

HOME MADE

It's a line we hear all too often: cheaper imports and the high Australian dollar are suffocating our manufacturing industry. What do those on the inside have to say? HVAC&R Nation checked in with some local HVAC&R manufacturers to explore the challenges facing a vital sector. Rachel Urquhart reports.



Inside Simons Green Energy Co's Australian manufacturing plant.

The prevailing sentiment in Australia is that our manufacturing industry has fallen on tough times. Consider, for instance, the fallout from the announcement by the Ford Motor Company that it will cease local production and, in doing so, end 90 years of tradition.

Ford says that due to its commitment to the vehicles it made in and for Australia over the past five years, it lost almost \$600 million.

Leaders of the Australian Manufacturing Workers' Union, which represents auto workers, recently said that Ford's decision could end up costing 6,000 jobs through knock on effects. With figures like those, it's hard to think optimistically about the local industry.

Some manufacturers bemoan Australia's relatively high wages and low population base, and use phrases such as "competitive advantage" to justify their decision to move manufacturing operations offshore.

Others have opted to stay, and even to bolster their Australian manufacturing base.

Those who persevere despite the odds have both their reasons for staying and strategies for growth. As well as being realistic about the challenges, they're well versed about the advantages of manufacturing here at home, and where the future opportunities lie.

And they know that as an integral part of Australia's history, as well as its future, the continued support, survival and evolution of local manufacturing is imperative.

A CHANGING LANDSCAPE

According to Celme International managing director Tom Schilbach, M.AIRAH, the manufacturing share of Australia's GDP has halved during the past 25 years, with only growth in raw material shipment offsetting the loss in manufacturing jobs.

"Skilled labour costs in Australia are double that of Japan, and we are not twice as productive as

the Japanese on the shop floor," Schilbach says. "Outsourcing is something we have to get used to in return for reaping the benefits of exporting more food, primary resources, education and tourism to a booming region."

In the HVAC&R industry, many manufacturers are experiencing the widely reported "perfect storm" of high Australian dollar and tough overseas competition, teamed up with soaring export, labour, and overhead costs.

CSR Edmonds general manager Allan Ramsay, Affil.AIRAH, agrees the state of the Australia's manufacturing sector today is certainly not encouraging.

"The Australian manufacturing industry in general is going through a very hard transition phase," says Ramsay.

"Those having a relatively easier time have very meaningful barriers to import competition, intellectual property-protected product differentiators

or participate in small, specialised areas. Most manufacturers are finding life difficult due to severe import competition from countries where economies of production scale are much higher, and labour costs and overheads much less, as well as having a relatively stagnant non-mining construction sector.

“Export sales have been savaged by the high Australian dollar, plus the seemingly never-ending rise in shipping costs, with a high component arising before the products leave Australia.

“Labour costs and conditions, rising energy costs, difficulties in locating factories with required energy-supply capacity, and a myriad of local and government hurdles to circumvent add to the woes faced by manufacturers.”

For CTS Flange CEO Gary Stanley, the outlook remains much the same. However, there may yet be some encouragement for those companies sticking it out in the Australian manufacturing landscape.

“In general, the current climate for Australian manufacturing is extremely challenging, especially given the downturn in domestic commercial construction,” says Stanley. “However, manufacturers in Australia that have been able to adapt and evolve to technological, political and economic challenges over recent years are well-placed to capitalise on future opportunities for growth and development.

“The issue of most concern to Australian manufacturers and exporters is the over-inflated Australian dollar, which has allowed overseas manufacturers to gain financial and commercial advantage, with their governments’ economic policies in manipulating their currency to be favourable to manufacturing and exporting, while we have been placed at a distinct disadvantage.

“This is an extremely difficult situation placed upon the Australian manufacturing industry. To try and combat this situation, we have had to invest in technology upgrades and evolve our manufacturing processes to improve efficiency.”

ON HOME TURF

And yet, despite the pervasive doom and gloom, there is a stronghold of businesses that are sticking close to their roots in Australian soil. Which begs the question ... why?

For Derek Simons, CEO of fourth-generation Australian-owned companies Simons Green Energy and Simons Boiler Co, supplying locally means his company can provide service and maintenance for the life of a system. It also provides the advantage of easy access to spare parts and the community benefit of supporting Australian industry.

“Being a small family-owned company, we are able to respond quickly to market trends, allowing us to provide offerings relevant to the times,” says Simons.

