

HVAC&R

Nation

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ARBS wrap

Our best
on show

**Skills
WORKSHOP**

HVAC&R
Optimisation –
Variable
head-pressure
control



WHEN THE WORST HAPPENS

**PREVENTING AND DEALING
WITH HVAC&R WORKPLACE TRAGEDIES.**

FRESH-FACED FRIDGIE'S FIRST-PLACE FINISH

The 2016 Worldskills Australia National Refrigeration Competition saw Queensland's Nathan McHugh take on nine of the finest refrigeration apprentices in the country and prove himself as the nation's best. Following his winning performance, McHugh caught up with HVAC&R Nation to chat about his life-changing experience and how the competition rewarded him with more than just a shiny gold medal.

Do you believe the pathway you've taken is the best way to get started in the industry?

"There is no better way to enter any industry. If I was to give advice to any young person who wanted to get a start, I would say "choose something you enjoy doing and are passionate about, grab it with both hands". You should surround yourself in trade knowledge and you will always be successful in your career.

What do you enjoy most about your job?

The thing I enjoy most about my job is no two days are the same. Being a young trade compared to some, it is continuously evolving, giving me immense opportunity to learn new things.

I have been fortunate enough not only for my father to be able to provide me with an opportunity to complete my trade within his business at DTM Air but have been mentored by an expert within the HVAC&R Industry. My father Darren started DTM Air in 2004 when the feedback from clients, other tradesman

HVAC&R Nation: Nathan, how did you first get involved in the industry?

Nathan: I was always mechanically minded, being involved with motorsports and tinkering in the shed after school. So when choosing my career path, I decided it had to be mechanical and electrical – so refrigeration had everything to offer.

We hear your family has quite the background in the HVAC&R industry. Tell us a bit about that.

I'm not only fortunate enough to have my father provide me with an opportunity to complete my trade within his business at DTM Air, but also have the opportunity to be mentored by an expert within the HVAC&R Industry. My father Darren completed his apprenticeship in 1987 and attended SkillsTech, the same TAFE Institute I have just completed my training through.

He worked within the industry specialising in commercial installations. He took a big risk and started DTM Air in 2004 in Jimboomba. He worked primarily on commercial installations, which led to many successful contracts working with construction companies and government projects. My grandfather was a panel beater by trade so we can attribute our mechanical aptitude and interest to my grandfather Trevor.

In what ways has this benefitted you most in your career to date?

Working within the family business has not only exposed me to the technical components of my trade, but also provided many opportunities to understand managerial components of running a successful business. I have an understanding of what qualities

they look for when employing a tradesman and thrive on making sure I succeed all those criteria.

My parents have been fantastic in allowing my exposure to all elements of the business and by never treating me like the boss's son. An extended vacation or sick day for me was never an option.



McHugh poses with mum and dad following his big win.



WorldSkills competitors are required to draw upon a wide variety of skills.

and his employer suggested his skill and knowledge within his field would ensure his success. With a young family to support, Dad took a chance and started to develop DTM Air. He was primarily working on commercial installations, which led to many successful contracts working with construction companies and government projects. My grandfather, Dad's father, was a panel beater by trade so we can attribute our mechanical aptitude and interest to my grandfather Trevor McHugh.

I understand the risks associated with fee for supply and service industries and the importance of how only high-quality and professional service will allow for success within the HVAC&R Industry.

What is Worldskills?

Worldskills was a chance to showcase my skills. Being up against the finest up-coming apprentices in Australia and being tested across a wide range of different skills in a pressure-cooker environment – it's been absolutely life changing. I owe a lot to the support I received from my fellow competitors, family, and mentor Carl Balke from TAFE Queensland SkillsTech.

Tell us a bit about the how you first heard about Worldskills? How did you get selected to be part of competition?

I first heard about Worldskills in my first refrigeration block at SkillsTech Acacia Ridge, from my teacher Carl. He said to me, "go home look up Worldskills and start putting as much effort into your learning and training as you do to being a class-clown and you can pull it off."

From this point I decided I could be good enough. So I started to engage in class to absorb as much information as I could. I knew it wasn't going to be

easy, as I believe SkillTech Acacia ridge produces some of the best refrigeration technicians in Australia, but I put in everything I had and pulled it off – like Carl said I could. From there I was invited to compete at Nationals in Melbourne at ARBS.

What was the structure of the competition? What were you tested on?

It was four parts broken down over three days of competition – major install (small chilled water system), decommission recommission of an air conditioner, electrical fault finds, and a refrigeration fault finds. The competition tested my mental and physical skills, and was one of the toughest obstacles I've overcome. I believe the hard work and dedication I put in allowed me to not crack under the pressure.

What do you feel is your strongest skill when it comes to refrigeration?

I am lucky to work for a very diverse company, so we do a wide scope of work. I am continuously doing different tasks. I believe my strongest skill is being able to think quickly and adapt to new situations – this is what helped me achieve my results in Worldskills

Now that the competition is over, how has the whole experience assisted you – both personally and professionally?

With Worldskills, there is nothing negative with being involved – you meet other great people, learn new skills, and get to show why you are so passionate about your career. When the competition is all said and done, it's an experience you will never forget and you'll have new mates for a lifetime. I believe

Training Institute: TAFE Queensland SkillsTech

Qualification:

Air conditioning and refrigeration mechanic.

Experience: Just out of trade.

National Worldskills Result:

National Gold Medallist.

being part of Worldskills will allow your career to prosper, showing future employers your dedication to the trade and that you can achieve greatness.

What are the biggest challenges for young HVAC&R apprentices?

Every apprentice is going to have ups and downs – we all live and learn as they say. I think if you have passion for the industry, you will see that everything you put in comes back to you ten-fold. No one said being an apprentice was easy, but put in the hard yards and you won't regret a thing.

What advice would you give to someone who's just starting out in their apprenticeship?

I believe I learnt the most by being out of my comfort zone and being surround with a wealth of knowledge. So any chance you get to do something different, grab it with both hands and take every opportunity to learn from it. Train at a respectable TAFE Institute to learn about the things you won't see in your day-to-day environment. SkillsTech is an amazing TAFE, with amazing teachers who go the extra mile to ensure your knowledge and skills are impeccable. I believe you shape a good tradesperson by teaching the correct skills from the very start.

Would you recommend other apprentices get involved in the Worldskills Australia competition?

Of course. It was such an eye-opener. Win, lose or draw, there is nothing negative about the experience. It's changed my life and opened up many doors for me that I never knew existed before.

What advice would you give them to excel?

Preparation is the key. Testing yourself and pushing yourself to the max will help you learn and understand your trade better. It is also important to ensure you have support from your TAFE, employer, family and friends. Put in 110 per cent and no matter what the result, you will be proud of your achievement and have a newfound confidence to take on the world.

What are your plans for the future in HVAC&R?

I have just started my electrical apprenticeship, which will enhance my career opportunities. I have a diploma of air conditioning and refrigeration in my sights. Once I have completed this, I might look into a sea change and move into a large plant or supermarkets – I find that equipment interesting. I love this industry and can't see myself moving away. I am always looking to learn more and love taking in new information and skills everyday. ■