

2430 hectares we farm, that does start to add up in savings on time and fuel."

In retrospect Tom does think they will do some things differently in the future: "We had the header on large radial tyres and we did have some rough tracks to follow. As the Lexion filled we would see the tyres start to balloon sideways and the auto steer was having to work extremely hard to keep the machine on track. We will go to duals on the front of the machine this year, with the inside tyre over the three metre mark and just decrease the pressure on the outside tyre so it can act as a stabiliser."

"With our field peas now planted with the auto steer, we will be able to come back in with a set of crop lifters between the rows. That will give us an even better feed next time round."

"We would not be without the Beeline Arro auto steer gear – our next step will be to fit our John Deere 8000 series tractor with it so we can spray and/or spread fertiliser while the Cat 55 is also operating."

### Wide and successful application

The Beeline Arro range has been successfully fitted to over 130 different makes and models of agricultural equipment, and can now 'plug and play' on the Case IH and John Deere range of auto steer ready machinery.

The patented cab kit and VIU design enables a single controller and screen to be moved between equipment in under five minutes without tools or recalibration of the unit.

This equates to a saving of around 75 per cent on the cost of auto steering an additional tractor, spray rig or header.

**For further information on the Beeline Arro Universal range go to [www.agline.com.au](http://www.agline.com.au) or call (02) 6792 1988** ■



**Arro comes with a variety of terminal options to suit your needs that are all easy-to-read and user friendly.**

## The way to smarter farming

**I**nvesting in two-centimetre RTK auto steering allows farmers to implement smarter farming techniques.

Adam Hutton, gps-Ag sales and marketing manager said base level auto steering provided growers the ability to steer their tractors and reduce application overlap and operator fatigue, but where there was the need for repeatability to achieve improved farming productivity, 2cm RTK auto steer was the winner.

"It gives farmers the ability to chase moisture and/or nutrients in the rows from the previous year – or, in heavier country and stubbles, to sow in between the rows," Adam said.

"Techniques like shielded spraying with 2cm RTK are taking farming applications to an even finer degree. Growers basically have better accuracy available to make these types of decisions. Without 2cm RTK, you can really only just let the tractor drive. It's accurate, but it doesn't provide these benefits."

"RTK is on the mark every time, and you can recall that mark and nudge over or run straight on top of it again, he said.

### Benefits seen this year

The benefits of seeding next to or in last year's stubble rows using high accuracy autosteer systems – and where this has occurred from driving freehand – have been recognised in numerous crops this season.

Some of the best established crops this year have been

...20▷



**The difference in crop establishment between that sown in last year's rows on the left, compared with that sown between the rows on the right, pictured on the join of an up and back pass.**

## ◁19...THE WAY TO SMARTER FARMING

those sown close to last year's stubble rows, but without removing the stubble.

The crop benefits of high accuracy autosteer are often viewed soon after its adoption, and this season similar advantages have been recognised where traditional seeding drifted close, or into, last year's drill rows.

In one case where the latter occurred under good seasonal conditions, the contrast in germination and establishment between the crop sown next to or in last year's rows with that sown between the rows was significant.

The better established crop was estimated to have at least an extra one tonne per hectare more yield potential than the poorer crop.

It was very visual. Every time the seeder wandered slightly closer to last year's furrows, where there was more moisture, germination was better. There would also be more weed competition in the poorer areas of the crop.

There were possibly nutrition implications as well, however the early germination, when it was still surviving on seed reserves, indicated that 99 per cent of the beneficial effect was due to moisture.

In Western Australia, Bencubbin producer Nick Gillett has been seeding into the same drill rows where beneficial on the family's property since 2005, and he says it has been the difference in getting crops 'up and away'.

This season, despite the dry and warm conditions in May, crop establishment has again been very good, albeit for a 'few patches' on one block, but where there was still about 90 per cent germination. Crop establishment around the district this year has been indifferent.

Nick has been using a gps-Ag Autofarm 2cm RTK Autosteer system on his Case tractor and he recently upgraded to the Autofarm A5, dual frequency package.

The AutoFarm A5 system features Controller Area Network (CAN) bus technology that opens up a world

of compatibility with other manufacturers' equipment. CAN bus is essentially a cable that distributes information between modular electronic components (user terminal, steering controllers, application rate devices, yield sensors and other vehicle components) and it's already widely used in farm machinery.

AutoFarm uses a unique dual CAN bus design to ensure high priority control data reaches critical electronics without delay.

The AutoFarm system works on all types of tractors (wheel, track and articulated) and even works on harvesters to ensure maximum harvesting efficiency. With the A5, just the user terminal and the quick-release roof array are moved – all cables stay in place.

The Gilletts have about 6070 hectares under crop production on their main 'Malkana' property and have been sowing into the same drill rows since 2005 'to chase moisture'.

Their seeding rig includes an Ausplow DBS bar, Gason tow-between airseeder and tow-behind liquid cart.

"On one farm we have sown into the slots every year since 2005," Nick said. "We did it again this year to chase the moisture. We received 25–30 mm at the end of April, but only four mm in May and it was extremely warm. The soil was drying out very quickly and on May 15 we decided to continue seeding with all of it into the slots.

"On heavier country we generally go into the slots. Going between the rows on heavy land is a lot cloddier and the germination is not as good.

"They say there is disease risk going into the same slots, but by getting all of the crop germinated there is the chance of greater potential yield.

"In a wet year we would sow between the slots.

"Normally, once you get steering to 10 cm, many suggest that's all you need, but that's not right. If you want to get the full agronomic benefit and repeatability you need to go to two cm."

Nick said they also used the Autofarm on their spray rig and harvester.

"It's good to be able to multiple spray a pulse crop and go into the exact wheel tracks to reduce damage."

"With harvesting, you also have 100 per cent efficiency of operation – the comb is chockers and there is reduced operator fatigue," he said. ■



**Western Australian farmer Nick Gillett, Bencubbin.**



**Pictured is crop sown between last year's stubble rows on the left, compared with a large percentage sown in rows on the right. The increased amount of stubble knocked down on the right indicates the crop was sown next to or in last year's rows.**