbing flow from another during a combined operation. Without balancing valves on each unit, overflow through one appliance may cause underflow through another. While overflow causes short cycling and lowers the

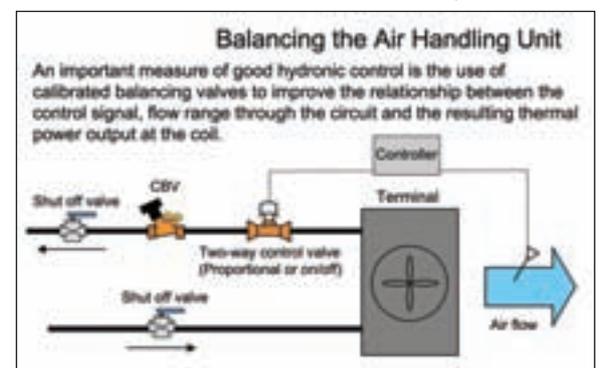
unit's rated efficiency, it also has a tendency to reduce the expected service life of the equipment. Underflow, on the other hand, can damage a boiler or chiller. A boiler's heat exchanger may crack due to temperature stress. Underflow for a chiller increases the chances of tubes freezing and causing damage to the unit. Balancing at the power plant eliminates flow issues and insures delivery of the rated output into the water from each unit.

From the pump discharge, getting the right balance and flow to all the branches of piping and into each terminal unit is a matter of pushing the flow out to the farthest reaches of the building with balancing devices. The process of hydronic balancing is conducted in an organized procedure done by an experienced commissioning agent. Whether automatic valves, handwheel calibrated balancing valves, or circuit setters are installed, the agent's responsibility is to insure that the hydronic system is operating at design specifications. Understanding how a system is brought into balance is best explained through the work of a commissioning agent.

Pushing the flow out to the farthest branches and terminal units is a matter of creating resistance in the sub mains, branches, and terminals that are closest to the boiler or chiller. The balancing valve, by

means of a handwheel-turned dropped stem or an automatic venturi, adjusts the resistance to flow and enables the commissioner to have a reference place to measure the flow rate. The commissioning agent begins with the balancing valves at the power plant and then works with the balancing valves at the sub mains, starting from the closest valve from the pump and ending at the farthest valve. This process is carried out for balancing valves on the risers, the branches and finally at the terminal units (such as fan coils). The commissioner always begins at the closest balancing valve to the pump discharge and works his way out to the farthest balancing valve for each group and sub group.

Calibrated balancing valves (CBVs) have many practical features that are serviceable to the commissioning agent and the service technician. CBVs give the commissioning agent the ability to preset the valve for the desired flow rate, and then to adjust and measure at the CBV the precise flow rate within 3% measuring accuracy. The multi-turn handle allows for a wide range of flow adjustment. CBVs are designed to have low pressure drops across the valve (1psi or 2.3 ft



Combination valves save space in air handler units and require less labor cost to install.

of head minimum drop for test and balance) and offer high Cv values.

This affords lower energy consumption at the pump over automatic balancing valves. A service feature unique to CBVs is the built-in memory position at the top calibrated setting, and the valve can be used as a positive shut-off valve. Also, adapters can be put in place of the measuring ports for draining and filling. These features allow for the CBVs to be utilized for servicing the hydronic system. With the memory stop in place, opening back the valve handwheel to memory resets the balancing valve as the commissioning agent left it. Handwheels can also be locked.

Balancing valves are particularly important at fan coils. Energy output (Turn to A matter of... page 44.)

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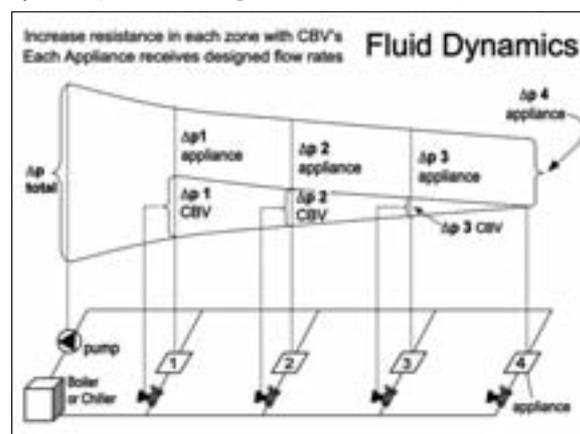
A matter of balance

(Continued from page 42.)

at the fan coil is dependant on flow, water temperature, and air velocity. All three must be in balance for the coil to operate at its rated output. This is particularly important in a variable flow system, when a two-way proportional control valve is installed at a fan coil. The relationship between the control signal and the resulting thermal power from the coil, referred to as the circuit characteristic, determines the controllability of the system. In variable flow systems, differential pressure across

havior. These combination valves are space savers in air handler units and require less labor cost to install than building individual components together. The flow range is easily viewed and can be set with the help of a lockable handwheel. These valves can include test points for measuring the regulated flow.

Heating and air conditioning technology has come a long way. Energy efficient boilers and chillers, intelligent controllers and building management systems have replaced yesterday's crude and often oversized



Balanced distribution was once an art, done by tapering down pipe diameters and through reverse return piping, but now balancing valves, presetting and measuring can ensure energy balance throughout the entire system.

the control valve must not vary too much in order to prevent the circuit characteristic from distorting. Without pressure stabilization valves, small changes in the control signal, even tiny alterations, may cause large swings in thermal output.

On the other hand, any actions from the control signal could result in marginal changes of thermal output. Balancing valves stabilize differential pressures at the control valve and improve the circuit characteristic. The result is a better control relationship from changes in the proportional control valve to the thermal output at the coil. No matter how advanced the controls, an effective measure to improve the circuit characteristic across a fan coil includes a means to set the design flow rate for the fan coil, at the control valve fully open so the thermal output will respond more linearly to proportional flow.

Balancing valves for fan-coil units and surface heating systems are also manufactured in valve combinations with controls. These valves offer the benefit of a control valve with a linear flow characteristic, which is advantageous when using proportional actuators that have linear stroke be-

systems. But one problem remains — complaints about comfort persist, while at the same time HVAC systems are using 40% more energy than intended.

Even when the most recent technology has been implemented, property managers can't determine why a building cannot achieve temperature balance. Hydronic balancing isn't just a good idea, it is good practice. Bal-

ancing valves are an important component throughout the hydronic system to evenly distribute the energy for heating or cooling a building. Quite frequently, insufficient attention is paid to balancing a hydronic system — inexpensive valves are chosen, poor choices are made, and efficiencies that could be gained are lost. You wouldn't drive circles around the block to get where you want to go — you want to find the most efficient route to get to where you want to be. Hydronic balancing delivers the energy throughout the piping network or roadways where it needs to go efficiently and right on time. ■

Peter Biondo is the Technical Sales Coordinator for Oventrop Corporation. He has been involved in solar hot water and hydronic heating for more than 25 years. His primary work is assisting mechanical engineers and contractors with hydronic heating systems, as well as solar domestic hot water and heating for residential and commercial applications. He is a workshop instructor for Solar Energy International, and a Webinar instructor for the Radiant Panel Association. His solar and hydronic workshops are featured at trade show conferences throughout the country.

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Thumbs up for hands-free

BY KRISTIN MEYERS

When you hear the words “hands-free plumbing products,” unfortunately, many envision the faucets seen years ago in airports — where users

were required to frantically wave in every direction just to get the water flowing. Fortunately, hands-free products have come a long way since then, as manufacturers have expended numerous resources and utilized state-of-the-art technologies to



Hands-free faucets and flush valves help prevent the spread of disease as well as promote significant water conservation in public washrooms.

enhance their efficiencies. Today, hands-free products are used for two primary purposes: 1) water savings and 2) hygienic benefits.

