

HVAC&R

Nation


AN AIRAH PUBLICATION

FEATURE

Evaporative
condenser
safety

Skills WORKSHOP

HVAC&R
pressure-control
settings
and valves



THE SKILLS GAP



**WHY ARE SKILLED HVAC&R APPRENTICES
BECOMING HARDER TO FIND?**

MIND THE GAP

In another sign that our industry's skills gap is widening, small and medium contractors in Queensland are finding it increasingly difficult to recruit and retain capable, qualified tradespeople. As **Sean McGowan** reports, the issue led to a recent forum that found support for licencing and pathway reform.

For at least a decade, the HVAC&R industry has talked about a skills gap, or skills shortage. But for one reason or another, it has continued to widen to become not-so-much a gap, but a chasm.

In South-East Queensland, a lack of capable and qualified tradespeople is affecting the ability of small and medium-sized RAC contractors to deliver their projects – particularly during peak summer periods.

The latest Australian Government Department of Employment report on the state of the air conditioning and refrigeration mechanic labour market in Queensland reinforces this view.

“

The research shows a state-wide shortage of RAC mechanics, with 45 per cent of all vacancies remaining unfilled four weeks after advertising

”

The research shows a state-wide shortage of RAC mechanics, with 45 per cent of all vacancies remaining unfilled four weeks after advertising. There are reports of some employers taking over four months to fill vacancies.

“On average there were 6.7 applicants per vacancy,” says the report. Perhaps more concerning is that an average of just 4.2 applicants were qualified for these positions.

“Half of all employers did not fill their vacancies, and 40 per cent advised that their vacancies attracted no suitable applicants,” the report says.

Even recruiters for medium and large-scale projects in Queensland are being forced to draft in experienced engineers and project managers from interstate, with their clients incurring relocation costs.

But this is an issue that does not recognise state borders.

In New South Wales, Department of Employment reports revealed an average of five applicants per vacancy in the RAC mechanic labour market. An average of 0.7 per vacancy were considered suitable by the employer.

The Victorian experience is similar, with employers receiving an average of 8.1 applicants per vacancy, of which an average of only 0.9 per vacancy were suitable.



It can be up to three years or more before a HVAC&R apprentice becomes a financial asset for the business.



As the HVAC&R industry's skills gap continues to widen, skilled apprentices are becoming harder to find.

"Metropolitan and regional employers both noted that online and newspaper-based recruitment avenues typically attracted low applicant numbers, and as a consequence multiple recruitment attempts, were frequently undertaken," says the Department of Employment report.

"Further to this, approximately a third of the surveyed employers reported that they had only been able to source suitable applicants via word-of-mouth and industry networking methods."

It lends credence to growing concerns that the HVAC&R industry is not only facing a skills gap, but is also suffering from an identity crisis in the broader community.

GRASS ROOTS

Add Staff Recruitment specialises in recruitment and apprenticeships in the HVAC&R and electrical industries. It works closely with many HVAC&R contractors in South-East Queensland, as well as regional centres in the west and north of the state.

According to managing director Melissa Stanford, at any given time Add Staff generally recruits between five and 10 refrigeration and air conditioning mechanics for its client base of contractors.

But recruiting and retaining staff has become a major problem for her clients.

"In our experiences engaging with a range of small, medium and large contractors, I would suggest it is most difficult to recruit and retain staff within the small and medium-sized HVAC contractors," says Stanford.

"And we have found this to be especially the case in regard to residential installation and service technicians."

Although some might expect to find a similar skills shortage across a number of other trades,

LOVE THE ONE YOU'RE WITH

If you were selling the HVAC&R industry to a school leaver who was considering taking up a trade, what would be your message?

Is it the high demand for labour within the sector, job security, generous hourly rates and remuneration packages at all levels or the opportunities for continual professional development?

According to Melissa Stanford, managing director of Add Staff Recruitment and Apprenticeships,

all of these should be key selling points for the industry, as well as the diversity on offer.

