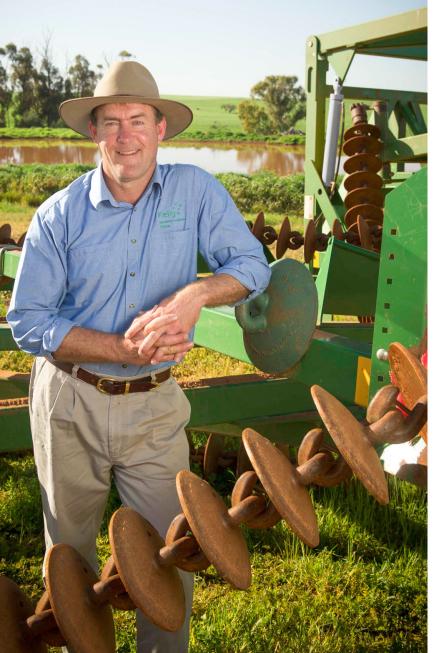
# Kelly\* TILLAGE SYSTEM

A Better Seedbed for a Better Bottom Line

### Kelly... ... Inspired by community



Kelly Engineering is a family business with strong community values. We believe in servicing our customers well, caring for our staff and ensuring that our products contribute to sustainable agriculture.

It is our aim to have satisfied customers promoting our products and contributing to our continued improvement.

Our staff are critical members of the Kelly Engineering team and their dedication and pride is demonstrated in each and every product we sell.

Sustainable Agriculture for us meansimprovements in soil structure and productivity. Build up of soil carbon, best use of soil moisture, integrated weed management and improved economic margins.

We thank you for showing an interest in our products. If there is anything the team or I can do for you, please do not hesitate to contact us.

Shane Kelly

Scan the QR CODE to see the full Kelly story.





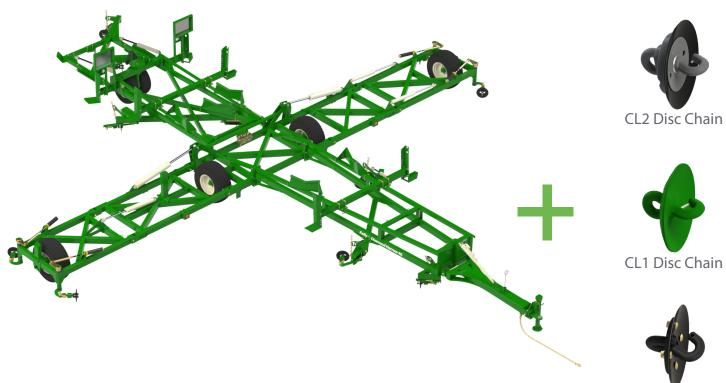


Kelly is located on the family farm, 10km south of Booleroo Centre in the northern agricultural region of South Australia. Nestled in the foot hills of the rugged and picturesque Flinders Ranges, Booleroo Centre has a long history of agricultural innovation.

The Kelly family connection with this area stretches back to 1875 when our forefathers settled on the farm where our factory now stands.

# One machine for year round tillage

Kelly



**Kelly Diamond Harrow** 

K4 Disc Chain

#### Chain



Spike Disc Chain



W36 Disc Chain



R300 Disc Chain



**Kelly Seeder** 

Integrated on the Model 4614 only. Custom aftermarket seeders can be fitted to all machine sizes.



### Kelly Tillage System

Whether it's stubble management, weed control, moisture management or creating that perfect seedbed prior to planting, the unique diamond shaped Kelly Tillage System offers a wide array of ground engaging discs to satisfy your year round tillage requirements.

The Kelly Seeder provides enormous cost saving benefits through one pass broadcasting and incorporation.

With a reputation for strength and reliability, the Kelly Tillage System is versatile and tough enough for every application.