Water savings

As the worldwide population continues to grow and the scarcity of fresh, potable water increases, the demand for sustainable products is becoming ever more necessary. While this is a worldwide epidemic, in the United States alone, water managers in 36 states expect to see water shortages in the next 10 years (according to the U.S. Government Accountability Office). Fortunately, manufacturers are working ahead of the situation, and have developed a wide variety of water-saving and hands-free products which greatly reduce water waste by automatically ensuring proper shut-off.

Resource conservation issues such as energy efficiency, water conservation, and waste minimization are widely embraced by facility managers in the commercial buildings industry because of both environmental impact and cost reductions to the overall operating budget.

Installing these products saves hundreds of thousands of gallons of water without losing functionality. Hands-free products are practical for public facility restrooms due to the high amount of usage which equals high energy costs, significant health concerns and continuous cleaning and maintenance issues.

Hygienic Benefits

Besides water savings, hygienic

benefits are a significant advantage of hands-free faucets. Manual fixtures can become a safety and health hazard when it comes to the spread of germs in public restrooms, due to the fact that you are touching something that countless other people touch, spreading pathogens through bodily fluids, which leads to disease and illness.

With the widespread distress and germ sensitivity regarding H1N1 and the seasonal flu, hands-free technologies have become very popular and practical. These products allow for the promotion of hygiene both for the user and the cleaning crew — which is especially important in schools and hospitals, where disease is easily spread.

Electronic faucets and flush valves also help to keep the public restroom itself cleaner. Whether it is in a school or a hospital, the facility's overall cleanliness is often judged by the cleanliness of the restroom. If water is displaced all over the sink, it not only looks sloppy; but it's also the ideal breeding ground for bacteria. Sensor-operated faucets reduce splashing caused by wet hands, as well as eliminate water waste — which keeps operating budgets in check as water and sewer bills escalate.

Likewise, if toilets aren't flushed properly, both odor and bacteria can grow quickly. Sensor-operated flush valves solve this problem by removing waste and keeping the toilets operable by reducing clogs. ■

Kristin Meyers is associate product manager, Moen Commercial.

Practical Solutions

Moen Commercial offers a wide variety of water-saving products with hands-free operation, including a full line of M•Power electronic faucets and flush valves which ensure efficient water usage, low maintenance costs, cleaner restrooms and the ultimate in hygiene and sanitary protection. The most recent additions include:

- **Dual flush (closet):** Relies on timing and works automatically to achieve a smarter use of water by operating with a reduced flush for liquid waste and a full flush for solid waste. Ensuring that the right amount of water is used to avoid water waste for facilities while keeping restrooms clean and sanitary
- **Pint flush (urinal):** Boasts the lowest available flush — delivering 88 percent water savings over the traditional 1.0 gallon per flush (GPF) models, without the maintenance, expense and odor involved in waterless urinals. Not only does the pint flush outperform the

waterless models, it also has the lowest operating and maintenance costs over both the waterless and other traditional flush valve styles currently on the market.

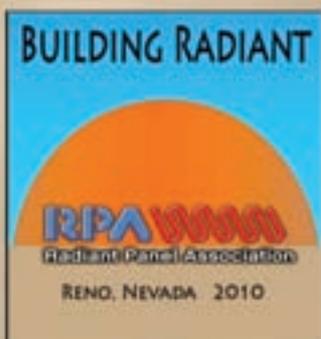
Moen Commercial's newly redesigned M•Press metering faucet uses a .5 gallon per minute (GPM), vandal-resistant aerator, which allows for a 30 percent reduction in the cost of water usage and maintenance. This exclusive metering cartridge outperforms others with reliable flow, consistent timing and rugged construction for the most demanding environments. The pressure-independent spool provides constant timing and the highly accurate adjustment screw allows for 10 to 60 second cycles depending on user needs.

All of Moen Commercial's products include smart, vandal-resistant features which allow them to stand up to constant use and abuse to provide years of maintenance-free service.

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Consumer trends coupled with water cooler innovations can affect your bottom line

BY JACK KRECEK

Water coolers have evolved and improved dramatically over the years -- from the humble, yet inventive beginnings of simply relying on a compartment of ice for cooling in the late 1800s, to the self-contained electric water cooler in 1938 and to the present day pressurized, filtered, hands-free models we now see in schools, healthcare, hospital-ity and recreational facilities. From its inception to its growing list of innovations today, the water cooler continues to significantly impact how the public conveniently taps into obtaining a free, cool drink of water. As a water cooler manufac-

turer, I wanted to share my insights on how far the industry has come, noting several hurdles, as well as what the latest trends and innovations may mean for plumbing contractors, specifying engineers, builders and architects.

Emergence of bottled water

Just as water coolers have changed over time, so too has the public's perception of public drinking water units and their confidence levels in the safety of tap water. First popularized in the 1980s as a convenient, healthy alternative to sugary drinks, the plastic, disposable, single-serving bottled water industry exploded on to the marketplace. Soon, consumers began to buy bot-

tled water under the misconception that it was safer, purer or healthier than tap water. This consumer reliance on bottled water occurred de-



spite the strict regulations set forth when Congress passed the Safe Drinking Water Act (SDWA) in 1974 to protect public health by regulating the nation's public drinking water supply. The SDWA mandates also regulate water coolers and drinking fountains to ensure they meet strict health, plumbing code, sanitation and environmental standards.

Even with these regulations in place, public drinking fountains and water coolers were soon becoming just an afterthought. This could have been sparked from a lack of education regarding the innovations behind water coolers or perhaps the public was swayed by the deep advertising pockets of plastic, disposable bottled water manufacturers and marketers during the 1990s and early 2000s.

With the growing popularity of single-serving, plastic bottled water and the safety of municipal water in question, water cooler manufacturers focused on developing drinking water solutions that would overcome the public's perceptions regarding the purity of tap water, while providing plumbing contractors, specifying engineers and architects with hygienic, innovative and environmentally-friendly solutions for end-users.

Visual filtration — the clear solution

One solution that manufacturers developed was filtration systems within the water cooler units to ensure the water's cleanliness. Manufacturers engineered cost effective

and reliable water filtration systems, offering their customers a credible, inexpensive, and easy way to supply filtered water to the public. Now, with several filtered units available in the marketplace, Elkay® Commercial Products took it one step further with the recent introduction of the Visual Filter Monitor Water Cooler unit in 2008.

This hands-free water cooler line is outfitted with a unique LED display on the user interface, visually communicating the presence



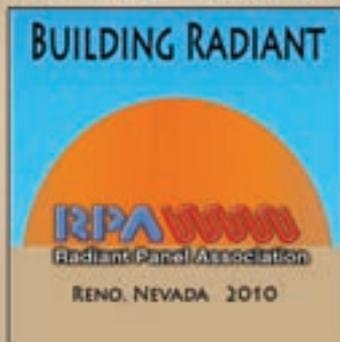
To help end users better visualize and appreciate how much this bottle filling station can save in terms of the number of plastic water bottles not wasted, a green "ticker" on the front of the unit displays the running total of 16-ounce disposable water bottles saved.

of a built-in WaterSentry® filtration system. The filtration system serves to decrease the amount of harmful impurities, such as lead, cysts and sediment, from reaching an end-user. The lights along the display alert the end-user that the filter is functioning, to provide peace of mind, and also notify maintenance staff when the filter needs to be replaced. This forward thinking not only provides plumbing contractors with a tangible solution for their customers but also encourages end-users to trust in their water cooler for a cool, refreshing sip of filtered water. With the proper use of filter monitors, which give visual reminders for filter replacement, contractors can also enjoy a larger revenue stream driven by replacement filter cartridges.

Another important enhancement to note is the fact that many manu- (Turn to Water Coolers, page 50.)

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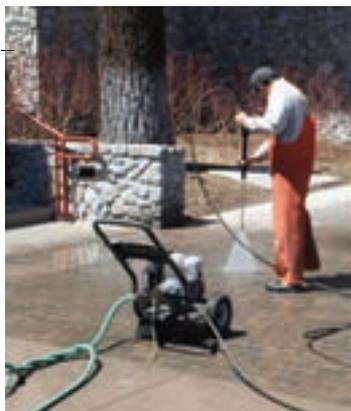
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FROM THE DESK OF...

