ADVANCED MANUFACTURING GROWTH CENTRE

MEMBER PROFILE

FormFlow

FormFlow is a Geelong-based startup developing a deceptively simple but incredibly useful process.

Proof-of-concept for their technique ran in late-2016 and they are on the path to commercialising their flagship technology, the FormFlow Bend. Their process enables sheets or corrugated iron to be bent at precise angles and without damaging the metal's structure.

"The tricky bit is that you'll see the peaks on one side of the bend turn into troughs on the other side and vice versa; that's the key to making this actually work, and we've registered that," explains co-founder Matt Dingle, pointing to a finished piece.

"We could do that across the ridge of a roof, for instance, or from the roof down to the eaves and we can replace lots – where traditionally you'd need flashings at the intersection between two sheets. We can eliminate a lot of those things. And it looks good."

Accelerated corrosion tests have shown no degradation to the bent steel after the cold bending process. This might not seem like much at first blush, but has never been achieved by anybody else. Technical achievement aside, the concept creates something with clear appeal: a building product with a pleasing look, and which lets in no air, dirt, small animals, or – in the event of fire – embers.

The company was formed by Dr Matthias Weiss, Dingle, and Ross and Lyn George of Geelong engineering business Austeng.

Deakin is a strategic research and development partner, with Weiss a long-time head of sheet metal research at the IFM, and the leader of one of the world's biggest dedicated roll forming research groups.

"Deakin also has very strong groups in architecture and building, and we will be working with them in future," adds Dingle.

"And there are probably other groups within the university that we'll end up working with."

Dingle calls university-industry collaboration "absolutely vital" for manufacturing in Australia.

We don't have large organisations that have the broad skills base that you find in some of the huge multinationals overseas, he says.

"But if we pool our efforts collectively, then we have an incredible knowledge base and capability."

A collaborative project assisted by the Australian Manufacturing Growth Centre will help develop FormFlow's idea. Among the partners, Austeng will design and manufacture equipment and carry out ongoing service support. FormFlow plans to scale up through partnerships with larger companies, with the partner company using FormFlow's technology under license.

Taking the world-first idea to commercial reality and grabbing a slice of the $1 billion Australian metal roofing and guttering market will require continued cooperation.

The adventure of taking a promising idea through to commercialisation is one Dingle is familiar with, as a co-founder of Geelong-based success story Carbon Revolution. It can be done, and it's important that it is: for those that are directly involved and for those that aren't. This is among the reasons FormFlow has joined the AMGC.

"We believe in Australian manufacturing," says Dingle.

"I think manufacturing underpins economies in most countries and I think it should be the same in Australia, and I think we want to part of ensuring the manufacturing sector in Australia is strong and becomes stronger over the next decade. We want to be part of that."

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Matt Dingle, Co-Founder at FormFlow