# Year Round

Stubble management, weed control, seedbed preparation and herbicide To learn how the Kelly Tillage System



#### **Stubble Management**

Using our range of disc options, the Kelly Tillage System can chop and split the stubble into smaller lengths, exposing the unprotected inner parts to moisture and microbes.

The stubble layer protects the soil from wind and water erosion and moderates temperature fluctuations, providing the ideal environment for decomposition to occur, while adding nutrients and building soil structure.



#### **Weed Control**

The fast, efficient and long-lasting Kelly Disc Chains work in two ways. Firstly, they uproot existing weeds and leave them on the surface to die. Secondly, the shallow scarifying action stimulates weed seeds to germinate and keeps them near the surface where their viability degrades quickly.

Reducing the weed seed bank using shallow tillage is a key tool in the fight against herbicide resistance.

# Tillage

incorporation are important factors in todays farming practices. can help, visit www.kellytillage.com



#### **Seedbed Preparation**

Kelly Disc Chains work the surface of the field, smoothing and leveling while creating a layer of tilth covered with a protective mulch of stubble.

The light shallow action of the harrow preserves moisture near the surface. Planter accuracy is at its very best because of the smooth, consistent surface preparation. Optimal preparation leads to optimal seedbeds, which gives you the best chance of excellent crop establishment.



#### **Herbicide Incorporation**

The combination of the diamond shaped layout and versatile disc chain configuration provides even soil levelling and distribution. The shallow working nature of the Kelly Chains make them ideal for incorporation of herbicides and fertilisers, both liquid and granular.

Use the Kelly Tillage System to incorporate after broadcasting or our mounted seeder for a cost and time saving "one pass" application.

## **Kelly Chains for**

Having multiple chain types on your Kelly Tillage System



#### **CL2 Disc Chain**

A concave replaceable disc mounted in a heavy cast steel boss with a hook and eye to link together.

The sharp disc provides penetration while the weight and shape of the boss keep the disc cutting and controls the working depth. Heavy residue management and reliable weed control make this our most powerful option.

> Weight 125kg/m Disc spacing 214mm

#### **CL1 Disc Chain**

The most versatile of the Kelly Disc Chains, the CL1 is a concave disc made from hardwearing cast steel alloy with a hook and eye to link together.

The ideal tool for stubble management, weed control, levelling soil and working at just the right depth create the perfect seedbed.

> Weight 70kg/m. Disc spacing 163mm

#### K4 Disc Chain

A mid-weighted replaceable disc built for enhanced weed control in the loam range of soils.

The sharp edge of the K4 disc pulls weeds from the soil, flipping them over and leaving them on the surface to die. Farmers using this method have reported over 90% reductions in weed density.

> Weight 68kg/m Disc spacing 160mm



#### R300 Di

A curved disc hardened wear plate welded to

The 125mm provides depth soils and full improved weed working

> Weight Disc spacing

## all situations

will help you tackle all your year round tillage needs







#### sc Chain

made from a resistant steel a heavy chain.

disc spacing control in sandy coverage for control while shallow.

70kg/m 125mm

#### **Spiked Disc Chain**

10 spikes per disc and 125mm spacing gives this heavy duty Spiked Disc Chain real effectiveness.

The Spiked Disc Chain is very effective at removing weeds, making it an ideal tool for pre or post seeding clean up. The shallow working depth and combing action means the Spiked Discs are light to pull and cover more hectares more quickly.

> Weight 75kg/m Disc spacing 125mm

#### W36 Disc Chain

A lightly curved disc made from a hardened wear resistant steel plate, welded to a heavy chain.

The W36 Disc Chain is our wet weather specialist. Used alone or in combination, the smooth, shallow disc surface performs in wet and sticky soils like nothing else can.