"I love that this industry is so diverse, and offers a broad spectrum of technical challenges along with long-term development opportunities," she says.

"From large industrial refrigeration plants, cold rooms and processing facilities, to cooling of commercial and data facilities, supermarket refrigeration, construction projects and residential installation – the industry has a lot to offer."

Stanford says it is much more challenging to recruit suitably qualified and competent HVAC staff than electricians, for example.

"As a comparison, we generally receive between five and 10 resumes for a refrigeration mechanic advertisement, but between 100 and 200 resumes for an electrician," she says. "And quite often, the RAC applicants are not suitably qualified for the position they are applying."

Likewise, Stanford is surprised by the limited uptake in the employment of apprentices in the RAC industry – at least in Queensland.

And she says the industry's low profile within the broader community may be to blame.

"There will always be a challenge with RAC not being one of the traditional trades," she says.

"Therefore, the industry is not at the forefront of aspiring tradespersons minds when they are deciding on their future. This in turn limits the potential apprentice candidate pool for employers in the sector."

INDUSTRY CONSULTATION FORUM

Established in 2008, Energy Skills Queensland (ESQ) is an industry skills body operating in the energy, rail, telecommunication, and greater electrotechnology sectors of Queensland.

It provides industry intelligence, engagement and development programs to support industry, government and the training sector. This includes producing labour market research targeted toward workforce skilling changes driven by industry and technological demand.

So, when Add Staff approached ESQ about the problems it was having filling RAC vacancies for its clients, ESQ proposed an Industry Consultation Forum to identify the drivers behind the skills gap.

In preparation for the forum, ESQ's industry skills adviser Russell Rohde carried out considerable research into what the current and historical state of the RAC trade.

He found the fragmented manner in which the industry is supported to be a major contributing factor to the ongoing skills shortage.

But he also found many parties within the HVAC&R industry who openly appoint the blame towards other trades with a higher level of influence, primarily through union and employer associations support.

“Everyone, I think, will agree on some level that while making the RAC trade more attractive for potential apprentices is important, it is equally necessary to investigate how to make small and medium employers want to pass their trade onto a new worker,” Rohde says.

Additionally, Rohde found historical support for a dual-trade pathway in both RAC and electrical qualifications, with pledges for over 100 dual-trade apprentice positions in Queensland.

“At the same time however, the very strong polarised views of the electrical industry held by many within the HVAC&R industry became evident.”

“

It is much more challenging to recruit suitably qualified and competent HVAC staff than electricians

”

CHICKEN OR THE EGG?

To assist the forum outcomes, ESQ created a survey for industry stakeholders to complete prior to attending.

Much of the feedback via the survey pointed to a gap in knowledge and training of the use of natural refrigerants, as well as a lack of fault-finding skills.

These results are reflected in research conducted by the Department of Employment, which cites a lack of experience as the main reason for a potential employee being considered unsuitable.

A lower than required proficiency in finding, diagnosing and fixing faults, as well as knowledge of specific manufacturers' units, means many applicants are not considered for vacant positions.

But with fault-finding and diagnosis covered in training courses, one has to wonder if it is the training by the registered training organisation (RTO), or apprentice on-the-job training with the employer, that is failing to address this vital skills gap?

“It is important to remember that an apprenticeship includes training from both the RTO and from the employer,” says Rohde. “And it is also important for the employer to be able to provide a scope of work broad enough to build fundamental skills to be transportable across all aspects of the trade.”

Having owned a small contracting business, Rohde understands the reluctance by some small

and medium employers to employ apprentices given it can be up to three years or more before an apprentice becomes a financial asset for the business.

And he says the high seasonal fluctuations in RAC business-demand further compound such issues.

It's why he says appointing training courses as the only method to fill the skills shortage is an easy mistake to make.

“It is also easy from a small-to-medium employer's financial risk-assessment approach to seek only candidates who can demonstrate that they already fit the brands and scope of work performed by a business.”

