

# Case Study.

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Photography Ferne Millen

## REBOOTING THE BUSINESS

The shutdown of the car industry forced small Geelong manufacturer Austeng to dramatically rethink its operating model.

**It's every CEO's** worst nightmare: an announcement from a major client that results in work drying up – immediately. For boutique Victorian engineering firm Austeng, this was the potential death sentence it faced in 2013 when Ford Australia announced it would shut its two car plants within three years.

"We thought the car companies would eventually leave Australia, but what caught us by surprise was that our work went over a cliff," says Ross George, Austeng's founder and managing director. "For companies like us, supplying capital equipment, it was a guillotine. You feel a cold pit in your stomach."

Four years on, the Geelong-based Austeng has transformed itself into a mini manufacturing hub for startups. Instead of designing specialist equipment for the automotive industry, its projects range from hemp harvesters to bended corrugated iron. Just as importantly, its business model is no longer based around fees for one-off prototypes; increasingly it takes equity stakes and partners with startups to commercialise their ideas.

"We're already flat-out until Christmas," says Lyn George GAICD, Austeng's corporate manager, who co-owns the firm with her husband, Ross. "We're working with eight startup companies – the rationale being that only one or two would take off. But recently, most of them have made huge steps forward, such as breakthrough orders or grants to enable production set-up, which is very exciting."

The Georges are brimming with optimism, but they acknowledge the past few years have been tough. Ford and other car clients had accounted for about 55 per cent of Austeng's \$10

million revenue (down from 100 per cent in the late 1980s). As the firm scrambled to reinvent itself, the Georges retrenched just three employees, but struggled to keep its long-term staff of 18 occupied.

"We spent years carrying people; they were pushing brooms," says Ross. "Effectively, you're running a charity and no-one, including us, knew how long that could last." The couple discussed walking away often, but stuck at it because of their belief in the importance of manufacturing jobs and passion for their hometown of Geelong, 75km southwest of Melbourne. Here's how they did it.

### Work out what you're good at

"We knew we needed to go back to basics," says Lyn. After much brainstorming, the Georges realised Austeng's niche was as a one-stop shop for designing and building proof-of-concept prototypes to attract funding from government grants or seed investors.

A crucial aspect was the couple's complementary skills. Lyn, a commercial lawyer, could help inventors with business issues such as grant applications and manufacturing contracts. Ross, a mechanical engineer, had expertise in the practicalities of moving from idea to prototype.

"Often, we are dealing with original founders who have worked on their ideas for more than 10 years," says Lyn. "They are quite brilliant in their particular field, but may not have the skills to take their concept to the next level, and through the commercialisation 'valley of death'."

### Identify target industries

"We can't compete with imports on very straightforward projects so we really had to concentrate on advanced manufacturing," says Lyn. That meant focusing on innovative, high-value-add processes in emerging industries such as graphene production and polymeric powders.

### Get out and build your network

Lyn says Ross was horrified when she suggested they should network – he says mortified is a better description. "I'm a technical person so I didn't believe that standing around talking to people would bring opportunities out of the woodwork, but it has – and they're still coming."

Now he's a convert and attends plenty of networking events himself. The tipping point? "I said to Lyn that we have to build a better mousetrap and she agreed, but added that you also have to tell people you're making them." ➤



### Build your network

AICD has regular networking events that connect members around the country and overseas. Visit [companydirectors.com.au/events](http://companydirectors.com.au/events)



Lyn George GAICD and husband Ross on the Geelong factory floor.



**What Austeng does:** designs and builds customised engineering projects from idea through to prototype and production.

**Established:** 1982 by Ross George and his father (originally called AustPole), now run by Ross and wife, Lyn.

**Staff:** 22

**Revenues:** 2016/17 \$6.5m

**Victorian Manufacturing Hall of Fame:** inducted in 2009.

**Winner:** (with Cytomatrix and Deakin University) 2014 Victorian Engineering Excellence Award for Research and Development/Innovation.