> Weight 55kg/m Disc spacing 165mm



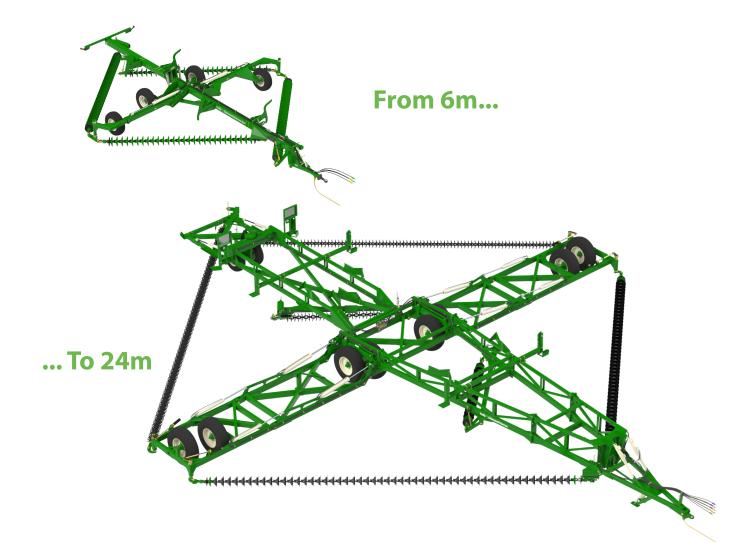
#### **Prickle Chain**

A spiked chain ideal for levelling worked soil and incorporating pre-emergent herbicides in very light tillage applications.

Made from wear resistant rods welded through each chain link, the spikes are shaped to be self-cleaning and to run smoothly, giving a perfect finish every time.

> Weight 25kg/m Disc spacing 90mm

# No farm too big or too small!



# **Model Range**

Model	2006	3009	40	4614	6218HDX	8024
Working width	7.2m	10m	13.5m	15m	18.9m	25.8m
Cut width	6.4m	8.8m	12.5m	14m	18m	24.4m
Transport width	2.4m	2.4m	3.5m	3.9m	5m	7.5m
Transport height	3.9m	3.4m	3.8m	3.9m	4.8m	4.6m
Transport length	10.4m	11.6m	13.9 m	17.1m	21.9m	27.9m

The Kelly Tillage System models cater for all sizes and types of farm operation.

Model size ranges from 6m to 24m, including controlled traffic models.

# Hear what customers have to say

"

### Pleased to own an implement that only gives you pleasure

I am very pleased with my decision to have imported this extremely efficient and fantastic implement. I believe this low maintenance implement will do most farmers around the world a big favour both financially and emotionally. It reduces your workload (stress), saves chemical costs both in winter as well as spring. Time is money and the Kelly assists us to achieve this! It's a pleasure to own an implement that only gives you pleasure. *Ashley Whitfield, Kroonstad, South Africa* 

# Integral part of our farming system

We have owned a Kelly Disc Chain for 4 yrs and consider it the most versatile and useful bit of farming plant we have ever owned. It has become an integral part of our farming system and with the recent upsurge in fleabane and wild radish it is giving us weed control where chemicals are in trouble.

For pre seeding weed control, ground levelling and seedbed preparation it is unique and we have no hesitation in recommending it.

Alan Klante, Alan Klante Nominees, Nyngan NSW

# **Time is money**

We grow around 1500 acres of grain sorghum. In the past we have had to do 5 to 7 deep tillage trips over the field to prepare the seedbed. We run the Kelly Tillage System once and burn the residue and wait for the rain and then run the Kelly at an opposite angle and plant right behind it. The Kelly Tillage System has saved us 3 to 5 trips. *Tad Hargis, Louisiana, United States* 

# **Could farm only using the Kelly Tillage System**

I farm 6,000 acres of rice and soybeans with my father and brother. The Kelly Tillage System is the main tillage tool that works well in wet gumbo and sandy grounds.

We believe we could farm using only a Kelly Tillage System and Planter. *Nathan Fuller, Oil Trough, Arkansas United States* 



Scan the QR CODE to hear more testimonials from Kelly customers around the world.

