The boiler market is heating up. With the residential market set to surpass $12 billion by 2024—fueled in part by new standards and codes toward adoption of efficient heating technologies—and the industrial market nearing $14 billion in 2021, contractors should pay close attention to what is happening in the boiler industry.

Staying on trend
One of the biggest trends in boiler products is the growth of connected controls, which are Wi-Fi accessible and allow the user to control their boiler anywhere Wi-Fi is available. Connected controls are growing in popularity among both consumers and tradespeople. Consumers get extra options traditional products may not offer, and can control their home's heating and cooling from anywhere—from the comfort of their home, from work, on the way home or on vacation. Using the Wi-Fi connectivity, a homeowner can adjust the temperature from his or her mobile device, turning heating or cooling up or down as needed, or checking the temperature to ensure it is optimal for that particular day—even overriding the timer if necessary. This gives homeowners peace of mind as well as better regulation of their home's HVAC system.

For service professionals, a potential future advantage is the ability to remotely monitor and diagnose certain problems. Right now, when a consumer experiences an issue with a boiler, a contractor must diagnose the problem on-site. If the boiler needs a part, the contractor must go to a wholesaler or parts supply company, which delays the fix.

In the future, a smart system will allow a technician to see what error code the boiler is throwing before he or she even walks in a homeowner's door, allowing the tech to be better prepared with parts and a time estimate of how long the fix might take. While this capability is still being developed, it is likely we will see remote troubleshooting capabilities in the next few years. This will result in faster, simpler fixes.

There is another layer to the connected controls trends: troubleshooting will involve more electronics knowledge than it currently does, so technicians will need additional training. While some technicians may be less than thrilled to hear that, this scenario is roughly analogous to mechanics having to learn the computers that became part of all new vehicles a couple of decades ago.

Another new capability still in the early stages is a boiler's compatibility with the rest of a smart home. While this is still developing and remains a novelty at the moment, eventually a heating/cooling system will be perfectly integrated with the rest of a home—not only responding to commands, but also anticipating needs. For example, if the heat is running and the homeowner opens a window, the system would sense the open window and shut the heat off automatically.

Connected controls and smart homes might sound too futuristic to some—after all, not everyone has the desire to interact with their appliances on that level—but like it or not, this developing trend will influence the boiler market in the future as consumers realize the convenience, access to data, and peace of mind smart homes will provide.
Another trend in boilers that is not new, but gaining traction, is the shift toward combi boilers. A standard boiler heats the space, but requires a secondary appliance to deliver domestic hot water. The combi system handles both applications with the same product, eliminating the need for a secondary appliance, and delivering space heating and hot water to the meet the customer’s comfort requirements in one system. Most homeowners won’t need or want to replace the existing hot water heater and boiler at the same time, but combi boilers are good options for new construction, where contractors have the opportunity to install one product that does two jobs and provides optimal comfort.

Lastly, plug-and-play is an ongoing trend. Manufacturers are looking to make the installation process more effective and efficient for the installer. This helps contractors, allowing an installer to get the job done faster and move onto the next one.

To stay on top of these and other rising trends in the boiler industry, contractors should:

- Listen to the industry and be open to the changes end users want.
- Engage with manufacturers by giving feedback and sharing experiences.
- Participate in continuous training in order to gain new skills and knowledge on new products and techniques.

Installation, servicing and troubleshooting tips

Of course, it is not enough to only keep up with industry trends—it is also important to keep tabs on installation, servicing and maintenance tips and best practices. Even seasoned contractors might find something new to learn from others in the industry.

Installation

This may seem like basic advice, but it bears repeating: the most important thing a contractor can do for himself or herself and the customer is to get comfortable with the product he or she will be installing. The best way to do this is through the manufacturer's installation manual/brochure. No one knows the product better than the manufacturer, so don’t take this resource for granted.

If the product is new to the tech or contractor and they have never installed one, they should not read the manual the morning of installation. An ideal scenario is to have the appliance delivered in advance and review both the product and the manual ahead of time to get the lay of the land.

Servicing

Familiarity with the installation manual comes in handy when troubleshooting and servicing as well. Without a base knowledge of the manual and the ability to follow manufacturer-recommended servicing flow charts, a contractor might replace a part without knowing that particular part was the culprit. That can lead to a frustrated homeowner that needs to call for service yet again.

Additionally, the new high-efficiency products on the market do not necessarily have the same indicators older products have; they instead show an error code,
just like a car with a “check engine” light on will when plugged into a diagnostic system. After determining the error code, technicians need to follow the troubleshooting guide and trace the entire circuit, and this will generally lead to the problem. The code does not diagnose the problem; it merely functions as a helpful indicator of where the problem resides.

Of course, learning the error code does not guarantee a diagnosis; sometimes it still does not lead a technician to the solution. When that happens, don’t be afraid to call the manufacturer directly. Every manufacturer has a call center with people who can help guide a contractor over the phone. Be sure to have the troubleshooting guide nearby, as one of the first questions support personnel will ask is what manufacturer-recommended steps have been taken to identify something has failed.

While the call might seem excessive, or if it seems it will take too much time, think of it this way: if a contractor misdiagnoses a problem on an appliance that continues to fail, their reputation with the homeowner will suffer, and review sites like Angie’s List, combined with good old-fashioned word-of-mouth, may impact their reputation beyond that single customer. It is better to get help to fix it the first time, rather than risk a professional reputation.

Finally, when troubleshooting and performing maintenance, develop a routine. The more a tech or contractor performs that routine, the less they will forget to check and double-check something. If they can trace every possible service situation they perform in a direct line from step A to B to C to D and so on, they will never miss a step.

**Continued education**

Don’t be afraid to learn about new appliances. Contractors who have been in the business for decades may have no desire to learn how to install and repair the newer high-efficiency equipment, but it is what most homeowners want these days. Contractors looking to maintain or grow their business will need to roll with the punches and get familiar with the new appliances.

When it comes to learning to install and repair new appliances, contractors have resources available to them. Manufacturers offer training sessions to get technicians familiar with their specific products, and it is a good way to learn about the equipment through firsthand experience. Some manufacturers will travel to the tech or contractor, while others might prefer to work in their own labs. Either way there are plenty of options for contractors who want to gain more experience with a particular manufacturer’s appliances.

Remember, there is no such thing as a stupid question. Manufacturers are motivated to ensure that the contractors installing and servicing their equipment are doing so correctly, and their support staff will be more than willing to help with any question or issue the HVAC professional encounters. After all, their reputation is on the line, too.

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