John Hazen White, Jr.**Your Job is Our Job**JOHN HAZEN WHITE, JR.
President & CEO, Taco Inc.

2010 marks the 90th anniversary of a little business venture called *The Thermal Appliance Company* that started out with two employees and one product, a *Firepot Generator*, in Elizabeth, New Jersey back in 1920. We've come a long way since then and I'm especially proud — as the third generation of my family, after my grandfather and father — to run Taco and bring the company into this new century.

Taco's progress through the decades has not always been smooth, and our success was never guaranteed. But we survived the Great Depression and the

"Surviving 90 years requires listening closely to your customers"

Second World War (when Taco supplied products to the U.S. Navy), and we were the first company to bring the wet rotor circulator to the U.S. market. We weathered initial problems with that technology - problems that tested the company's resiliency once



again — but we persevered and went on to develop the highly successful Taco 00[®] circulator line, the basis of our success.

Not satisfied with being just a residential products company, we made the decision to expand into commercial

grade pumps, tanks and heat exchangers in the 1980s. We have survived labor troubles and recessions, and faced with a challenge to reinvent ourselves or sell the company in the early 1990s, we embarked on a top-to-bottom transformation that set the stage for the solid growth Taco has enjoyed since then. We re-invested in our operations, our workplace practices, and our employees. We immersed ourselves in electronic controls, advanced software product selection and design, and intensive training programs. We embraced a systems approach and advanced our product lines to offer complementary "system" products. Along the way, we forever abandoned the notion of simply selling cast iron by the pound.

Amidst all the ups and downs over the years, one thing has always remained constant at Taco: Our belief in our products, our people and our steadfast commitment to our customers. To survive in the marketplace for ninety years requires a company to listen closely to its customers, to be loyal to them, and to work hard in supplying them with the right products they need to make their jobs easier, more efficient, and their work more profitable. It means being in the field with them and acting on their concerns and suggestions. It means introducing new products for emerging applications like radiant heating and cooling and solar. It means providing comprehensive training and education. And it obligates us to never be entirely satisfied or complacent, and to never forget that it's for our customers — You — that we come to work each and every day.

That's why we say: Your Job is Our Job. That's not just a marketing line, because at Taco it's our way of life. Thanks again for your loyal support!

Circle 37 on Reader Reply Card

Water coolers

(Continued from page 48.)

factures integrate anti-microbial agents within the product design which work to inhibit growth of common bacteria, molds and fungi that cause stains, odors and product deterioration, further reinforcing a hygienic and safe experience at the water cooler.

Efficiently green

The production of filtered water coolers and the addition of anti-microbial agents have enabled end-users to confidently enjoy a healthy, crisp, clean drink at the water cooler for just pennies per gallon for the provider, instead of purchasing a plastic, environmentally taxing water bottle, which can cost anywhere from 89 cents to \$2.50 or more for one 16-ounce bottle. By refilling water containers at a filtered water cooler, less bottled water waste ends up in landfills, which is one major success story for water cooler manufacturers.

Perhaps another is what the industry has done in terms of water conservation and energy efficiency. For example, the VRCGRN water cooler by Elkay, the industry's first Green-Spec[®] listed Water Cooler is equipped with a low-flow bubbler that provides a thirst-quenching stream of drinking water using 40 percent less water than other water coolers, while the refrigeration compressor on the VRCGRN is more energy-efficient than a standard compressor. When tested during a CSA Standard C-815 "Energy-Performance of Drinking-Water Coolers" in a UL recognized test lab, results indicated that the VRCGRN realized a nearly 55 percent improvement in energy efficiency, when compared to water cooler products using a standard compressor.

Advancements like this not only reduce the impact on the environment, but also provide plumbing contractors, specifiers, architects and builders with the ability to offer top-rated, energy-efficient and environmentally-responsible drinking water solutions, increasing their bottom line and expanding their product offerings for a variety of applications in this ever-growing, ever-changing marketplace.

The return to the public water cooler

In the last few years, awareness of the environment and our impact, whether it be as consumers, contractors, corporations or manufacturers, or all of the above has transpired into a whole new level of eco-awareness. People are increasingly conscious of the impact made on the environment as a result of every choice they make from the building materials in their home, to transportation choices and recycling habits, and even the water they drink. They are also more aware of the environmental impact that results from the millions of plastic bottles that end up in landfills year after year, especially with the influx of headlines blowing the whistle on the lack of health regulations surrounding the bottled water industry. These stories in the media also highlight the financial toll that purchasing bottled water can put on recession-strapped end-users, which has cre-

ated a resurgence of water cooler and drinking fountain usage.

The public is once again reaching out for an alternative to disposable bottles of water, even creating bans on plastic bottled water usage. In fact, as noted in several media reports over the last year, a number of educational facilities, government affiliated organizations and municipalities have made headlines with their public promises to decrease disposable bottle water usage with the increase of water cooler installations. According to the *Huffington Post* in July 2009, over the past few years, at least 60 cities in the United States and a handful of others in Canada and the United Kingdom have agreed to stop spending taxpayer dollars on bottled water. Even more intriguing is the entire town of Bundadon, a rural Australian community, who in the fall of 2009, banned all sales of plastic disposable bottled water within their town — creating the first community in the country — and possibly the world — to take such a drastic step in the growing backlash against the industry.

Today, inspired by the demand for quick, clean and green drinking water, Elkay Commercial Products introduced the EZH2O[™] bottle filling station, providing users with an affordable, filtered water option, while also offering plumbing professionals and specifiers high-quality, on-demand drinking water solutions. This bottle filling station provides a rapid fill of cold, filtered water at a rate of 1.1 – 1.5 gpm, which is up to three times faster than a standard drinking fountain, allowing someone to fill a 20-ounce, reusable sports bottle in as little as 6½ seconds! To help end users better visualize and appreciate how much this bottle filling station can save in terms of the number of plastic water bottles not wasted, a green "ticker" on the front of the unit displays the running total of 16-ounce disposable water bottles saved. Plus, the EZH2O unit is outfitted with a 3,000 gallon capacity filtration system which equates to saving up to 24,000, 16-ounce plastic bottles per filter.

As the green movement continues to gain momentum and end-users resolve to change and improve their habits and lifestyles to do what is best for the environment, a unique door has opened for plumbing contractors and specifying engineers. By educating their customers as well as end-users on the safe, clean, filtered eco-responsible drinking water options available, plumbing contractors and specifying engineers will be able to specify and install the most efficient units for any application. This also allows them to meet and exceed the eco-demands of the end-user, aid in the LEED certification of commercial buildings, and offer a more environmentally-friendly, profitable solution within their portfolio of products. ■

Jack Krecek is vice president and general manager, Elkay Commercial Business Unit. Elkay is an innovative manufacturer of stainless steel sinks and faucets for residential and commercial use. Elkay expanded its commercial offerings more than 38 years ago to include efficient water coolers and drinking fountains.

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Domestic water heating is the #2 user of energy in most parts of the country. That's why homeowners are warming up to solar. With Taco Variable Speed Solar Pumps with integral controls, system performance can increase by as much as 20%. Our Solar X-Pump Block's patent-pending design includes a variable speed solar differential control, collector circulator, storage tank circulator and brazed-plate heat exchanger for system isolation, all in a single unit. The Solar Pumping Station is a complete closed loop system. With just 5

connections – 2 to the collector(s), 2 to the storage tank's heat exchanger, and 1 to the expansion tank – the installation is done!

Flexible applications.

All Taco solar products work beautifully with any solar thermal application: open or closed loop, drain-back, 1 or 2 storage tanks and more. And each is a snap to install. It's solar everyone can warm up to.



Lead-free leaders



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Watts Water Technologies— leading the charge on the lead free front

Watts Water Technologies has been front and center in the lead free movement. The following is an exclusive interview with Doug DeViney, vice president of marketing, Watts Water.