# **Case Study: Lance Wise**

Farmer: Lance Wise, Queensland, Australia Farm: 1650ha, black clay and red ridge soils Crops: sorghum, wheat, barley, chickpeas, mung beans Kelly Model: 3009 & 4012 Disc Chains: CL1, CL2, Spiked Disc

Lance Wise has four Kelly harrows (two 3009 and two 4012 models), which he uses on his own farm as well as renting them out to others as part of his dry hire business. Two machines (one of each model) are fitted with CL1 Disc Chain front and rear, for a more moderate and versatile approach. The other two machines have CL2 Disc Chain front and Spiked Disc Chain on the rear; the sharp-edged CL2 discs provide more aggressive weed control, while the spiked discs leave a coarser finish which is more resistant to erosion.

Lance Wise first purchased a Kelly as a way to supplement his weed control. He uses the disc chain together with herbicide as a cheap 'double knock' that doesn't contribute to chemical resistance. This process helps him to kill a higher percentage of weeds at a lower cost. The Kelly has been effective at controlling herbicide resistant feathertop Rhodes grass and fleabane, especially on Wise's black clay soils.

Wise has found that the Kelly harrow kills 85-90% of weeds when used before spraying herbicide. After a light spray though, weed kill goes up to 99%. Since integrating the Kelly into his weed control program Wise has been able to cut out a total of 3-4 sprays per year, and weed pressure on his farm has decreased significantly.

Wise also uses the Kelly to help soil moisture levels. Improving water retention is the biggest challenge for Wise, who has begun to use sub-soil ripping to increase water holding capacity. The Kelly aids in this process by levelling the field after ripping, mitigating damage to the seedbed and increasing the tilth.

#### **Key Findings:**

- A combination of shallow surface tillage and sub-soil ripping has led to reduced weed pressure and increased water retention.
- An integrated approach to weed control has reduced weed pressure and allowed Wise to cut out 3-4 sprays each season.
- Levelling the seedbed with a Kelly harrow has increased working speed for all field operations.
- Managing stubble with the Kelly harrow has led to improvements in crop establishment.

# **Case Study: Bernd Richter**

Farmer: Bernd Richter, Eastern Germany Farm: 150ha, sand to loam soils Crops: peas canola, wheat, barley, rye Kelly Model: 2006 Disc Chains: CL1

The Kelly harrow is used for a wide range of purposes on the Richter farm, including controlling weeds and cover crops, preparing a seedbed in tougher conditions and managing stubble (especially canola stubble). Richter feels that the CL1 Disc Chain is best suited to dry and normal conditions in soil that isn't too heavy. He has also been trialing rear-fitted Spiked Disc Chain in combination with the front CL1, and feels that the Spiked Discs are ideal for better aeration of the soil and for creating a seedbed that isn't too fine.

The Kelly Tillage System has increased overall productivity on the Richter farm. Richter's Kelly harrow uses around 3 litres of fuel per hectare, half as much as the cultivator that he used previously. With a 12-14km/h working speed, the Kelly covers 6-8 hectares every hour. As a direct result of the higher working speed and lower fuel and labour expenses, Richter is now able to make two passes across the field where he previously made one, at the same cost.

Richter's maintenance costs are also dramatically lower with the Kelly harrow than they were for the cultivator.

A surprise benefit that Richter mentions is a result of the level seedbed that the Kelly harrow creates for planting. Having flat and even fields has allowed planters and drills to work at higher speeds, increasing productivity and reducing planting losses. "The driver of the harvester praised our flat, bump-free surface," says Richter. Having a smoother seedbed also led to improvements in crop establishment, causing Richter's pea crop to grow more evenly.

#### **Key Findings:**

- Richter states that the biggest problem on his farm is water retention. "What we try to do is hold it inside the ground. Since we got a Kelly harrow we stopped working deep during the hot and dry months."
- Cutting back on chemical application and making heavy use of ground cover have made the soil more resilient.
- A concerted effort has been made to minimise field traffic, significantly reducing soil compaction and operating costs.



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