

Heating Up



Interesting Times Ahead in 2020

We offer a few thoughts in this issue about what's ahead in the coming year from three really smart people: Nick Reggi, CMS, our International Past President; Vern Sanderson, the new president of Refrigerating Engineers & Technicians Association (RETA), commonly thought of as the industrial ammonia group; and our own EVP Lori Schiavo. Check out our 2020 Outlook beginning on page 18.

The high-level view is that equipment will continue to get smarter and smaller. In terms of smarter, we have two articles on the Internet of Things in this issue. One is a news story about a collaboration between Danfoss and Microsoft that's on page 6. The second is in The Last Word column on page 38 from an executive at Motili, a unit of Daikin, about an HVAC IoT solution for commercial building owners. It's all about saving money. Supermarket operators and commercial building owners can save money by keeping tabs on equipment through smart and communicating control systems. The smaller aspect, in terms of the 2020 Outlook for refrigeration, means to look for small packaged propane systems feeding glycol loops to the cases or roof-mounted low-charge ammonia systems.

One issue I plan to sort out in 2020 is the increasingly confusing world of new refrigerants that's confusing based on the legislative, regulatory and judicial turmoil that's going on. The California Air Resources Board is continuing its own HFC phase-out based on EPA rules that were partially invalidated by a Federal Appeals Court. Sixteen states plus Puerto Rico plan to follow California's initiative, but meanwhile EPA is revising the SNAP rule that was struck down by the courts. And, also meanwhile, the Uniform Mechanical Code

and the International Mechanical Code have both put off attempts to increase the amount of A3 refrigerants like propane that can be used in refrigeration systems. And then there are big national firms like Aldi and Walmart spearheading the move to CO₂ systems. So what's a contractor or service technician to do? We'll sort it out in the coming months.

Reggi, talks about this in our 2020 Outlook article in his comments about the market moving to low-GWP blends and HFO refrigerants and natural refrigerants. "Our classic form of training using A1 refrigerants with the good old single-speed, on/off, cooling-only system has become stale," Nick writes. "The industry requirements are diverging from this design concept while incorporating a multitude of newer refrigerants with variable speed components, variable capacity, improved energy and comfort needs, with cascade, compound, booster systems that can simultaneously heat and cool."

The level of complexity has led Reggi to advocate for a national training standard. Unfamiliar refrigerants and equipment designs not seen before make it difficult for even seasoned technicians to learn the skills they need. It might be the time for contractors, manufacturers, educators and other relevant parties to talk about how we're going to navigate through the changes. ☺

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