What is the significance of Watts Water Technologies' role in the Lead Free movement?

DeViney: Historically, Watts Water has always been on the forefront of providing education, awareness, and code development for key products used in the plumbing and heating industry — temperature and



pressure relief valves, water pressure reducing valves and backflow prevention devices to name a few. When the law for lead free products was passed in Calif. and Vt., we immediately led the charge by rolling out a full line of

lead free products to the marketplace to support our customers needs. We continue to be front and center in providing the awareness, education and supporting code requirements with an offering of compliant plumbing products. As the recognized leader, we launched a new informational website, www.WeAreLeadFree.net, to educate plumbing professionals, engineers and do-it-yourselfers on products, news and feature stories on lead free initiatives happening in Calif. and Vt., and all around the U.S. These, and many other subjects touching the lead free initiative, are available on this website. We believe that Watts Water Technologies and its brands are in the forefront of the lead free movement offering the broadest line of NSF certified lead free products in the world.

How did www.WeAreLeadFree.net come to be?

DeViney: In looking at the lead free legislation, we determined that there was going to be a tremendous need to educate the marketplace on the lead free movement that was

taking place in Calif. and Vt. Based on this foresight, our marketing communications group proceeded to develop the www.wereleadfree.net website, which is recognized today in the plumbing industry as a leading educational resource.

What are some of its key features?

DeViney: Some of the key features include:

- News and feature stories on Lead Free initiatives around the U.S.;
- An interactive map showing the status of lead free initiatives nationwide; and
- A downloadable list of compliant lead free* products.

We want to share all we know about the lead free movement with our customers, trade professionals and the general public. Visit the website and you'll far better understand the new standard of lead free plumbing.

What are the newest lead free products available?

DeViney: We have provided lead free* versions of all of our core products that are intended to be used with

potable water. This includes tankless water heater valves, thermostatic mixing valves, braided water connectors, backflow preventers, quick connect fittings, and a multitude of ball valves, to name a few.

How can contractors identify your lead free products?

DeViney: Our new lead free* valves and products are embossed with an LF mark (for lead free) in the castings/forgings and all new lead free repair parts are marked with an LF, as well. We are careful with our packaging identification to ensure our customers are receiving lead Free* products. All of our lead free products are packaged using distinctive lead free labels which carry an easily recognizable bright blue "lead free" emblem. Our products are compliant because the material that they are manufactured from is already lead free (i.e. stainless steel), and carries the same lead free packaging mentioned above. Our customer's reputation will not be compromised.

*The wetted surface of our lead free products contacted by consumable water contain less than one quarter of one percent (0.25%) of lead by weight.

Cimberio offers lead free kit

CIMBERIO VALVE has introduced a "No-Lead" version of its popular CimKIT™ tankless water heater valve kit. The "No-Lead" CimKIT™ has all of the same features and benefits of the standard CimKIT™ such

Hansgrohe announces low-lead products

ALPHARETTA, GA. — Hansgrohe announced that all relevant products under the Axor and Hansgrohe brands are compliant with California's and Vermont's low-lead legislation, which limits the lead content of pipes, pipe fittings or plumbing fittings, and fixtures intended to convey or dispense water for human consumption through drinking or cooking.

Kohler residential faucets compliant with low-lead standard

KOHLER, WIS. — Kohler Co., 2008 and 2009 WaterSense Partner of the Year, announced all of its residential bathroom and kitchen faucets have been converted for compliance with California legislation AB1953 and Vermont's bill number S.015 in regard to lead content in faucets that are used for drinking water.

"Kohler is committed to a proactive

as a compact, integrated design and forward-facing, color-coded handles; but its lead free construction is in full compliance with California's AB 1953 and Vermont's S.152 laws regulating the amount of lead in plumbing fixtures. The "No-Lead" CimKIT™ is available with ¾" threaded or sweat connections and can be purchased with or without a lead free pressure relief valve.

Danfoss introduces unleaded bronze valves

GLENS FALLS, N.Y. — Danfoss Flomatic Corporation is compliant with California and Vermont lead-free legislation that went into effect January 1 of this year for all valve products. For many years, Flomatic has been committed to pro-

ducing products that exceed the requirements for lead content for decades and has excellent experience in manufacturing unleaded valve products.

Danfoss Flomatic Valves is a company committed to preserving and

approach when it comes to legislation that changes the plumbing industry, and this conversion was no exception," said Rick Reles, vice president of global faucets at Kohler Co. "Kohler thanks all of its customers for their support during this transition, and rest-assured, Kohler faucets continue to offer a singular level of quality for design and performance."

Grundfos Pumps CR products receive Annex G Certification

OLATHE, KANSAS — Grundfos Pumps announced that the CR, CRI and CRN products have received NSF/ANSI Standard 61 — Annex G certification, effective February 25, 2010.

NSF developed the evaluation procedures in NSF/ANSI Standard 61 — Annex G to establish an American National Standard to determine

product compliance with lead content requirement of the California Health and Safety Code. Assembly Bill 1953 (commonly known as AB1953) is a change in the California Health and Safety Code to phase out lead content from for pipe, pipe fittings, fixtures conveying potable water, or water intended for human consumption.

improving the environment while producing valve products that meet stringent safety and health standards. Danfoss Flomatic introduced the industry's first unleaded bronze ENVIRO-CHECK® in 1996, which have been recognized as an acceptable material for California Prop 65.

Leonard Valve mixing valves meet lead free requirements

CRANSTON, R.I. — Leonard Valve Co. has released a line of thermostatic mixing valves that meet California's AB1953 and Vermont's S.0152 lead-free plumbing laws. The new ECO-MIX™ thermostatic mixing valves from Leonard have all been certified by IAPMO as compliant with the lead-free requirements and are listed to stringent ASSE performance standards.

The ECO-MIX line includes several lead-free thermostatic mixing valve models. Models LV-982-LF and LV-985-LF have minimum flow capacities of 3 GPM (11 l/min) and 10 GPM (269 l/min), respectively. Two high-low models are the XL-200-LF with a minimum flow capacity of 5 GPM (18.9 l/min) and the XL-82-LF at 1 GPM (3.8 l/min).

WeAreLeadFree.net

It is the dawning of a new day for our Industry.

We are the brands of Watts Water Technologies.

In California and Vermont, after months of discussion, preparation and hard work the world has changed and Plumbing Professionals, Engineers and Do-It-Yourselfers are waking up to the new standard of Lead Free plumbing.

Today, we are Lead Free.

For more information or product ordering visit WeAreLeadFree.net or contact your local authorized representative.



Circle 39 on Reader Reply Card

Haller Enterprises – growth and technology oriented

It's something we in the industry don't see enough of. Haller Enterprises, a mechanical contracting firm based in Lititz, Pa., saw substantial growth in their the residential and commercial service and replacement business in 2009.

Rick Haller started the firm in 1981 and it grew steadily. Today, Haller employs more than 260 employees with expansion into HVAC, plumbing, hydronic and electrical contracting, now to include several locations in central Pa.

Binocular vision

It was their ability to look into the distance while watching a shifting market years ago that led Haller managers to make strategic changes to shore-up the firm's business. Early indications that the construction market was softening led them to strengthen their resources for service and replacement work.

Today, company managers report that tough economic times, if anything, have sharpened their focus on managing the business.

"Haller has expanded through conservative growth, never growing on speculation or for the sake of gaining size and stature," said John Michel, vice president of the Retrofit and Service Division. "We're attentive to building long-term customer relationships, first, and that leads to smart growth and profitability."

One first-encounter surprise is Haller's headquarters facility, an artfully-designed gem designed to meet the fast-paced needs of the growing firm. And though the two-story structure is only nine years old, the owners already added substantially to its size in '08, making accommodation for the larger number of employees with additional offices and a "Haller University" training facility. There, employees learn the latest in

safety and installation techniques, the latest changes in building codes, and receive certification training.