“Simons is well-known in the industry for problem-solving issues that consultants and end-customers have. We are one of only a few boiler manufacturers left in Australia.”

Competing against low-cost overseas imports when the dollar is strong and local manufacturing costs are creeping higher – because of wage increases, rising rent and energy costs – is a real problem.

Like other Australian manufacturers, Frank McCarthy, Affil.AIRAH, CEO of Scholz Industries Group, says Scholz



Innotech Controls Systems’ manufacturing headquarters.

(an AIRAH company member) makes a conscientious effort to outpace overseas competition.

“We are constantly trying to find ways to improve the design and local production, to enable us to bring to market products that are one step better than anything imported,” says McCarthy.

Like Simons, McCarthy says one of the advantages of manufacturing at home is it gives flexibility that allows manufacturers to supply on demand, in turn satisfying shorter customer lead-times and allowing for lower minimum order quantities (MOQs).

Queensland-based manufacturer Innotech Controls Systems grew from humble beginnings – under a house in the Brisbane suburb of Sunnybank – to a thriving, globally recognised business with about 90 staff. And for Innotech (an AIRAH company member), manufacturing locally is largely a matter of supporting your own.

“There are no monetary advantages to staying in Australia,” says Innotech distribution manager Thomas McIlhatton, Affil.AIRAH. “We could double our bottom line by moving our manufacturing offshore, but we believe in Australia and want to keep the money here.

“We employ a substantial amount of dedicated people, and the advantages we have by keeping it in-house and in Australia are that we know our quality control is not compromised and we keep Australians employed. So the only advantage is we employ Australians and contribute to the Australian economy.”

Ramsay says there are some advantages for a manufacturer that focuses heavily on the Australian market and in a sector not in natural decline. Indeed, CSR Edmonds has been manufacturing here for almost 80 years.

“A stable political regime and a competent and predictable legal system protect against IP infringement, underpin law of contract, protect consumers and suppliers under the Competition and Consumer Act, and facilitate debt recovery,” he says.

“There is also an opportunity to achieve substantial local market share, provided there are tangible barriers to import competition.”

Examples of barriers include: imports not meeting Standards, a competitive exchange rate, product bulk impacts on freight, specialised knowledge, channels to market, requirement for continued after-sales support, and IP.

Additional advantages to manufacturing on home soil include the well-informed populace, simple business structure, fewer vagaries and uncertainties in day-to-day business and capable universities producing quality staff. However, Ramsay points out, there is still a lack of meaningful collaboration between Australian universities and the manufacturing sector.

EXPORTING THE SKILLS

Through this lack of collaboration comes a widening skills gap in the manufacturing industry. According

WHO'S WHO

A number of local manufacturing representatives provided insight for this article, they were:

- Thomas McIlhatton, Affil.AIRAH, distribution manager of Innotech (AIRAH company member)
- Tom Schilbach, M.AIRAH, managing director of Celme International
- Allan Ramsay, Affil.AIRAH, general manager of CSR Edmonds
- Gary Stanley, CEO of CTS Flange
- Derek Simons, CEO of Simons Green Energy and Simons Boiler Co
- Frank McCarthy, Affil.AIRAH, CEO of Scholz Industries Group (AIRAH company member)

to Ramsay, problem areas are emerging in product design and software modelling skills (particularly computational fluid dynamics); electronics/computerisation applications in product design; and 3D printing technology.

"The skills gap will be addressed when these skills are more highly valued by manufacturers and society in general," says Ramsay. "They create value yet are paid well below other occupations of dubious value-add capacity, yet with glamorous images."

Stanley adds that the skills gap is being compounded in other ways.

"An obvious void has developed, and the number of manufacturers who export their technology to capitalise on less expensive labour rates and favourable production costs overseas are effectively becoming importers, not manufacturers," he says.

And according to McCarthy, skills shortages are always a problem in the manufacturing industry, largely because fewer apprentices are coming through the ranks.

"Becoming a qualified sheet-metal tradesperson is not as enticing as it perhaps once was," says McCarthy. "There is a skills shortage. This is due in part to there being less and less interest in taking on a 'trade' and working in a factory environment, and there is a lack of incentives."

For McIlhatton, and Innotech, the best way to confront the skills gap has been to take it upon themselves.