LICENSING

As well as industry employer feedback on the state of the current RAC labour market, the pre-forum survey conducted by ESQ also found strong consensus for the establishment of a national licence to help address the skills gap.

“Further discussion on this has suggested that many in the RAC trade desire an occupational licence driven by skill, and not refrigerant handling licences,” says Rohde.

This will warm the hearts of many and at the same time dismay others, such is the polarity in views around licensing.

While proponents on either side of the debate will argue how this might advantage or disadvantage the HVAC&R industry as a whole, Rohde is of the personal view that the RAC trade should be recognised as an occupational licence.

“I do not think it is feasible to approach it in a traditional one-size-fits-all national licence handled and maintained by a single federal body,” he says.

“A frank and honest assessment of what can be achieved by broad industry licensing and regulation is needed before determining if it will improve skills shortages. Again, because the industry is so fragmented, it is difficult to pin-point, any one thing the industry is calling for.”

The introduction of “cross” or “dual trade” skill recognition may be just as an important driver to reducing the skills gap, with support growing for a dual electrical and RAC licence a possibility.

But any dual-trade outcome will not only have to overcome the polarised views in the industry, but also solve potential licensing and industrial relations challenges.

And then there is the small matter of just how much training is required before a license is awarded.

“A minimal number of respondents stated that any second trade should take another minimum of four years, while others believe that a dual trade could reasonably be less than four years,” says Rohde.

He says that in Queensland, any apprentice undertaking a dual trade incorporating an electrician outcome cannot be issued with a licence until the completion of the training contract.

“This means that even after four years in a dual electrical and RAC trade, an apprentice cannot apply for the electrical licence while still undertaking training for the RAC outcome.”

Such an outcome will therefore require recognition of prior learning, in much the same way current programs assess the skills of foreign workers against Australian trade outcomes.

In such cases, those who can demonstrate through assessment that they meet the minimum benchmark level of skills directly relating to a particular qualification, work to fill the skills gap via a training plan developed with the assistance of an RTO.

A similar program could be established in the development of any dual-trade pathway.

“I think most people agree that recognition of prior learning (RPL) and recognition of work skills is an accepted part of undertaking a second trade,” says Rohde.

MOVING FORWARD

Having existed for at least a decade, and perhaps longer, the skills gap impacting the HVAC&R industry is far too big an issue to be solved by a single industry forum.

Rather, such forums involving industry leaders and training partners can help identify current trends and future demands – and become the first steps to solving the RAC skills gap by openly exploring such divisive issues as licensing and dual trade pathways.

“I believe the HVAC&R industry needs to assess the manner in which it is currently fragmented and identify, through industry engagement and as a unified entity, what exactly is the desired outcome or goal of the industry,” says Rohde.

To this end, he says there are a couple of things that need to be achieved.

“The first is a united workforce that can engage the industry as a whole and represent the industry for what the employees and businesses themselves want. Second is a concise understanding and outline for the formation of an occupational licensing scheme, in whatever form it presents itself, by engaging with the broader HVAC&R industry.”

AIRAH is constantly working to help consolidate the different sections of the industry. It continues to be goal that the Institute's executive manager – external relations and technical services Phil Wilkinson, F.AIRAH, is passionate about.

“We work in an amazing industry that is going through an exciting period of change, with lots of opportunity,” Wilkinson says.

“We need to work together to create our own future – a future where we can make a good living, we are highly skilled, professional and environmentally effective. A future that sees our industry become one of choice, not one that people accidentally fall into – like I did.” ■

JOIN THE CONVERSATION

Help to improve the profile of the HVAC&R industry by joining the conversation with AIRAH on LinkedIn.

Join the Making HVAC&R Visible group at www.linkedin.com.au/groups/7067055 and have your say in the creation of a strategy, plan and actions to make the air conditioning, refrigeration and heating industry visible.