Evidence of the company's success can also be seen in other nearby communities. Haller now has branch offices in Mechanicsburg, Pa., 40 miles to the west of Lititz; Palmyra, Pa., 20 miles away; and York, Pa., 25 miles to the south and west. The company's three key divisions are Commercial Service and New Construction, Residential New Construction, and Residential Retrofit and Service.

Haller isn't your typical mechanical contracting firm, especially if you consider its location in the historic, rural community at the heart of Pennsylvania's Amish country. Though the area is susceptible to the strained market conditions seen nationwide, the region's industrial and commercial diversity, tourism, wealth and seasonal changes provide

steady opportunity for business and growth.

"We've prepared for and nurtured our growth with care," said Michel. "It's been an amazing process to see and be a part of. Frankly, we've all been surprised by the pace of growth here, but much of it stems from how things began when our senior managers — Rick Haller and Lindy Bair — chose to build the company's foundation on firm respect for the employee, attentiveness to customer needs, and knowing when to turn to experts outside the company."

Training and software — platform for growth

Key facets to the growth of Haller's Retrofit and Service Division, growing at a brisk pace, are a software platform they invested in and implemented in 2005 and, soon after that, a link with the Seattle-based training and management gurus at Business Development Resources (BDR, Inc.).

(Turn to Haller, page 56.)

INTRODUCING THE ACCELERA® 300 HEAT PUMP WATER HEATER: ACCELERATE YOUR SAVINGS!

New!



Energy from nature.

The new Accelera® 300 can extract up to 80% of its energy requirements from the air around it. Heat pumps have been around for decades, but a heat pump water heater is a brand new concept. The Accelera® 300 works like an air conditioner - but instead of dumping the heat outdoors, it puts it into the water.

The Accelera's compressor and fan consume only 1 kWh of electricity to generate the heat equivalent of 3 - 5 kWh. The efficiency of the unit goes up with increasing ambient air temperatures. This ground breaking efficiency redefines what a water heater is capable of, and what savings can really mean !

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Circle 40 on Reader Reply Card

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Haller

(Continued from page 54.)

“We needed and found HVAC contracting management and sales presentation software,” said Michel. “We’re certain that it attributed successfully to the growth of our division, helping us to achieve a 46% revenue jump in the first year.

“It’s a well-conceived software

selling platform that greatly improves and simplifies sales presentations, and adds to our already solid technical background,” he added.

“We found that the system, Opportunity Manager, quickly took our professionals to the next level,” he said. “It met our high expectations. We recouped our investment in the software within several months with successfully sold jobs that included a number of large residential jobs

where high efficiency equipment was installed.

“Very quickly, customers told us that the interactive nature of the presentation and its ability to share multiple options to meet their desires were a key to getting the job,” continued Michel. “And we’ve heard pretty much the same thing from other customers since then. Internally, the software has given us great consistency in pricing and has en-



A technician checks his roster before leaving Haller.

HEATINGHELP.COM

GREENING STEAM

How to Bring 19th-Century Heating Systems into the 21st Century (and save lots of green!)

By Dan Holohan

NEW

GREENING STEAM

How to Bring 19th-Century Heating Systems into the 21st Century (and save lots of green!)



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“When it comes to saving dollars on heating, old steam systems are delicious low-hanging fruit. There is so much you can do to make them better, and most of what you do won’t cost a fortune.”

Dan Holohan

abled us to manage our margins closely.”

Working in conjunction with the use of “OpMan” software is Haller’s growing relationship with BDR. “It’s helped us immensely to see and hear things from a different perspective,” said Michel. “BDR’s experts, whose sole focus is the HVAC industry, have empowered us with broader industry experience and information. But the work isn’t done. We continue to learn and to refine management of the business, thanks in part to the knowledge and skills they’ve shared with us.”

Service work, the key to growth

According to Michel, Haller now has 30 service technicians – double what they had just three years ago. “BDR’s service expert, Jennifer Shooshanian, has helped immensely,” asserted Michel. “She and others from BDR have been here several times and, each time, we gain new and helpful insights. With Jennifer’s guidance, we now have a process in place for all facets of service operations – from pricing, telemarketing and dispatching to how we show up at the customer’s home and communicate with them.

A year ago, Haller managers proposed the idea that the company get into duct cleaning. Through BDR’s network of client companies, Haller managers called and spoke at length with several contracting firms that were running successful duct cleaning operations. “We quickly learned about the process, the best equipment on the market, and the job skills needed to make it work. It’s now a valuable and profitable piece of our business,” continued Michel.

The rest of this story can be found on our website at www.phcnews.com.

Dual flush toilets: Easy maintenance, easy water savings



Toilets are the main source of indoor water use in the home accounting for nearly 30 percent of an average home's indoor water consumption, and older toilets are a major source of wasted water. By replacing an inefficient toilet with a Caroma high efficiency dual flush toilet, up to 74% more water can be saved.

Caroma is the world leader of innovative, dual flush high efficiency toilets (HETs). Caroma HETs can save up to 44% more water than the standard 1.6 gpf single flush toilet and up to 74% more water than a 3.5 gpf single flush toilet.

All Caroma high efficiency toilets include the following features:

- Dual flush: two button system using 1.28-1.6 gallons per flush (depending on model) for solid waste and 0.8 gallons per flush for liquid/paper waste
- Large trap throughway, nearly double the industry average, virtually eliminating blockages and overflows
- Easy to install for new builds or retrofits
- Washdown technology, pushing waste from the bowl for greater drainline carry
- WaterSense labeled

With Caroma's HETs, you don't need to trade flushing performance for water savings. Caroma's toilets are designed to work together as a complete flushing system that takes into consideration waste removal as well as proper drainline carry out. Caroma 270 toilets come with an adjustable offset connector for 10"-12" rough-ins that accommodate rough-in variations and make the toilet ideal for retrofits and renovations. The unique style and clean lines also provide for easy cleaning.

Customer experiences

The beautifully-designed St. Regis Atlanta opened in 2009. In addition to the elegant residential feel, one goal was to maximize water savings for drought-stricken Georgia. Caroma high efficiency toilets were chosen for the St. Regis. The unique designs of the toilets fit the style of the elegant rooms. The hotel expects to save up to 300,000 gallons of water annually while minimizing maintenance costs.

After a \$30 million renovation, the historic La Posada de Albuquerque Hotel has been transformed into the pre-eminent boutique hotel in the Southwest: the Hotel Andaluz. The Hotel Andaluz in Albuquerque, New Mexico is using Caroma Sydney Smart and Caravelle toilets to help reduce water use by more than 45% and gain three points towards LEED Gold certification. The offset connector included with the HETs made it easy to adjust to the variations in rough-in dimensions in the hotel guest rooms.

The Hilton Palacio del Rio hotel in San Antonio, Texas, installed 470 Caroma Sydney 305 elongated toilets in 2007. During the first eight months after the toilet installation, the Hilton Palacio saved nearly six million gallons of water compared to the same period one year earlier. There was a greater than 80% reduction in maintenance calls, and guest complaints about toilet problems dropped more than 90%.

Request a company brochure

Caroma has recently introduced a new corporate brochure! The 36 page brochure includes an introduction to Caroma, water savings using Caroma HETs, the design and performance of Caroma, two case studies, pictures and dimensional drawings of all Caroma toilets, sinks, urinals and seats, and finally feedback including quotes from several companies. If you are interested in receiving the Caroma brochure, visit the web and complete the registration form.

More information:

Phone: 1 800 605 4218

Website: www.caromausa.com

Email: info@caromausa.com



The St. Regis Atlanta hotel opened in 2009 with an eye toward maximizing water savings for drought-stricken Georgia. The Caroma high efficiency toilets chosen for the hotel are expected to save up to 300,000 gallons of water annually.



The Hilton Palacio del Rio hotel in San Antonio saved nearly six million gallons of water compared to the same period one year earlier after installing 470 Caroma Sydney 305 elongated toilets.