"There is a skills gap emerging due to many businesses closing in Australia and moving overseas," says McIlhatton. "As a company that is passionate about Australian manufacturing, we have elected to stay, so we train our own people. We don't believe the skills gap is being addressed by the government and we don't see how it can be."

"MEG/Innotech has developed a training regime for our staff and also for our growing global network of distributors, using the latest e-learning technologies and investment in a full-time Innotech systems trainer. We are seeing the need to address the skills gap ourselves, as we are not seeing it addressed by anyone else."

Additionally, Innotech has dedicated its resources to the development and implementation of a new training regime in conjunction with training institutions such as SWSi, North Coast TAFE, and a North American training institute.

"We are developing and supporting the HVAC&R/BEMS industries with technology courses and products," says McIlhatton. "This will hopefully help educate our future industry leaders, and also highlight the benefits and capabilities of Australian manufacturing."

STAYIN' ALIVE

So, what's the secret to surviving in Australia's manufacturing landscape? Knowing your strengths and point-of-difference, as well as innovation and industry knowledge, can enable local manufacturers to enjoy continued success.

Ramsay says CSR Edmonds has "stuck to the knitting" for the almost 80 years it's been in business, and, as such, has a wealth of knowledge.

"CSR Edmonds has a well-defined and meaningful 'purpose' that is often lacking in other businesses," he says. "It helps to galvanise the organisation, and for

the size of business, it has a well-resourced and highly skilled research and development (R&D) team, with the latest available modelling and design software."

With more than 15 patents in place, including critical ones filed in major export countries, CSR Edmonds protects its all-important IP.

Innotech takes a different approach to remaining competitive in the HVAC&R manufacturing industry.

"Most HVAC&R, DDC and BEMS products on large projects are sold at-cost or even below, which is a great saving for the builder and contractor," says McIlhatton. "Unfortunately, this locks in the client to unreasonable ongoing service and maintenance costs, and licensing costs for the life of the product, known as 'life-cycle costs'."

"The Innotech philosophy works on up-front costs for the product, with options for service and maintenance – to suit the clients ability and need – and no ongoing licensing fees, meaning the life-cycle costs for the product are second to none."

McIlhatton says the growing interest in energy analysis, and ongoing business with clients after a project is completed, is forcing consultants to take notice of life-cycle costs at a project's inception.

"This usually indicates the Innotech offer is more cost-effective and sustainable," he says. "And it also allows more control, better local support and a happier client in the end."

SUPPORTING THE LOCALS

For most consumers, the importance of buying Australian-made is often beat out by the importance of meeting the bottom line. And as buyers tighten their belts, the manufacturers all agree: the point-of-difference has to be product quality.

Stanley doesn't think the HVAC&R industry should be expected to give preferential treatment to Australian manufacturers, but that buying Australian might work in their favour.

"We believe the support we receive from our customers is driven from the quality of the product that we manufacture – the fact that it is manufactured in Australia can only be an advantage to our country as a whole."

Both McCarthy, at Scholz, and Simons, at Simons Green Energy, agree that local customer support for Australian manufacturing is on the wane, driven by an increased focus on the bottom line.

"The traditional advantage of being an Australian manufacturer was in the ability to draw on loyal and patriotic customers, who preferred to buy Australian made," says Simons. "This has become less relevant over the years, with pricing being the key."

McIlhatton says Innotech has experienced the same decline in patriotic purchasing – it's now left to the product's quality and manufacturer's reputation to keep business moving.

"There has been definite support for Innotech over the past 28 years; however, this has been from those willing to 'give the product a go' and seeing the benefits," McIlhatton says. "There are definitely some avid supporters who believe in supporting the Australian brand, but there is no real support from the local industry, except when paid for."

"We work hard in extolling the virtues of Australian-made products and their competitive life-cycle costs for the end-client. But it isn't always a priority and over time it is getting less and less important."

"Innotech markets directly to building owners, consultants and construction companies just so they know we exist, and we are explaining and showing them the advantages of using an Australian manufacturer, highlighting the need to compare the upfront and ongoing costs, as well as highlighting what support is available for some of these imported products when considering the overall package."

And while manufacturers understand that buyers are simply looking out for their profit margins, they believe it's the government who should be stepping in to protect and promote manufacturing.



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"The government doesn't provide sufficient support for manufacturers unless you are a multinational, and more often than not, the multinationals are owned by overseas companies," says McIlhatton. "What little support they do offer involves so much red tape and hurdle-jumping that it's better to do your own thing and not rely on anyone."

