

Frances tastes fruits of sprayer success

GRAHAM FULLER, NATIONAL MACHINERY WRITER
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Frances Cook's early scale model of Silvan Australia's G2 orchard sprayer, also one of the first production units in the background.

STARTING from a clean sheet of paper has seen young engineer and designer Frances Cook deliver Australia's latest orchard sprayer on time and on budget.

By any yardstick it's a noteworthy achievement for the confident but quietly-spoken graduate who headed up the sizeable \$1 million initiative on behalf of employer Silvan Australia.

Company managing director Stephen Lelli said he was impressed by her short stint in the automotive sector prior to heading up the company's design team in 2007, a year after graduating with a Bachelor of Engineering in product design.

Presented with Silvan's exciting challenge to create a modern and advanced orchard sprayer, the upshot is the Supaflow G2 unit which made its debut at the prestigious Sebel Heritage Hotel in Victoria's Yarra Valley late last week, where it was roundly applauded by Silvan's dealers.

Ms Cook conceded she never envisaged getting into the business of designing farm machinery, recalling her early first impressions of a largely male-dominated industry, which also has a rapidly ageing workforce.

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Two years down the track has convinced her of the opportunities that exist within agriculture, commenting: “No two days are the same.”

But it was a very different story when the slightly-nervous Swinburne University graduate showed her portfolio of engineering drawings to Silvan’s senior executives, who were impressed with her appreciation of mechanical equipment design, design for manufacture and consumer-driven design capabilities.

With the company keen to gain a “fresh input” into their Next Generation range of sprayers, Ms Cook was given the nod by Silvan, embarking on a hectic two years criss-crossing Australia to garner ideas from orchardists, farmers, plus the company’s dealer network.

Having landed “a dream job”, the challenge remained of managing a project with tight timelines and budgets.

There’s no doubt the new development product development process represented quite a significant business risk for Silvan.

“Fabricating and manufacturing the tooling, and then rotationally moulding a new tank design are complex processes, as is the fitment of the new tank to a new chassis and other unique componentry,” Ms Cook said.

Interestingly, by December 2009 the tooling for the 4000L tanks had been completed, the chassis design had been validated, ready for Ms Cook’s design team to build its first prototype.

Then, with the prototype of the 4000L G2 Supaflo assembled, it was time to take Silvan’s new ‘baby’ out to Mildura for the field testing programme.

Thoroughly trialled, it surpassed all expectations, paving the way for the company to develop a smaller-brother 2000L sprayer.

Both were unveiled at the big Silvan dealer launch in Victoria.

“So, today is a fantastic occasion,” Ms Cook said.

While there have been some heart-aches, particularly with the tank, all that is behind the design team with the recently-employed graduate relieved they did not translate into production delays.

“It was so exciting when we saw the G2 hitched behind a tractor for the first time during trials on a Mildura property,” Ms Cook said.

“It just made it all the worthwhile,” she added.

Frances Cook says the whole journey – from concept to completion – has turned out to be “very rewarding”.

“You have to work hard but it’s worth it in the end.”

Graham Fuller was a guest of Silvan at its product launch in Victoria.