

Liquid fertiliser in-furrow reduces UAN volume by 30% for WA farm

A West Australian continuous cropping family has reduced its urea and ammonium nitrate (UAN) usage by up to 30% thanks to the accuracy and efficiency of direct injection equipment from Liquid Systems (SA).

Nitrogen delivered directly to the seed bed with Liquid Systems (SA) equipment has saved the Stanley family 30% in urea and ammonium nitrate (UAN) across their 20,500ha West Australian property.

The continuous croppers located near Kalannie, 260km north east of Perth, installed two Ai120 modules in January 2017 when they upgraded to DBS Auseeders.

"It's way more efficient to have the nitrogen in the ground, a couple of centimetres below the seed," said Travis, who runs the farm with his wife Carmen and parents Ian and Robin. "We're using 30% less nitrogen because it's where it needs to be and is more available to the seed. We used to broad spray 45L/ha in front of our seeders and now we inject 30L/ha on average with variable rate technology in furrow."

The accuracy of the system, even delivery of liquid across the bar and section control also contribute to the efficient use of their liquid product, according to Travis. "We calibrate the machines pre-season and then again during the season if we have to stop because it's too dry or wet. We found that from manifold to manifold, it's spot on," he said. "We also have section control on both of our bars so that allows us to save as well."

The Stanley's DBS Auseeders are both fitted with "Stacker" section control kits from Liquid Systems (SA), which automatically shuts off the liquid flow from each manifold when the seeder overlaps parts of the paddock it has already covered or turns at the end of a run. "Section control probably saves us 21,000L of UAN, which is about a 5 to 8% cost saving across our entire program," he said.

Who:	Travis and Carmen Stanley, with Travis' parents Ian and Robin Stanley
Where:	Kalannie, Western Australia
Property:	20,500ha continuous cropping enterprise
Equipment:	Two Liquid Systems (SA) Ai120 pump & control modules, both fitted with "Stacker" 6 Section Control Kits
Outcomes:	<ul style="list-style-type: none">• Reduced UAN usage by 30%• 5 to 8% UAN cost saving thanks to liquid section control• Disease protection for early-planted wheat varieties in a large cropping program• Plug and play installation combined with simple ongoing operation

Travis varies the rate of UAN across his property using a John Deere rate controller on the farm's Borgault air seeder, with the rate ranging up to 60L/ha. On specific wheat varieties, like Calingiri and sometimes Mace or Scepter, he also mixes in 200-300ml of Flutriafol, a fungicide that protects against disease outbreaks.

In an enterprise that has nearly doubled in size in the past two years, growing from 12,000 to 20,500ha, injecting the fungicide up front during seeding allows the family time to finish the program before returning with a boom spray.

"Because of the size of our program, delivering the liquid mix with the seed just gives us that breathing space," said Travis. "By the time we've finished seeding, the early-planted wheat is out of the ground, so it provides protection until we get back with the booms."

The Stanley's decision to invest in Liquid Systems equipment was primarily based on price and customer service. "I got quotes from a couple of companies and Liquid Systems' equipment was substantially cheaper," said Travis. "I was also impressed by the availability of Liquid Systems' owner Peter Burgess. I was able to chat to him like he didn't

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have anyone else to talk to. He ran through everything I needed to know leading up to purchasing the equipment and he was really good at explaining things and pointing me in the right direction.

“When it came to installation, the instructions were easy to follow and Peter was there to offer advice. If it wasn’t him, his offsider was on-hand to help, but I could mostly get Peter on the phone.

“And the system is really simple. It’s pretty much plug and play.”

The Stanleys use 16 on-farm tanks to store UAN, which is delivered to the property in 55 tonne loads and carted to their seeders with 30,000L Flexi trucks during seeding. They purchase Flutriafol in shuttles and inject it into the Flexi N stream as it goes into the bins.

Travis wouldn’t hesitate recommending Liquid Systems’ equipment to other farmers. “I recommend Liquid Systems all the time. I might actually ask Peter for a commission,” joked Travis. “I don’t live far from Kalannie,

so I have people coming out and looking at the system on my bars a lot.

“The system is simple, easy to maintain and easy to clean. I really can’t fault it.”



Opposite page: Liquid stream from friction tube assembly. **Above top right:** One of the “Stacker” manifolds on the bars that also incorporates two 6 Section Contol units. **Above:** Two A120 (126L/min) Pump & Control Modules mounted on the sides of the Bourgaud 6550 Carts. **Below:** Travis Stanley taking a moment out of his busy schedule to have his photo taken.