Grooved Snap Coupling

Figure 780 Grooved Snap Coupling features a hinged lever mechanism for quickly and safely connecting grooved piping systems. A unique two-step closing feature that partially locks, then closes the coupling helps to minimize the chance for personal injury. Pushing the lever handle initially snaps the housing segments together. Continuing to push the lever handle then smoothly locks the coupling into position.

Grinnell Mechanical Products.

Circle 101 on Reader Reply Card

2" pump guide rail

The GR22 pump guide rail allows easier installation or removal of submersible pumps in deeper pits. This new model features heavy cast iron construction and an efficient single rail design. With a discharge size of 2", the GR22

fits Liberty series FL150 thru 200-series effluent pumps (Model GR22-FL) and LE70, LE100, LEH150 and LEH200-series sewage pumps (Model GR22-LE). An internal 2" thread on the pump mating claw will allow for adaptation to other pumps.

Liberty Pumps.

Circle 102 on Reader Reply Card

PHCC Pro Series' 2400 control unit

New 2400 control unit, that comes with the PHCC Pro Series 2400 bat-



tery backup sump pump system. This new control unit adds a slide switch on the front panel that allows the user to select either a "maintenance-free" or "non maintenance-free" battery. Features include: automatically switches to battery power when AC fails; automatic quick recharge; and tests pump weekly. **Glentronics.**

Circle 103 on Reader Reply Card

★ Phc News product of the month ★

SmartPlate water heater line

SmartPlate line of water-to-water heaters help reduce system energy costs by utilizing innovative brazed plate, and plate and frame designs uniquely suited for use with high-efficiency condensing boilers. Capable of supporting up to 90 gpm domestic loads at a 100° F rise, these fully packaged, instantaneous heaters incorporate real-time load tracking capabilities and responsive controls to maintain accurate hot water temperatures under diversified load patterns common in commercial and institutional applications. Available in both brazed-plate, single wall and plate-and-frame, double wall configurations, all SmartPlate water heaters incorporate a PID temperature controller and a high turndown, electronic control valve to maintain outstanding $\pm 2^\circ$ F temperature control when operated under constant load conditions with variances held to $\pm 4^\circ$ F under normal load changes. State-of-the-art controls package also supports remote monitoring and easy integration with building automation system (BAS) software via Modbus communications protocol. **AERCO.**

Circle 100 on Reader Reply Card



SANIPLUS macerator

The redesigned SANIPLUS — part of the new "Quiet Range" lineup of macerating systems — offers faster cutting action and a quieter performance that is nearly 10 decibels less than the previous generation, which was comparable to that of a conventional gravity-flush toilet. A response to user requests to lower the volume a bit. **SFA Saniflo.**

Circle 106 on Reader Reply Card

410A inverter Halcyon mini-split line

Company now offers three new ductless wall mount split system heat pumps with longer refrigerant pipe



lengths and high energy efficiencies.

Each of the three

systems offers an extended line set capability, providing a line set maximum of 165 lineal feet. The 18RLXS 18,000 BTU, 19 SEER, 10 HSPF and 24RLXS, a 24,000 BTU, 18.0 SEER, 10.0 HSPF both qualify for Tier 2 Energy Star ratings, making them eligible for up to a \$1,500 Federal tax credit. Also, the 30RLX provides 30,000 BTUS of heating and cooling with ratings of 16 SEER and 9.5 HSPF. **Fujitsu.**

Circle 107 on Reader Reply Card

True manual override

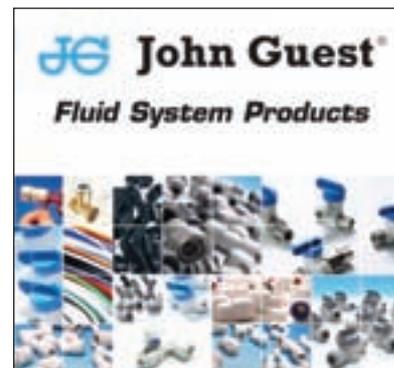
The electronic Royal® ES-S Flushometer models allow non-hold open true mechanical manual override in case of a power outage, cleaning/service needs or user preference. Also applies to concealed Flushometers with and without a wall box. The Royal wall box has been reduced in size with improved aesthetics and ease of installation. Exposed Flushometers now include a wall flange and are easy to install. New consolidated ES-S wall-plate options reduce stock. **Sloan Valve Co.**

Circle 108 on Reader Reply Card



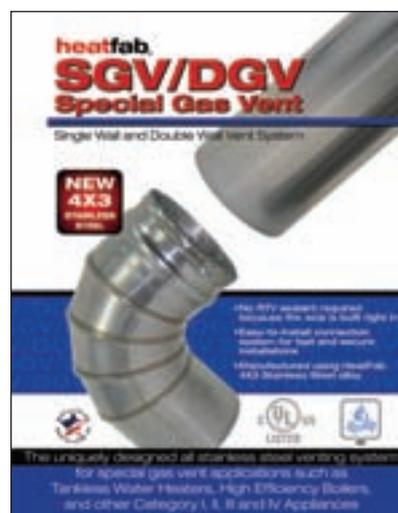
Fluid system products

Fluid system products catalog presents product and pricing information for the complete family of standard line of push-in fittings, shut-off valves and polyethylene tubing that is used



in a wide range of industrial water treatment applications, from water filtration and reverse osmosis to dispensing and vending. Line consists of a wide variety of 1/2" polypropylene and 1/2" acetal fittings, brass fittings, Metric polypropylene fittings and metal acetal fittings along with JG Superseal fittings for use with stainless steel tubing. Standard line valves consist of 1/2" polypropylene stop adapter and 1/2" acetal shut-off valves. 1/2" and Metric polyethylene tubing completes the standard line product package. **John Guest USA Inc.**

Circle 105 on Reader Reply Card



SGV/DGV special gas vent systems

New single and double wall Special Gas Vent system — SGV/DGV — is a safe and reliable venting solution for Category I, II, III, and IV gas appliances. This UL1738/ULC S-636 listed Special Gas Vent features a unique stainless steel alloy featuring exceptional corrosion resistance and easy-to-install connection system. Features include: 3" & 4" SGV single wall diameters; 3/5" & 1/2" DGV double wall diameters; and a unique "4X3" stainless steel alloy. This is a corrosion resistant product that performs favorably to 316, 304, 430 and other grades of stainless. **HeatFab.**

Circle 104 on Reader Reply Card



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Business Seminars

TOPIC	TIME	LOCATION
Mechanic's Liens, Stop Notices by Sam Abdulaziz/Paul Young	10:00am to 11:30am	202B
Uponor Wirsbo AquaPex Train- ing & Certification: Required for AquaPex Installation by Phil Valles & Bob Payne, Keyline Sales	10:00am to 11:00am	203C
OSHA Top 20 Citations and How to Prevent Them Michael Nicholas, California Loss Control	11:00am to 12:00pm	203A
Service & Repair Roundtable with Pat Walner	11:30am to 12:30pm	203C
Today's Environmental Hazards for the Plumbing Professional A look at Asbestos, Lead and Mold by Ross Driscoll	1:00pm to 2:00pm	203A
Lead Free Alloys Presented by NIBCO	1:30pm to 2:30pm	202B

Hands-On Seminars

TOPIC	TIME	LOCATION
Select Trenchless Pipe Lining	10:00am to 11:00am	Space 1
Bosch Thermotechnology: Intro to Bosch Solar Water Heating	11:15am to 12:15pm	Space 2
Emerging Technology- "Eternal Hybrid Water Heaters" Presented by O'Connor Sales	1:45pm to 2:45pm	Space 2
Intuit-Go Payment Take Payments in the Field: Making Mobile Payments Work for You	2:00pm to 3:00pm	Space 1

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The Flow Expo. We'll Show It All To You!

