

# Up Close

Behind the Scenes with the Industry's Leading Innovators

Choice Refrigerants' environmentally friendly options include a mid-temp R-22 replacement.



## LEADING THE CHARGE

Choice Refrigerants is making sustainable refrigeration more viable than ever.

By Julia Stone



Recover, reclaim, recycle. That's been **Choice Refrigerants'** motto since the beginning. Choice is an offshoot of **Refrigerant Management Services of Georgia (RMS)**, one of the original 13 EPA approved refrigerant reclamation centers, founded in 1993.

RMS developed their first product—Choice R-420A (HCFC), the first environmentally friendly R-12 (CFC) replacement, greatly reducing the impact on our ozone. In the early 2000s, RMS expanded the Choice Refrigerants line by adding a mid-temp R-22 replacement (Choice R-421A - HFC) and a low-temp R-22 replacement (Choice R-421B - HFC).

Choice is truly leading the charge when it comes to sustainable refrigerants, advancing the industry through education and by establishing their own line of HVAC equipment. "We're disruptors. That's what we've always been," says **PK Graff**, product development manager at Choice Refrigerants. "We are always taking strides to reduce the amount of ozone depleting gases released into the environment."

### The Importance of Reclamation

Choice is focused on further developing reclamation to make the process more efficient and easier for technicians to use coming in from the field. "Reclamation has been a mainstay of our company, and we still do it to this day. We have recovery jobs going all the time with HVAC companies," Graff says. He and his team maintain a large fleet of recovery cylinders and go out into the field to bring gases back to recertify, repackage, and resell.

Choice wants to make it easy for HVAC technicians to utilize recovery cylinders and get paid for the gas they recover. "We offer full-service HVAC solutions by selling gases and then providing an easy way for technicians to return the refrigerants to us as opposed to venting it out, which is illegal," Graff says. This not only helps the environment—it also benefits business.

The success of Choice's reclamation program hinges on good practices. "We want to incentivize the technicians to avoid mixing refrigerants," Graff says. Once technicians understand that if they turn in dirty

but high-purity gas they make a profit, it can be part of their business model. Graff says the industry realized penalizing technicians for mixed-gas doesn't work; incentive is the way to go.

### Educating the Industry

As the alternative refrigerant market expands, the biggest battle is education, Graff says. Choice is currently building an educational center to teach others about best practices in reclamation and recovery, and how to use alternative refrigerants.

"We are lovingly referring to the space as Choice University for the time being," Graff says. "We want to provide a friendly and home-like environment where people can come in, have breakfast and coffee, and then go out to the warehouse to do some hands-on learning."

Graff and his team are planning to sponsor and organize educational programs for HVAC technicians and wholesalers in order to help them comply with the new 608 refrigerant management provisions. Choice also wants to host HVAC companies in the space so they can bring in their team to teach courses on unitary maintenance, refrigerant recovery, and more. As far as teachers and instructors, Choice will feature their own courses and work with industry specialists to build high value curriculum.

### Choice Systems

Choice is the first refrigerant manufacturer to develop a line of privately labeled HVAC equipment, Choice Systems. "We have always wanted to have a line of HVAC equipment that we could call our own," Graff says. "We made this bold move to further assert our gas (R-421A), as we believe it to be the 'easy choice' to replace R-22 systems and especially to compete with R-410A systems in high ambient temperature environments and multifamily applications. Our line of equipment is brand new and still evolving every day, but it has been received very well by our customers," Graff says.

In the last year, Choice's team has had serious conversations with unitary manufacturers. "The first company to jump on board with our idea was Johnson Controls, one of the most renowned unitary manufacturers in the industry," Graff says. Running on R-421A, this new line of equipment could help the multi-family development industry by replacing R-22 systems without costly modifications to line sets.

"You get to keep all of the R-22 components that still work and replace only the broken parts with Choice Systems equipment, significantly reducing waste," Graff says. "The fight in our market is to get technicians and suppliers to understand that R-421A is the best choice in new and replacement systems. It all boils down to real-world efficiency."

