Skills WORKSHOP
Refrigerating systems and heat pumps

FEATURE
Chiller queen

Launch your career
TIPS FOR HVAC&R APPRENTICES
At the end of each quarter, the mentor, apprentice and regional manager will meet and formally discuss the apprentice’s performance and provide any feedback. We also have a detailed task competency matrix – a list of tasks and the timeframe for when we expect the apprentice to be able to competently complete the task. For example, by six months, can they demonstrate correct swaging and flaring? It is quite an extensive list in excess of 100 items, but they have four years to work through it.

Once the mentor is content that the apprentice can demonstrate this, they will sign off on the task in their handbook.

“Given the size of our company, it could be quite easy for an apprentice to get lost in the system.”
We identified this quite early on and put steps in place to mitigate against this. We have developed and implemented a structured training plan for our apprentices, above and beyond the requirements of the apprenticeship board and TAFE. We wanted to ensure that the apprentice is given the right opportunities to develop the skills they require to become a good tradesperson, as well as the right attitudes at the end of their apprenticeship.

“The plan involves assigning the apprentice to a tradesperson (mentor) to work with, and rotating that mentor every quarter.”
This ensures that the apprentice gets to work with a wide variety of tradespeople and has exposure to different attitudes, approaches, and methods.

“With almost 300 team members, Woolworths/RetailFM are one of the largest commercial refrigeration employers in Australia.”

As a school leaver, getting a start in the industry will be both one of the hardest and most important things you’ll do in your career. To help you ensure that first step is a successful one, Woolworths’ national installation manager Shaun Merry shares the company’s approach to apprenticeships with HVAC&R Nation.

“Retail FM is Woolworths’ in-house facilities management business.”
Retail FM was founded in 2013 as a wholly owned subsidiary of the Woolworths Group.
Our sole purpose is to provide refrigeration and HVAC facilities management services to the Woolworths fleet of stores and associated brands. We carry out servicing and maintenance on both refrigeration and HVAC assets, as well as design and installation work on refrigeration projects – both in new stores and renewal projects.

“Our teams are state-based, and we have offices in every major capital city, as well as team members in the majority of large regional areas around the country. We are also well supported by an extensive sub-contractor network around the country.

While the apprentice needs to try their hardest and put in the effort, as a business and employer we need to ensure we are providing them with the right opportunities and direction to make them good tradespeople.

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This might seem excessive for smaller companies, but I would certainly encourage at least all larger employers of apprentices to introduce a similar strategy for mentoring its apprentices.

“We recognise that it’s a two-way street.”

While the apprentice needs to try their hardest and put in the effort, as a business and employer we need to ensure we are providing them with the right opportunities and direction to make them good tradespeople.

“We currently have 20 apprentices as part of our team.”

This has grown from around 10 in 2015, and I can see this growing further in years to come as we continue to invest in them.

I can also proudly say that we have recently employed our first female apprentice, and although only one for now, is still a fantastic step toward an increase in gender diversity for our team.

“I hold high regard for applicants who have taken the initiative to gain pre-start qualifications such as the Certificate II in Electrotechnology that TAFE offer.”

Any previous work experience that they can gain, which highlights that they have taken a vested interest in their career, is also generally highly regarded.

“When we have a new apprentice, I don’t expect a lot from them in regard to technical competence – after all, they are here to learn that.”

Technical competence will come with the right attitude and a willingness to learn.

But communication skills are often an issue.

I find myself reiterating to apprentices that they need to ask questions. And, if they don’t understand something – speak up.

Effective communication should be two-way. They should be discussing things with their mentors and asking questions, not just listening to what has been said and hoping that they understood it correctly.

“TAFE is always a topic I like to touch on with our apprentices, just to make sure they are not having any issues.”

Every now and then we will have an apprentice who may struggle with a module for one reason or another. Realistically it’s probably just pride, but they are generally reluctant to ask for help.

We have a wealth of technical knowledge in our team for them to get coaching from, but if they don’t speak up and ask for help, they have to struggle through it alone.

If you’re not sure, just ask!

Attitude. Attitude. Attitude.

Being punctual and respectful in the interview is a must.

Know your stuff.

For an apprentice, I will always ask, “What can you tell me about refrigeration?” I have had answers ranging from, “I don’t know. I guess it makes stuff cold.” to, “It uses gas to move heat from one area to another.” I’ve even had a few who could name the basic system components.

This quickly highlights who is really interested in the role, and who just wants a job.

Familiarise yourself.

Research the company that you are applying with.

For example, if an applicant doesn’t even know who Retail FM is, they can’t be too serious about the role!

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“When working with HFCs – or any other refrigerant for that matter – stop and think before acting.”

Given that the HFC phase-down will almost certainly see a far greater reliance on natural refrigerants (CO2, hydrocarbon, ammonia) with their own disadvantages (high pressure, flammability, toxicity), I actively encourage apprentices to stop and take a moment to think about what they are doing before acting when they work on a system.

All of these refrigerants transfer heat. The basic principles are generally the same, but making a mistake could have far more severe consequences than a HFC system.

“There are a few reasons for the skills gap in our industry, but undoubtedly the biggest is that a lot of larger companies don’t seem to be employing as many apprentices as days gone by.”

When you consider the attrition rate of technicians leaving the trade, we need to ensure that we are investing in the future and training the technicians of tomorrow.

“Recognising the skills shortage in the industry, we are in the process of implementing a training plan for our technicians to ensure they receive hands-on training in new technology.”

Given the specialised field that supermarket refrigeration has become, we have developed a structured internal training plan for our own team focusing on the equipment and technology that we readily employ in our fleet of stores.

“Woolworths has just opened its first supermarket in Australia to employ transcritical CO2 technology at the Greenway Plaza shopping village in Western Sydney.”

If we go back to the concept stages of this project when we decided to go down the T-CO2 path, the biggest known risk was clearly local industry knowledge, or the lack thereof.

It was at this time that we made the conscious decision to invest in local industry partners and work with them on this project.

We recognised that an easier option may have been to import plant from Europe or North America, but saw far greater long-term value in providing this opportunity to local suppliers with the view of upskilling local industry.

Rather than being thrown into the deep end, offering the opportunity for hands-on experience in a controlled environment has been important. By investing in local industry, and engaging with the wider team as we move along this journey, I firmly believe we can overcome any issues around lack of experience.

And, as we grow more comfortable with the technology, we will begin to expose our apprentices to it also.

“I can’t stress the importance of engagement on a project such as this.”

As we moved into the more detailed design phase of this project, stakeholder engagement was of paramount importance. We held countless roundtable meetings to talk through every facet of the project.

These meetings included everyone from engineering staff who were working through the design, to the service team that would be looking after maintenance, as well as plant, controls and components suppliers and everyone in between.

“And we approached the commissioning phase with much the same mindset.”

We have had more than 30 team members attend hands-on training at Bitzer’s St Mary’s facility, and further to this, we have had our service team actively participate in the commissioning phase of the systems at Greenway Plaza.

The foremost resource

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