

CRAIG AND CLINT CHARTERS

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Father and son, Craig and Clint Charters, are sixth and seventh generation farmers respectively. They are passionate about the challenge of growing high yielding irrigated and dryland crops.

Multi award winning corn and soybean growers, seven years ago Craig and Clint transitioned their cropping enterprise to predominantly cotton. This approach, along with a dedicated crop rotation and soil nutrition program, has resulted in year-on-year yield increases on both properties, achieving an average of 13.5 bales per hectare across farm in 2017/18, with a similar outlook for this year.

Committed to achieving maximum yield without mining their soils nutrition, Craig and Clint have a manure program in place on all irrigated country. Under lateral irrigation they practice a strip till cotton, wheat rotation with fertiliser applied at intervals leading up to planting.

Their furrow irrigated fields have a rotation of two seasons of cotton, then sorghum if enough store soil moisture is present, otherwise the field is left fallow. They place a maximum emphasis on monitoring beneficials, minimum use of insecticide and their disease management is based around rotation and stubble incorporation.

To ensure efficient water use, porosity moisture probes are used in the crop which provide irrigation trigger points and the bores are monitored continually to determine water use in each field.

Craig and Clint have a shared passion and talent for building bespoke machinery that suits the unique needs of their farming operations. Their work has achieved impressive results, including improved germination, yield, operational and water efficiencies on farm. Together they consistently seek to improve production efficiency.



They used the Kinze planter for many years and added Precision Planting vacuum seeding updates to improve seed placement, however believing better and more accurate results were possible, Craig and Clint designed and built their own planter. They built the tool bar and set it up using the John Deere Max Emerge 5 mini hopper seed metering units in conjunction with a central commodity box (allowing bulk bag seed purchases) on Boss double disk row units. The conventional metering plates designed by John Deere were found to be lacking accuracy, so Craig and Clint developed their own cotton specific planting plates to further enhance the planting meters performance. The plates tested have been tested at 99.8 percent singulation.

In addition to this, the innovative duo added the Precision Planting Pneumatic Clean Sweep trash wipes which are adjustable from the cab on the go. Water injection was fitted to the new planter and a hitch was placed on the planter to allow a trailing 4,800 litre tank to follow the planter which gives them the capacity to inject between 600 to 2,000 litres of water or water, liquid fertilizer and insecticide per hectare.

Craig has been using the water injection method for approximately 30 years and the perennial problem has always been the inability to deliver the water to the planted and into the ground quickly enough without slowing the planting process down considerably. To remedy this, this season Craig and Clint developed and built an on-the-go water filling system to further streamline the sowing operation on the farm.

The purchase of a Mercedes Benz Unimog started the build of a 6,000 litre tank, pump and on-the-go large magnetic connection system designed by Craig from an idea taken from a small-scale working unit witnessed in the United States last year. This now allows filling of the water tank at 5,500 litres in 4.5 minutes as the planter maintains sowing speed in the field. This has revolutionized the water injection process, with no downtime filling the planter, allowing planting to continue all day long.

This system has allowed early emergence and better establishment because the accuracy of the planter, the very shallow seeding depth and low press wheel pressure gained from the flexibility the water injection allows, giving seedlings the best chance to maximise seedling vigour. This also greatly reducing the need to irrigate the cotton in the very early stages of growth, when conditions become harsh.

In recognition of their outstanding achievement in innovation, Craig and Clint were awarded the 2019 Upper Naomi Cotton Innovator of the Year Award.

