Every year I make room in my schedule for the annual AHR Expo. This year it was held at McCormick Place in Chicago, January 26-28. Over 60,000 HVAC professionals attended the show, which featured over 2,100 exhibitors. As a contractor, it is difficult to leave town for a week in the middle of heating season, but this show is a “must attend” for me.

The AHR Expo is so extensive that if you simply wander down the aisles, something is bound to catch your eye. You will never make it through the entire show. I like to make a list of people and exhibitors to see first. This list contains a mix of my industry partners I currently do business with, key industry contacts, trade press, potential future vendors and new products I want to investigate. After running down my list, if I have time, I will walk the show to see what else is new.

Bradford White/Laars

My first stop was at the Bradford White/Laars booth. This was high on my list because I wanted to find out more information on the National Appliance Energy Conservation Act (NAECA), mandated by the DOE to improve water heater efficiency. I knew it was coming, and that it would take effect in April, but I have to admit I knew very little else about the changes and how they would affect my company and my clients.

I tracked down Chad Sanborn at Bradford White. Chad updated me on the changes in the energy standards and cleared up some misconceptions. First, the standard applies to manufacturers only. After April 15, newly manufactured water heaters must be in compliance with the new standards. Water heaters already in the pipeline in a wholesaler’s or contractor’s inventory can still legally be installed.

One way to comply with the new standard is to increase the amount of insulation around the tank. This means a given capacity tank will be physically larger. This might not be an issue in an open basement, but it could cause problems if the water heater is installed in a closet or tight mechanical room. Break out your tape measure before quoting that next water heater replacement. For a complete rundown on the new NAECA standard and how it will affect you, visit www.bradfordwhite.com/naeca

I then walked around the corner to the Laars side of the booth, where I chatted with Chuck O’Donnell. Chuck brought me up to speed on some new residential products from Laars. I had previously installed some Laars commercial boilers, but the residential line was new to me. What caught my attention was the new heat exchanger used in their residential boiler and DHW heater lineup. It is a heavy-duty stainless steel fire-tube design in a down-fire configuration. It holds about four gallons of water and is designed for a low pressure drop. I like this new design, and I will definitely check this one out when my local supplier puts it into inventory.

Weil-McLain

My next stop was the Weil-McLain booth, where I ran into my old friend Bill Price. I see Bill at various trade functions every year, and it is always good to catch up with him. Bill introduced me to his co-worker, Julian Webb. I was familiar with most of their products, but Julian introduced me to two new products I had not seen before.

The first was the Evergreen 95 percent modulating condensing boiler, designed for the large residential and light commercial markets. It comes in three sizes: 220, 299 and 399k TU/hr. and features a 10:1 turndown ratio. I like the stainless steel fire-tube heat exchanger and the built-in control package that features outdoor reset, zoning capability, DHW control and plain-English programming (no codes to memorize or look up). It also has an integral cascade control for up to eight boilers. This boiler is also Wi-Fi compatible, with NEST and other communicating thermostats.

The AHR Expo is so extensive that if you simply wander down the aisles, something is bound to catch your eye. You will never make it through the entire show. I like to make a list of people and exhibitors to see first.
HYDRONICS

FROM THE FIELD

The next product Julian showed me was the WM97+ stainless steel condensing boiler with integral DHW tank. It comes in three sizes: 70, 110 and 155k BTU/hr. This boiler is designed with the technician in mind. The stainless steel DHW tank connects to the boiler with union flings and flexible stainless steel connectors. Control wiring features simple Molex plugs. A low-water cutoff safety is factory-piped and wired. Pumps are included, and the boiler is pre-piped primary/secondary. These are real labor savers in the field.

Taco

My next visit was to the Taco booth to see what new products they were unveiling this year. They did not disappoint. Mark Chaffee took the time to show me several of their new products and systems. Two items really attracted my attention. The first was their new online project builder, now available on the Taco website. It allows you to create project schedules; to select pumps, specialties and equipment; and to download submittals, pump curves and specifications for your jobs. It is designed for contractors, reps and engineers. It allows projects to be saved online and viewed by partners for a collaborative effort. It is a real time saver and the price is right—it’s free.

Next, I met with Doug Bird, who showed me the complete line of Viridian ECM variable-speed pumps. I was somewhat familiar with the larger Viridians, which I have used on our commercial projects. They have filled out the line with smaller residential-sized products. The VR1816 is their smallest residential Delta-P pump, which is a good pump to use when zoning with zone valves. The next size up is the VT2218 Delta-T pump with an integral control board and digital display. The new VR3452, as well as the larger Viridians, will accept a 0-10v external signal for commercial projects with building automation systems. The entire line of Viridian pumps is electrically efficient, and they use anywhere from 50 to 80 percent less energy than a comparable PSC pump motor.

ECR/Utica Boiler

My next visit was to the ECR booth, where I met with Simon Olean and took a look at a couple of their boilers. The first product he showed me was their entry-level CuB series 85 percent modulating, non-condensing boiler, available in both space heat only and a combi space heat/DHW model. It features a copper heat exchanger with an induced draft design. It can either sidewall vent or vent into a lined chimney.

The next boiler I looked at with Simon was their entry-level 95 percent SSV condensing line with a vertical stainless steel heat exchanger. I really like their proprietary stainless steel vertical tube heat exchanger. It features a self-cleaning down-fire design and a large-passage waterway for a low pressure drop. I also like the boiler control with a plain-English text display.

Next, Simon showed me their top-tier, full-featured SSC boiler. This is very similar to the SSV, but with the addition of a factory-installed LWCO, an integral boiler pump and built-in primary secondary piping, which really simplifies field piping. Both models can be wall-mounted or floor-mounted with an optional rack.

AERCO

My last stop was at the AERCO booth, where their innovative products have always impressed me. I met with my friend Harold Krebs, who showed me some of their new products and systems. First we talked about their acquisition by Watts Water Technologies, which occurred fourth quarter 2014. Both parties are excited about the future of this partnership.

Harold first discussed their AERCO Advantage program, which is designed to help their contractor partners with design, training, start-up and maintenance of their products and systems. They have deployed several trailers, which travel to the contractor for training on live fire equipment. As a contractor, this saves time and travel expenses, so it is very attractive. This is forward-thinking by AERCO to invest in their installing contractors. It is sure to pay future dividends.

Harold next showed me their AM product, designed for both heating and DHW. It can go from 399k to 1 million BTU/hr. and features staged, modulating burners. It is factory-piped and skid-mounted, with an external buffer tank. This really saves on field labor.

Harold next showed me their Innovation high-efficiency commercial water heater. This unique product is up to 99 percent efficient, and it features a tankless stainless steel heat exchanger and a modulating burner with a 20:1 turndown ratio. This unit packs a lot of power in a small footprint. Its innovative flexible-tube stainless steel heat exchanger carries a long 10-year warranty. I have not installed one of these yet, but I am looking forward to trying one on my next commercial project.

AHR 2016

The next AHR Expo is scheduled for January 25-27, 2016, at the Orange County Convention Center in Orlando, Florida. I would encourage you to attend to meet your business partners, meet new potential partners, see old industry friends and take in all the new products there. I have it on my calendar, and hope I see you there next year.

Dan Foley is president and owner of Foley Mechanical, Inc., based in Lorton, Va. FMI specializes in radiant, hydronic and steam systems, as well as mechanical systems for large custom homes. He can be reached at 703-339-8030, dfoley50@verizon.net, or www.foleymechanical.com.