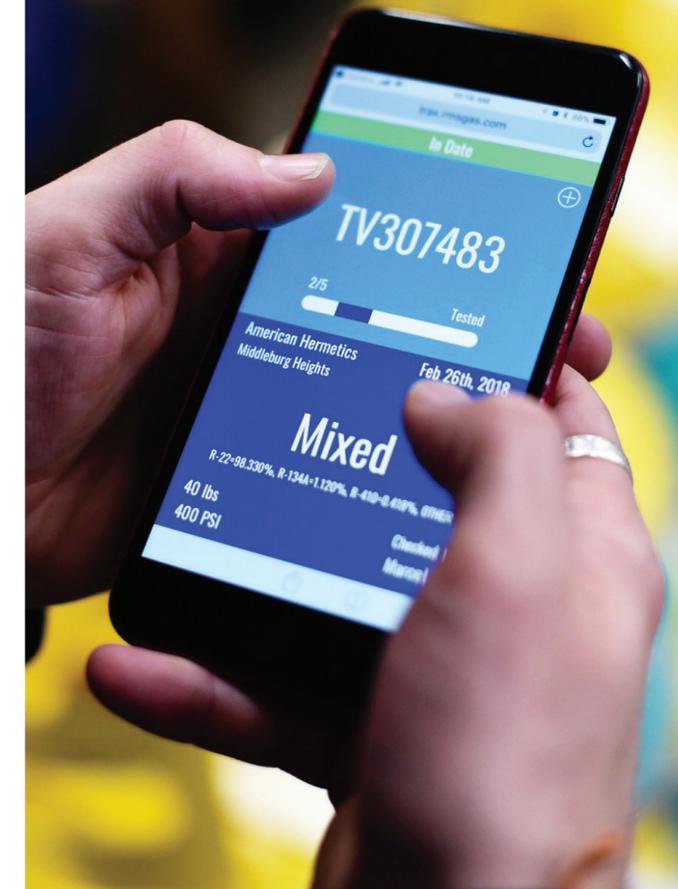
### Reducing Waste

Choice cuts back on waste when it comes to replacing HVAC systems. Technicians often tell property owners they need to replace the whole system even if only one component in their R-22 system is broken. This involves getting rid of old components that still work fine and replacing them with R-410A systems, which means high labor costs and ripping out line sets that might run through multiple interior spaces or even concrete structures.

Fortunately, Choice Systems allows users to continue using good components; they only need to replace broken parts. Their new line of equipment keeps existing equipment working longer, not only reducing waste, but cost, too.

Choice is also working on reducing waste in their manufacturing process by working directly with wholesalers and technicians. This helps reduce the amount of shipping waste. "We create a fair marketplace by driving down distribution costs, which results in savings on shipping costs—like diesel fuel, plastic, and cardboard—which leads to less waste." Our goal is improve our customer service while also coming up with innovative ways to get our products in the hands of our end-users more efficiently.

Choice's TRAX is easy-to-use record-keeping software that tracks the refrigerants sold, used, and recovered.



### Research & Development

Choice is investing in R&D to better understand their customers and supply chain. They are using algorithms, machine-learning, and artificial intelligence to glean insights into their data—from when their shipments need to arrive to which parts of their production process are costing the most money, time, and energy. "By improving parts of the manufacturing process, we'll improve the whole," Graff says.

Choice is helping to lead the way in managing the recovery and record-keeping requirement in the 608 provision—pushing to implement new services on platforms like a cloud-based version of their TRAX software. "In the future, we'll use our manufacturing data to further improve processes and continue to provide products at the best market value we possibly can," Graff says. TRAX is an easy-to-use record-keeping software that helps wholesalers, owners, and technicians re-

cord and track the refrigerants they sell, use, and recover—making 608 compliance easier.

### Defeating the Odds

Big companies typically have massive teams, but Choice can get work done quickly, too. The head of operations is in the office next door to Graff, and he has a direct line of communications with the owner/CEO. "If you want to get a cog in the machine moving, I know exactly who to talk to, whereas that might take weeks in a big company."

Being a small manufacturing facility can be a disadvantage at some times, but that doesn't stop Choice from leading the charge toward a greener, more sustainable future. "In an industry with big-name companies with billions of dollars of revenue, we're this little disruptor down in Georgia that comes up with innovative solutions, and the industry has learned that Choice punches above its weight class and will continue to do so." ☐

PHOTOS: COURTESY OF CHOICE REFRIGERANTS