October 2009

Southern P

plumbing • heating • cooling

Taco: Comfort Made EasyProduct Focus: Pumps

Change Service Requested

THIS MAKING LOT

Southern Trade Publications P.O. Box 7344 Greensboro, NC 27417

Cover Story



Taco: Comfort Made Easy



Taco's new, LEED-certified warehouse in Cranston, RI.

There's a restless manufacturer in the plumbing and mechanical industry. They've gained a leadership position through decades of innovation and hard work, always attentive to customer needs and opportunity for improvement.

The company is Taco, Inc., a leading developer and manufacturer of plumbing and hydronic-based heating and cooling equipment and accessories for use in residential, commercial and institutional applications worldwide.

Its roots trace back to the Thermal Appliance Company (T. A. Co.), purchased by entrepreneur and radiator salesman Elwood White in 1920.

One of Taco's early endeavors was a tankless water heater. The invention worked so well, in fact, that water was overheated. That fortunate challenge led to the development of a mixing valve to temper water for domestic use and, before they knew it, the race was on.

John H. White Sr., Elwood's son, joined Taco in 1936 at the age of 29 and worked deliberately to secure contracts with the U. S. Navy. It was an effort that brought \$3 million into Taco during the WWII years while building gun mounts for Navy airplanes. But there was also a seemingly less significant \$104,000 contract to supply steel tube heat exchangers for warships. Yet, this was the piece of business that anchored Taco's involvement in the other water-side industry.

Post-war years were boom years for the hydronics and plumbing industries in the U.S., and Taco was there to improve system performance in the millions of new homes sprouting across the nation. At the urging of White, Taco embarked on an ambitious product development effort: to design and build the world's best wet rotor circulator which made its debut in the 1950s.

Product refinements and

improvement led to a design that minimized the contact between metal parts and the circulated fluids, greatly reducing the risk of bearing contamination by iron oxide. The cartridge style 00 wet rotor circulator is still the workhorse of the industry to this day.

As owner of a privately-held firm, White was able to maintain his focus on product development, customer service and devotion to a growing family of employees. He moved the company to Cranston, RI in 1954.

Today, Taco employs about 500 people at facilities in Cranston, Fall River, MA and Milton, Ontario. The firm sells direct to OEMs and through leading wholesalers nationally. In 1980 – following many years of summer and school holiday work at the factory – Johnny H. White Jr., joined his father's firm full time while working for various Taco product reps. In 1983 he became a product manager. He rose through the ranks, ultimately assuming the role of company CEO and president in 1992.



Installers have favored Taco variable-speed circulators for several years.

Cover Story

РНС

Living hydronics and home comfort

Today, ask Johnny (his preference) to don a pair of binoculars – thinking externally – and he readily says that meeting customer needs or, even better yet, solving them before a need or challenge arises, "is the sole reason for our existence. It's why we're here. We live Hydronic systems and home comfort as though it were programmed into our brains."

Ask Johnny to grab a magnifying glass, instead, and to peer deeply into their reason for being, internally, and you get a different answer, but one that quickly circles back to the first one.

"Being in this business pretty much since birth, I've marveled at our growth and diversification," said White. "Each new employee, engineer, designer and manager contributes to this company in unique ways, in ways that inspire me and others here. Out in the field, we probe and ask questions, hear of challenges and even how our products and technology fulfill their mission in hydronic, plumbing and air systems big and small.

"But the genesis of every good thing to bear the Taco name starts right here in Cranston," continued White. "Our employees are the greatest treasure of all because of the pride they take in the work they do, and in the way they work so well together. In the grand scheme of things, we're a small company, but we've learned how best to make a big impact in a global market."

And that's how Johnny White deftly steers a listener's attention back to their "reason for being." Known for their "It's all about you" marketing campaign, Taco's unified focus is the installer, meeting their many varied needs with products and technology designed and built for the long haul.

At the core: product innovation

Taco managers today emphasize their focus on systems. "Though we may have started with a concentration on components, the company shifted to an emphasis on the system about 15 or 20 years ago," said Mark Chaffee, director of residential marketing. "It was a gradual shift, but one that turned into an allencompassing focus more recently as technology and installation techniques have permitted the integration of building systems.

"Hydronic systems now can source heat from the ground, or the sun," added Chaffee. "We can mix heat sources and offer more traditional fueled-system back-up heat. Of course, domestic water can be married to this, and there's even the integration of hydronics with forced air – visible on the residential radar, but much more prominent in the commercial market."

And, there's green. In the past five years or so, an emphasis that's become an overlay to Taco's system focus has been the need for product innovation in the green realm.