**Winner:** (with Imagine IM) 2016 Australian Engineering Excellence Innovation, Research and Development Award.

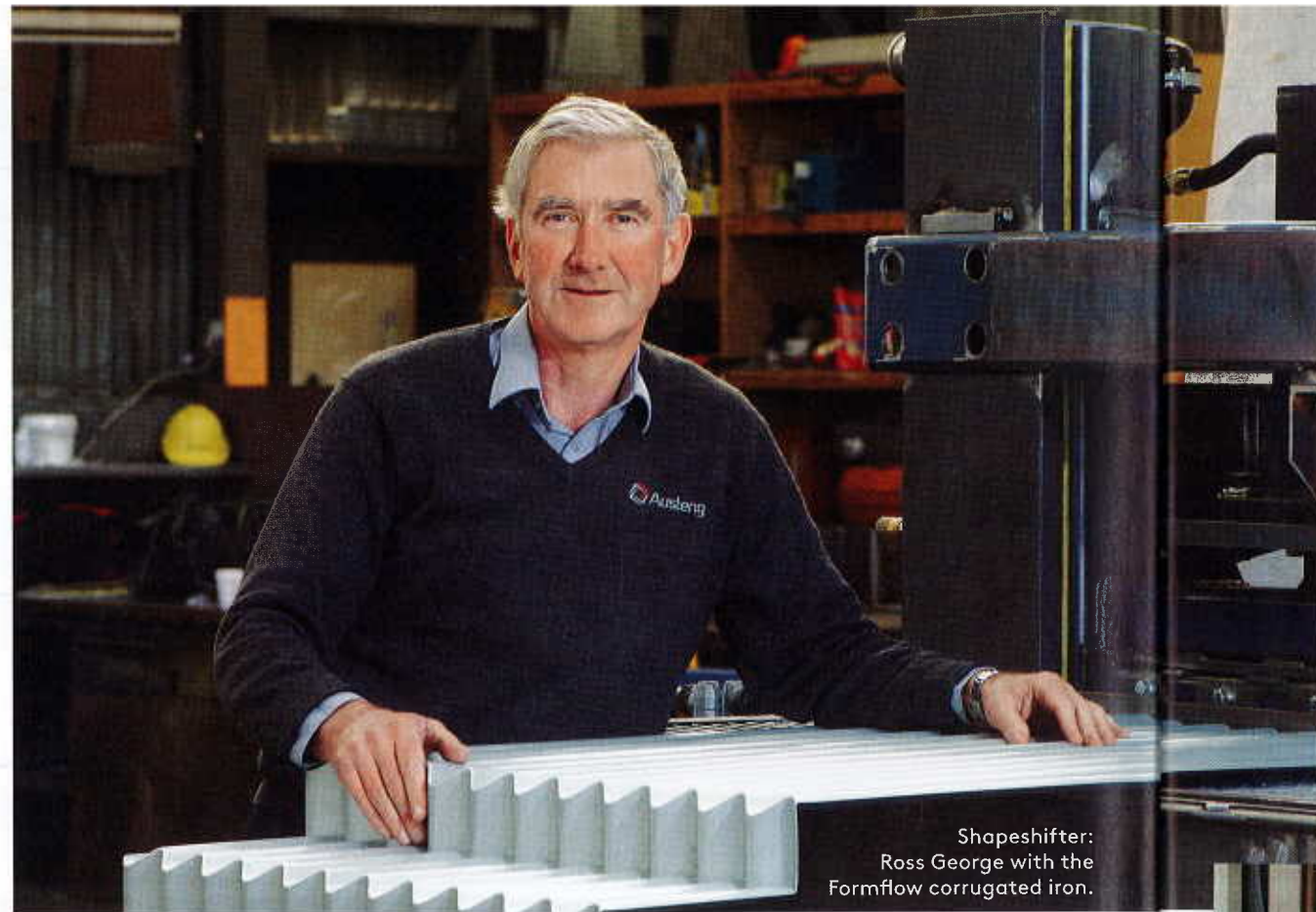
Lyn says it was hard at first; she was often the only woman among 30 or 40 men at an event. Austeng joined the Geelong Manufacturing Council and helped kick off a Women in Manufacturing Network. She also plugged into education networks. Lyn is now also a director of Advanced Fibre Cluster Geelong and on the advisory board of Deakin University's startup hub. Networking with universities is also important: while Austeng's main "feeder" is Deakin University Geelong, it is also working with Monash, Swinburne, Curtin and the University of Queensland.