Condensing combi boiler

The Condensing Combination wall hung boiler was launched in response to the burgeoning demand for a tankless unit that fulfills a combination of heating applications. It features the manufacturer's proven condensing technology and uses Sch 40, 3" PVC venting, which lowers the cost of installation and simplifies the process. The stainless-steel condensing heat exchanger and premixed burner make this product unique; the integrated primary and secondary stainless steel heat exchanger prevents corrosion and ensures a longer lifespan. Its outdoor sensor automatically regulates heating temperature according to changes in the temperature outdoors. Navien America.

Circle 109 on Reader Reply Card



On demand domestic hot water

The new ODW is available in 4 capacities from 99,000 Btuh to 199,000 Btuh, for performance and efficiency plus the comfort of on-demand domestic water. Users will never run out of hot water again. Benefits include energy savings and space savings because all of the units are wall hung. With revolutionary S line Heat exchangers, units can reach efficiency levels over 92%, which qualify for the 30% federal tax rebate. Because this unit is condensing, it can be vented with schedule 40 PVC. Quietside.

Circle 110 on Reader Reply Card



Hybrid water heaters

The Condensing Hybrid improves the technological advancements of the original hybrid water heater but in a smaller, more efficient and every bit as powerful unit. Patented full-flow design and stainless steel heat exchanger with a built-in 2-gal reserve. Can be wall mounted or floor standing with water connections on unit's top. Vented with 2" or 3" PVC up to 100 ft. Eternal Hybrid Water Heaters.

Circle 111 on Reader Reply Card



Holopalooza, the exclusive video event in which noted columnist Dan Holohan visits with PHC suppliers at the 2010 AHR Show, has wrapped up for its second year. These archived videos can be accessed at www.phcnews.com. Phc News would like to thank this year's sponsors for another successful event. The following products are dedicated to those sponsors. Please support these leaders in product innovation.



Climate control

Climate Control Network System is an integrated computer hardware and software package that connects all of a home's or building's HVAC systems to a single network control system. The Climate Control™ Network System integrates with Uponor's PROPANEL® pumping and mixing units to provide precise temperature control and energy efficiency for radiant heating and cooling systems. Uponor.

Circle 112 on Reader Reply Card



Squire® Stainless Steel Indirects

Expanding its Squire® line to include 12 stainless steel models with capacities between 30-119 gallons. Among the new models will be six solar units, which feature a hybrid system incorporating solar thermal panels with a secondary boiler heating coil or electric back-up. Lochinvar.

Circle 113 on Reader Reply Card



ICON System™ accessory packages

Packages work in conjunction with the ICON System gas control to provide additional benefits such as comprehensive leak protection and more energy efficient performance, including up to 36% savings on energy usage and an increase in usable hot water — 50% or more. Bradford White.

Circle 114 on Reader Reply Card

Solar trilogy

Innovative all-in-one solar pumps, components and controls deliver unmatched reliability and performance. The Solar Pumping Station combines all the features needed for a closed-loop water heating system.



The Solar X-Pump Block combines a stainless steel flat plate heat exchanger with two bronze circulators and a solar differential temperature control in one compact package ideally suited for installations where adding a solar storage tank is not feasible or where the solar storage tank does not have an internal heat exchanger. And the Variable Speed Solar Pump line includes circulators with integral solar differential temperature controls. Taco.

Circle 115 on Reader Reply Card



M-8000 Modular

By stocking individual M-8000 components you carry less inventory, yet build any solution the job requires. Sometimes the project may require supply and return temperature gauges; perhaps an air vent and fill valve; often a simple supply and return manifold with no frills will get the job done. You may need eight circuits and due to unanticipated job site changes, you suddenly need 10. Need a 1 1/4" manifold? Since the expansions are configured as 1 1/4", simply swap the end pair with 1 1/4". Legend Hydronics.

Circle 116 on Reader Reply Card

ProRadiant line's Climate Mat

Pre-fabricated Climate Mat system is a roll-up assembly with tandem supply and return headers and 1/2" tubing. Made in two separate 5' sections; may be unrolled one at a time or simultaneously. Lay 20,000 sq.ft. of evenly spaced radiant tubing in only eight hours. Viega.

Circle 117 on Reader Reply Card



Micro bubble air separator

Series AS-MB micro bubble air separator eliminates entrained air in residential and light commercial hydronic heating systems. Features a fully serviceable forged brass body in flanged, 3/4", 1" and 1 1/4" FPT sizes and requires no minimum inlet/outlet piping length for proper operation. Includes an integrated DuoVent



air vent assembly with high capacity and high temperature ratings. Ideal for use with glycol systems or as an anti-vacuum device. Watts.

Circle 118 on Reader Reply Card

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 ULTRA FLUSH
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 LOGAN SQUARE
 WICKER PARK
 IT'S
 BOTH
 BEAUTY
 AND
 THE
 BEAST
 POMEROY
 BRIANNE
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Finding eye-catching style, high margins and rugged performance might seem impossible. But it's easy when you look at Gerber.

This is Professional Performance.



**Gen-Eye SD™ video inspection system**

The new Gen-Eye SD™ video pipe inspection and location system gives you all the features of a full size video inspection system in a compact, lightweight package. The Command Module features an 8" LCD color monitor for crisp, clear pictures, an SD Card Reader to store video or still images (a 1 GB card records approximately 2 hours of video), and a full keyboard for on-screen titling. All are safely contained in a padded 10 lb. package. Use the docking arm to mount it on a full size reel to trouble-shoot 3" to 10" lines, or on a mini reel to view 2" to 4" lines. **General Pipe Cleaners.**

Circle 119 on Reader Reply Card

Phc News tool of the month**RIDGID® SeeSnake® microReel inspection system**

RIDGID® SeeSnake® microReel L100 and L100C inspection system is a complete compact, portable drain inspection system for pushing cable distances of up to 100 feet in lines from 1-1/2 to 4 inches in diameter. Designed for use in lateral lines that exit the building and connect to septic or sewer lines, and in roof stacks, it features a 100-foot cable and a larger, 25-mm camera head with greater lighting. **RIDGID.**

Circle 120 on Reader Reply Card

**Plastic pipe fitting reamers**

Money-saving reamers are designed to clean out the old or broken pipe and leftover solvent cement from a fitting so the fitting can be reused. In this era of green living and recycling, try these reamers on PVC to save time and material costs. Plastic Pipe Fitting Reamers are available in 4 sizes for Schedule 40 PVC. The PPR reamers fit into standard 1/2" drills. Fitting reamers feature a four-sided carbide insert, which provides one extra cutting edge after 180 degree cutting insert rotation. **Reed Mfg. Co.**

Circle 121 on Reader Reply Card

Saddle boxes

Models 126, 117 and 116 follow with the enhancements made to the Model 127 saddle box. The new and convenient attachment points are used for



securing tools and materials in the truck bed while new "Easy Find" organization includes an adjustable metal tray, a new removable parts bin and a level holder. These upgrades increase security and productivity. The attachment points offer the user the ability to safeguard tools and supplies by running a cable and lock to the truck box for protection. **WEATHER GUARD.**

Circle 122 on Reader Reply Card

Hackzall® M18™ cordless recip saw

Developed for superior control and versatility, the one-handed design of



the tool gives users the ability to make clean, accurate cuts while working overhead and in tight spaces. In addition, the Hackzall® Recip Saw features a dual gear anti-vibration system to achieve the lowest vibration level among all 18V cordless recip saws in the industry. **Milwaukee Electric Tool Corp.**

Circle 123 on Reader Reply Card

Open clogged pipes with**SHOCK ACTION!****Kinetic Water Ram™**

The WATER RAM clears sinks, tubs, toilets and drains fast. Compressed air creates a shock wave that breaks up stoppage. Effective around elbows and bends; bypasses vents.

Safe – there's no pressure buildup.

AS SIMPLE AS

1 PUMP UP

2 INSERT IN DRAIN

3 SNAP TRIGGER



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The toughest tools down the line.™

Circle 44 on Reader Reply Card

NAVIENT Condensing

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Schor

(Continued from page 16.)

showroom locations in New England. Saturday, April 17, 12:15 – 1:45 pm, David Kohler, president and COO of Kohler Company, will be giving a “State of the Industry” address called “The Road Ahead for the Industry.” It surely will have some sizzle!