"When you hear of industries like fruit growers being unable to compete with imported products, we can relate. Overseas governments pay subsidies for exporting, and the product is of such poor quality the subsidy may exceed the income those companies receive from the product directly."

"Our government then allows that product to be imported for less than what it costs to viably produce in Australia. If there was better protection and compensation for Australian manufacturers across the board, perhaps there would be more investment in Australian products and Australian jobs."

McCarthy agrees that the government should be working harder to look out for its own.

"The government could do more to support training, local product design and process development to improve local efficiencies in manufacturing," says McCarthy. "The pathways to get (R&D) funding seem onerous and filled with red tape to a point where it often puts people off even bothering to apply."

McCarthy says there are a few different areas that need to be targeted if the Australian manufacturing industry is expected to survive, and indeed, grow.

He says there needs to be less red tape to gain access to funding to support R&D, more training to develop skills, and more incentives for manufacturers to employ and train apprentices.

Although Ramsay believes the restoration of tariff barriers is an impractical expectation, support could come from other areas.

"R&D tax concessions could be much-improved for work of a truly innovative nature, as well as providing more support for generally higher product quality standards," he says. "And export development grants could be provided for small to medium enterprises."

For CSR Edmonds, as part of large Australian public company CSR, finding R&D funding is no longer a challenge. If a project is considered viable, then a sensible level of R&D funding will be made available.

BADGE OF PRIDE

CSR Edmonds has developed its own, "Made in Australia" logo and, although it is used consistently, Ramsay suspects it has limited impact in the marketplace.

"Products sell because of the value proposition they offer," he says. "And CSR Edmonds always seeks to maximise this value against cost outlay."

Like CSR Edmonds, CTS Flange's products are labelled as a "Product of Australia".

"It is difficult to quantify whether this is effective," says Stanley. "I would, however, like to believe that our customers would take this into account when choosing our product over a competitor."

As a totally Australian-owned manufacturing business, Scholz is an active member of the Australian Companies Institute Limited (AUSBUY). This is an organisation that represents Australian-owned businesses and encourages support for local businesses, as well as providing information about the implications of purchasing from overseas-owned businesses.

AUSBUY provides Scholz, and all its Australian-owned member companies, with a distinctive green-and-gold label.

WHERE TO FROM HERE?

"Without doubt, the key to the future for Australian manufacturers is the need for product innovation and protection of that intellectual property," says Ramsay. "Without unique IP, Australian manufacturing will always struggle in Australia due to the small scale of the local market, and will struggle in export markets, as any unprotected IP will quickly be duplicated."

Stanley, however, believes the future of Australian manufacturing relies on the ability of companies to innovate and capitalise on available technology.

"I firmly believe that investment in manufacturing technology will allow Australian companies to continue into the future," says Stanley. "Companies that do not embrace the available technology will definitely face a harder challenge to remain viable."

Celmeç's Schilbach says the question is whether or not we continue to capture the R&D value-added product in Australia.

"You need manufacturing to stay close to the product, which is getting harder and harder without exploiting the comparative advantage of other economies," says Schilbach. "Stamping your product 'Made in Australia' is not enough.

"The government could provide more support by offering legitimate R&D and export aid, and better

GST and FBT planning with incentive for Australians to favour Australian-made products. This would undoubtedly benefit manufacturing in Australia, and very importantly reduce unemployment, which would inherently offset the above incentive costs.

"We have to accept that government support is highly unlikely, and the key source of growth in productivity will continue to stem from high automation and a rapid shift of traditional jobs to cheaper offshore locations."

For some, the answer is part politics and part economics.

"The only way forward is with a stable government and sustained economic growth," says McIlhatton. "As a company, Innotech travelled well through the global financial crisis but Australia is now having its own Australian financial crisis (AFC), and the construction and manufacturing industries are suffering. We need business confidence in Australia, and until we have a new business-friendly government this won't happen.

"Within our industry, companies that have been around for 100 years or more are now suffering, slowing down and closing. This needs to be turned around, and only confidence in our government and a stable environment will do this.

"To continue to grow, Innotech is focusing on other market sectors and other countries to increase revenue. It is somewhat easier to grow in other markets rather than our own. However, with the appropriate support, there is certainly a lot more business we could achieve within Australia." ▲