"In the past, successful products needed to work well," said Todd Facey, Taco's senior vice president of residential sales and marketing. "Then they needed to work better . . . install easier and faster . . . and now, perform with utmost efficiency, even allowing the integration of system functions for greater overall system efficiency. This is at the root of one of the most remarkable transformations we've seen in the industry, and we're glad to be at the innovative, cutting edge.

"It's been amazing to see this metamorphosis from the inside, and yet – as well – through the eyes of installing contractors and homeowners, too," added



An installed WAGS shut-off valve from Taco is added assurance against water heater leakage.



Manufacturing at Taco.

Facey. "Plumbing and mechanical contractors today offer greatly more varied recipes to improving homeowner comfort. Ten or twenty years ago, it seems that there were perhaps good, better, best options, but even these were limiting.

"Installers now speak freely with home and business owners about comfort systems that integrate, use energy very sparingly and monitor outdoor temperatures to calibrate operations inside," Chaffee said. "And Taco continues to broaden and refine its product offering each year."

Popular Taco products and technology include:

- Single-speed, multiple-speed and variable speed hydronic circulators
- Hot water recirculation systems

• WAGS shut-off valve to prevent failed water heaters from flooding houses

- Expansion tanks
- Zone, pressure and mixing valves
- Air separators
- Heat exchangers
- Water and gas shutoff valve for water heater safety

• HVAC controls (iWorx - combining HVAC and hydronics)

LoadMatch for commercial systems

Cover Story



Johnny White remains as close as ever to Taco products and employees.

Not long ago, Taco introduced the LoFlo Radiant Cooling System. Chiefly for use in commercial structures, the system is designed to supply both cooling and heating for large interior spaces.

Hydronic systems use approximately half the horsepower and half the materials to move heating and cooling energy around a building when compared to forced air systems. In contrast, Taco's LoFlo radiant cooling system uses only one-third of the energy and materials to move heating and cooling energy within a building's interior when compared to air systems.

Low flow radiant convective cooling eliminates condensation problems by decoupling latent and sensible cooling.

A radiant cooling system uses only 1 to 2 changes of (outside) air flow per hour compared to 8 to 12 air changes per hour for an all-air system. As a result there's a substantial reduction in the energy needed to move BTUs around a building. This savings can approach one-quarter of the total HVAC energy in a building over a VAV system. Incorporating Taco's LoFlo injection pumping further reduces energy consumption.

Project FloPro

At Taco, it's not all about product innovation. One if the company's newest developments is a neighborhood for social networking: www.floproteam.com.

"Taco's FloPro Team concept is a successful, multi-level program that builds affinity between contractors nationwide," says mechanical contractor Ross Goldstein, Ross Mechanical Group based in Huntingdon Valley, PA.

"I've been an active FloPro member since I learned about the 'community' they were building," he added. "Since that time, Taco's

added incredible depth and capability to their service. I'm hooked."

Another FloPro devotee is Dave Yates, president of York, PA-based F. W. Behler, Inc. who was recently introduced to the newly-launched FloPro neighborhood. The website avails a robust suite of services and capabilities, all available free of charge to contractors, system designers and other professionals seeking easy access to information about hydronic systems and technology, radiant heat and a wide variety of new and emerging applications.

Simply log on, join the FloPro Team and reap the benefits. The moment you



John Barba adds flair to Taco training sessions.

check in, you'll join a quickly-growing "neighborhood" of experts looking for industry news and insights, gained through online and call-in technical support, videos and podcasts, and even "Twitter" and Facebook networking communications.

"The whole concept of Taco-specific social and professional networking began a few years ago during a Trade Council meeting," says John Barba, Taco's director of training. "What was unexpected, but totally welcome, were the friendships and connections that developed."

"When you put a group of people in the heating business together for several days, some amazing ideas materialize and strong relationships are formed," continued Barba. "The energy and spirit created during that meeting is something we wanted to capture and share with others... now it's taken form online in the FloPro Team. Members can easily discover new product applications, solutions for jobsite challenges, or to seek advice from – or to help – another professional.

"We wanted to create a community of installers, then supply them with the training, tools and the way for them to interact with each other in a personal, private and professional manner," he added.

"I'm sure it's no accident they call it the 'neighborhood'," concluded Goldstein. "Good neighbors look out for each other. They loan tools and share experiences. We're sharing, inspired and encouraged. And we get the sense that we're all in this together."

Taco sells its products through wholesalers, and is represented in the field by independent sales representative agencies. The company also sells products direct to original equipment manufacturers (OEM), mostly to boiler and fan coil manufacturers.

The company can be found online at www.taco-hvac.com.