

## Investing Yourself in the Trade & Making it Your Career

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I have never been a plant operator. I have never been a service technician. I have never done what most of you do for a living. I worked in a grocery store in high school, went to engineering school, graduated as a refrigeration engineer and went right to work. And that's what I've done for the past 35 years.

So right away you might ask "What qualifies a guy who has never been an operator or a technician, never worked a swing shift or a grave shift in a plant, and never filled out a timesheet with a rag hanging out of the back pocket of his coveralls, to talk about the tradesperson's investment in the ammonia refrigeration industry?"

It's a very fair question. But it's also the answer because what qualifies me to talk about this is the fact that from the first day I went to work in this profession, I have needed you.

Truthfully, what I do means nothing in the real world..... without you. When was the last time you saw an engineer...

- start up compressors and keep them running
- charge refrigerant into a system
- drain oil from it
- repair its worn out and broken components
- re-adjust and re-calibrate it when its controls drift or have gotten mis-adjusted by some engineer
- respond to high liquid level alarms
- figure out what caused them, and get the plant back into operation
- monitor the operation, setpoints and sequencing of a system day in and day out
- thereby save tens of thousands of kilowatt hours of power consumption, and the natural resources and money that goes along with it

If plants weren't (a) built by mechanics with pride and precision, and (b) operated by mechanics continuously and efficiently and reliably, this would all be strictly theory and I'd have a think-tank job, or I'd be a researcher or a professor. You are the ones who take the **theory** and make it **practice**; who take it from **virtual reality** to **reality**.

You are essential.

Knowing from day one that I'd be in big trouble without you, I have appreciated you and held you in high regard. It's the truth. If you asked around you'd find out that I pretty much stink as a mechanic. But hey, I know this, and I'm ok with it! In fact I pride myself on having tried to be a mechanic only twice in my otherwise distinguished career, both times when I was still in my 20's. Once I shut down an entire strawberry plant during peak season for an hour by crossing a couple of wires in a control panel and tripping a main breaker. The other time I pulled an compressor package's oil separator plug out when it still had 5lbs pressure on it to get it to blow down faster and blew 15gallons of oil all over myself and the engine room.

So now that I've come clean on that score, let me continue.

Why should you consider this profession, the trade of industrial ammonia refrigeration operations, to be worth investing your time, energy, enthusiasm, present and future in?

Here are **seven reasons “why”:**

1. **The Money.** Very few people know this trade – so if you do, and you’re good at it, you’ll always have a job, and one that pays somewhere between decent and good.
2. **The Challenge.** It is challenging to work at something you can always be learning about – and you never stop learning about refrigeration systems, the equipment in them, the technology they utilize, the principles of heat transfer, thermodynamics and fluid mechanics, and how they cool or freeze things.
3. **The Thrill.** Let’s face it: there is a certain degree of excitement in this, which adds to its prestige – and makes some people just want to be in the HVAC field.
4. **The Medals.** Even within this trade, most people don’t dig down very deep into its complexities to learn much about it – those who do dig deep become **true experts** at it and have few peers; they often can perform as **heroes**.
5. **The Satisfaction.** You work in the food and beverage industry and therefore give individuals and families access to a healthy, solid quality of life. You play an essential role in feeding this country’s population in a way that no population has ever been fed in the history of the world. It won’t get you recognized on the street, but it is purely and simply a noble thing to be about.
6. **The People.** You work alongside those who want to honestly earn a living with their wits and their hands, and have pride in their special skills. You work alongside people who enjoy being part of a team that gives whatever it takes to do the job well and celebrates the achievement of calling it “well done”. Your people are the best kind of people there is.
7. **The Alternatives.** What would you rather do? If there is something else you’d really rather do, then go do it. But if there isn’t anything else you’d rather do, appreciate this trade as you look at people doing things you’re thrilled NOT to be doing.

Okay, there’s some of the “why”. What about the “how”? How can I invest myself in this trade? How can I actually make it my career? Here are **seven ways “how”:**

1. **Take a Good, Hard Look.** If you are new at it, look it over carefully first, to be sure. Give it an honest run of two or three years. During this time get some RETA books and study them. Ask questions of those who know more about it than you do. Start soaking it up. Be passionate about seeing what it’s all about, not passive or lazy. This is true of whatever you pursue: you need to Bring It.
2. **Make the Call.** At some point after the first step, you simply need to make the call – will this be your gig or not? A chronically undecided person is a pain; both to himself and to those around him.
3. **Get on the Right Bus.** Decide very carefully – and fairly - if you’re working somewhere that gives you the opportunities to make it your career and to become a legitimate specialist at it. Your employer should allow you to learn, grow and improve our skills, not want you to stay more away from the refrigeration system than get into it. If there isn’t a pathway to improvement, you may be at the wrong

place. But BE FAIR about this. Talk to your supervisor and be patient in letting them respond. Companies need time to react to constructively ambitious employees, and you're going to need a lot of time to learn anyway. So don't be in a hurry. Pay your dues, make it known where your interests lie, and if there is light at the end of the tunnel be thankful for it. If there is no light, start calmly looking for a better fit for you.

4. **Join Up and Serve.** The first organization to join is RETA. Start going, volunteer to work with your local chapter, and determine that you will become a chapter officer. Whenever feasible, attend their annual meetings. Be a long-term RETA person and I guarantee you will **not** regret it. Then when you can, join IIAR and get access to their papers, and if possible go to their annual meetings. These two organizations have 98% of the knowledge base and the other resources this trade has to offer.
5. **Be a Hungry Protégé.** Find those people who will teach you the right things in the right way, and be an apprentice, be a protégé. There will always be someone who knows more than you, and you need to be hungry enough – and humble enough - to learn from them. You can also be a protégé of those who have written manuals, books and articles. Be into self-improvement from this angle too. There won't always be a trainer for you, but there will **ALWAYS** be a manual or a book. Read.
6. **Be a Trainer.** Some say that the best way to learn is to have to explain it to someone else. What you've received from those who went before you, share with those coming up behind you. This is one of the most rewarding slices of the entire pie – seeing somebody “get it” because you took them under your wing and shared your experiences and knowledge and skills with them. And maybe saved them from making painful and tragic mistakes.
7. **Be Professional.** This isn't a risk-less trade like web-site development. People can be permanently disabled and killed in this trade. You could be permanently disabled or killed in this trade. Treat it like that. Be safe, deliberate, knowledgeable and serious about what you do and how you do it. When you put yourself at risk by being cocky, sloppy, in a hurry, stupid or in any other way unprofessional, anywhere from one to a thousand others could be affected in tragic ways. Mistakes do happen, but they shouldn't happen often or too easily.

One of my favorite quotes is from Jim Elliott who did all of the above, and in the end gave his life to save others: "[Wherever you are, be all there.](#)"

After 32 years in this, I've seen lots of refrigeration operators and technicians. They come in the whole range from jokers to geniuses, from slackers to studs. You and I both know that you get what you give. So I close by sharing with you my belief that this profession will reward you well for your investment. Those who make the investment become the geniuses and the studs. Those who don't, go through it as the jokers and the slackers. So, who do you want to be?

P.S.: For the veterans of this trade, if you've gotten bored with it or feel like you've topped out in it, you may want to consider what you've stopped bringing to it. “Now” is always a great time to bring new stuff to an old game. Don't let yourself become a victim of Carborosity: when the steel in your back turns to lead in your butt.