There are some other NKBA programs, paid sponsored by manufacturer on subjects who should hold your interest such as green, lighting,

air quality, design trends and others that you should check out.

The NKBA book store is a great place to find visual books that are exceptional for your showroom. These books help visitors determine the look and products that they desire. The best of K/BIS 2010 product showcases is always a fun place to visit to see new products. The new ZOW Pavilion will showcase European products and design trends. The Kitchen and Bath Business TV broadcast from the show floor included interviews with industry

leaders and is not on any “real TV” but is intended for promotional press outside of the show. One of two pieces gets video streamed to their website.

Magazines and associations — at K/BIS 2010 — great value

One of the greatest perks of the K/BIS convention is that the magazines and free subscriptions are included in the business-to-business category. Most of the magazines are not assigned a booth until the middle of April or at show time. I would go on the K/BIS website (www.kbis.com) under “Exhibitor List” and look under “Publications — Business-to-Business” and “Publications — Consumer” Last year I counted 21 magazine booths. If you come to their booth with a typed list of your other showrooms, you can subscribe as a group. The business-to-business magazines are free to anyone attending K/BIS that have been pre-qualified. Make sure that you stop by the TMB Publications booth where *The*

Wholesaler, *Phc News*, and *Plumbing Engineer* magazines are located! Also, make sure that you register your staff to get *The Wholesaler* magazine with the monthly showroom columns. Many associations obtain booths the same way as we start getting closer to the show, so check it out.

China manufacturers — update for 2010!

There is a much larger number of manufacturers coming from China this year along with newer American companies importing products from China under American-type names. What I noticed is more Chinese manufacturers adopting more acceptable USA-type names. Look for manufacturers from China that have the “ISO Quality Certification.”

What's new and hot in bath and kitchen products

Some of my favorite and the hottest new bath/plumbing products at K/BIS 2010 and the reasons why:



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• The WOW Toilet (Booth S-4464) www.wowtoilet.com. You remember the Fish N' Flush toilet tank in 2005. This toilet tank is a specially-designed clear toilet tank for insertion of specialty-sized images, posters, advertisements and market-

What I noticed is more Chinese manufacturers adopting more acceptable USA-type names. Look for manufacturers from China that have the "ISO Quality Certification."

ing messages. This tank will fit almost all toilet bowls and is IAPMO Code Approved.

• Novellini Spa (Booth S-2812). www.novellini.com. If this crystal clear free-standing bathtub and the walk shower system doesn't know your socks off, I will eat a can of Permatex!

• Kimball and Young (Booth # S-4105) www.kimballyoung.com. They specialize in bathroom magnification mirrors and LED energy saving diode lights will last 50,000 hours. A must for grooming, make-up, or for the sight challenged. The products are designed for today's consumer.

• Cascade Faucets/La Torre (Booth S-2614). www.cascadefaucets.com. The ECO Cartridge works like what a dual flush is to toilets. With one click, users can save 20%-40% of the water flow/consumption. LEED Certified. The factory is ISO 14001:2004 Green LEED Certified. Do your single control faucets have this hot feature?

• Electric Mirror (Booth #143) www.electrimirror.com. The world leader in LCD-mirrored TVs and the inventor and innovator of back-lit mirrored lighting systems. They have been designed for the last 12 years in 5-star hotel bathrooms worldwide. This is a whole new category for bathrooms. A must see!

• Hirsch Glass (Booth # S-3708). www.hirschglasscorp.com. Glass Mosaic tiles in the most vibrant and alive colors I have ever seen. The new Art Glass Panel Vanity Top System features top, sink and faucet package.

• Native Trails (Booth S-3844) www.nativetrails.net. These folks own the category for artisan-crafted sinks and lavatories in copper, antiqued copper and brushed nickel finishes. A must see!

• Quick Drain USA: www.quickdrainusa.com. The winner of the #1 Bath Award at the "Best of K/BIS 2009." The low profile linear shower drain is clean and unintrusive — the outdated round center shower drain is no longer needed. Go on the website and see the various options for different drain locations.

• And of course, don't forget the Big John Toilet Seat Company (Booth S-3922) www.bigjohn toilet seat.com. This seat brings stability and comfort to people with larger frames. Specifically designed for big, tall and plus sizes. Bring it on!

Due to the date of the K/BIS 2010 Show and a much slower pace in new bath and plumbing products, I will be writing about K/BIS in upcoming articles. Don't forget to review the New Product Showcase in this next month's issue. ■

Peter Schor can be reached at pschor@dynamicresultsinc.com.

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Cloudy economy breaks with silver linings

BY JOHN MEISENBRINK,
editor

Over the Christmas holiday I was invited to see my niece's holiday band and choir concert. It was a real treat to sit there with my family and listen to the sounds of the season; that is, until I had to visit the gymnasium restroom. Honestly, it was like I entered a restroom of 1970s. The flush valves were rusting out, sink handles you could barely turn on and off and the whole room appeared cold and dank. Man, I thought, with bidding for work at a cutthroat pace, why have these gold mines been left behind?

As far as I understand it, \$21 billion of the \$787 billion — from the American Recovery and Reinvestment Act (ARRA), or Federal stimulus money — has been set aside for educational renovation. While initially no monies were set aside for construction and renovation of educational facilities, at the last hour, the House of Representatives wrote into the bill that it was imperative to include money on the construction side, not just administrative help — to help curb school cuts, continue school initiatives, etc. Where has that money gone?

February 17, 2010 marked the one-year anniversary of the ARRA. At the onset of 2009, the American economy was in serious trouble. It was battered and bruised by the collapsing housing and credit bubbles, and the resulting turmoil was instigating massive job losses in every sector of the economy —

especially, the U.S. construction industry.

According to a statement on the first anniversary of the ARRA from Building and Construction Trades Department president Mark H. Ayers, “As the ARRA funds have worked their way through the economy over the past year, the economic freefall that defined our nation one year ago today has abated. In fact, the Council of Economic Advisors has found that the ARRA has had a positive impact on our nation's GDP. Recent upticks in GDP growth are heartening for the U.S. construction industry, which is struggling with unprecedented unemployment that has now reached 25% nationwide, a number that would have certainly been greater had no action been taken.”

World Water Day reveals concerns, opportunity

In a recently released report from the United Nations (UN), it has been stated that more people die from unsafe water than from all forms of violence, including wars. March 22, 2010 marked World Water Day, where UN secretary-general Ban Ki-moon said, “These deaths are an affront to our common humanity, and undermine the efforts of many countries to achieve their development potential.”

According to the report, “Sick Water?” 90 percent of wastewater discharged daily in developing countries is untreated, contributing to the deaths of some 2.2 million people a year from diarrhea-related diseases caused by unsafe drinking water

and poor hygiene.

“At the beginning of the 21st century, the world faces a water crisis, both of quantity and quality, caused by continuous population growth, industrialization, food production practices, increased living standards and poor water use strategies,” stated the report by the U.N. Environmental Program.

Despite these statistics, the report also points to green opportunities for turning a mounting challenge into an opportunity with multiple benefits, and business opportunities in engineering and natural resource management.

“Financing and investment are urgently needed and must address design, ecosystem restoration construction, operation and maintenance of wastewater infrastructure,” the report stated.

But other solutions could be sought, such as education “to ensure water, nutrients and future opportunities for employment and development are not wasted.” ■

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Periodical #022-074 postage paid at Northbrook, IL and additional mailing offices.

POSTMASTER: Send address changes to Plumbing & Hydronic Contractor News, Creative Data Services, 519 E. Briarcliff Road, Bolingbrook, IL 60440. clewis@cds1976.com

Publications mail agreement No. 41499518: Return undeliverable Canadian addresses to PO Box 503, RPO West Beaver Creek, Richmond Hill ON L4B 4R6



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