**Collaboration: a new business model**

The Georges learned a tough lesson when one of their first projects delivered \$250,000 as a one-off prototype fee, while earning the client tens of millions of dollars in spin-off benefits. And Austeng did not win the ongoing manufacturing contract.

"It was a lightbulb moment for us," says Lyn. "It made us evaluate our worth and realise we needed a closer relationship with startup companies and universities." Gradually, Austeng's fee-for-service model morphed into a collaborative approach where Austeng takes equity stakes in startups, as well as ongoing manufacturing rights. Again, Ross was initially horrified by Lyn's proposal. "As an engineer, you'd never say to a client, 'I'd like a slice of your company'. But it gives you a seat at the table and more control of the customer and the market."

In fact, Ross credits Lyn almost entirely with Austeng's reincarnation. "To have a non-engineer in an engineering business is really valuable, especially with her skill set and strong



Shapeshifter: Ross George with the Formflow corrugated iron.

**“To have a non-engineer in an engineering business is really valuable, especially with her skill set and strong personality.”**

Ross George

personality; she will bulldoze things through." Lyn says she would like to see Ross value his intellectual input more. Both say they're able to manage their personal and business relationship "really well".

Like many smaller organisations, Austeng has no formal board and the two sometimes continue the decision-making around the dinner table. An advantage is that it allows Ross and Lyn to make speedy decisions. Recently, for example, Ross received "a cracking inquiry" from a startup on a Friday, worked on it over the weekend, and said yes to the \$1.4 million project on Monday.

Because of this informal governance approach, Lyn says doing the AICD *Company Directors Course* has been helpful, particularly in her new role advising startups and sitting on the boards of a number. "The attributes that got them to the point of technology development, such as being single-minded, can create challenges later," she says.

The Georges now see that stomach-churning Ford announcement of four years ago as an opportunity. Not just for Austeng but for Geelong's network of skilled manufacturing companies and workers – as well as frustrated inventors who couldn't garner interest.

"There were these really good ideas floating around, but large manufacturing was taking up all the capability and capacity," says Ross. He now fields a couple of calls a week and about once a month strikes a project worth looking into. "Some of them will be bigger than *Ben-Hur!*" ■



Clockwise from above: Ross George checks the specs; at the Austeng factory; Lyn, Ross and the graphene plant prototype.

**STARTUP HUB**

Equity and sweat: Austeng's strategy for growing new businesses

**1**

**Imagine IM**

Austeng began collaborating with Imagine Intelligent Materials in late 2015 to build Australia's first commercial graphene plant, taking an equity stake in the company in 2016. Graphene is a revolutionary atomic-scale carbon material. Thin, light, strong and highly conductive, it is the basis for a generation of "smart" materials.

**2**

**Formflow**

The Georges became founding shareholders in Formflow in early 2016, and Lyn became a founding director when the company was incorporated in September 2016. Formflow manufactures a corrugated iron, which bends at precise angles to remove the need for roof flashing and copping. Austeng is building the pilot plant and has an equity stake and exclusive manufacturing rights.

**3**

**Textile & Composite**

In 2012, Austeng partnered with Textile & Composite Industries, whose late founder, Adrian Clarke, had come up with a decortication process to strip the fibre from the woody core of the hemp plant. (Hemp uses less water than cotton, but is harder to harvest.) Austeng took a small equity stake in T&C in early 2015 and has the exclusive manufacturing licence. After worldwide interest, the company recently took its first order from the US.

**4**

**Polymeric Powders Co.**

In 2012, Austeng partnered with Polymeric Powders Co. which had come up with a process to convert the rubber crumb from shredded tyres into an activated powder used to make new materials. Initially on board to refine the pilot plant, Austeng took an equity stake in the company in 2014 and now has exclusive manufacturing rights.