

## KELLY Tillage System Product Brochure



# Reduce costs. Control weeds. Manage residue. Prepare a seedbed.

Do more with CELNA

KELLY is the global leader in the engineering and manufacturing of shallow tillage machinery. The KELLY brand is built upon a foundation of necessity-driven innovation and is committed to supporting beneficial farming practices.

KELLY machinery is intuitively designed, highly adaptable and offers multiple configurations to best suit the needs of the farmer, delivering cost savings and time efficiencies by completing multiple functions with a single machine and often completing those functions in a single pass.

KELLY continuously sets new industry benchmarks in the pursuit of a 'Better Tomorrow', with the commercial and environmental benefits of a KELLY seedbed promising a brighter and healthier future for both farmers and the planet.

#### Better Tillage. Better Tomorrow.

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## Inspired by **Community**

KELLY Tillage began as 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 team and their dedication and pride is demonstrated in each and every product we sell.

KELLY Tillage began on the Kelly family farm near Booleroo Centre in the northern agricultural region of South Australia. Nestled in the foothills of the picturesque Flinders Ranges Booleroo Centre has a long history of agricultural innovation.

Better Tillage. Better Tomorrow.

Sustainable agriculture for us means improvements 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

Pictured: The Kelly family farm in Booleroo Centre, South Australia



### The KELLY Tillage System

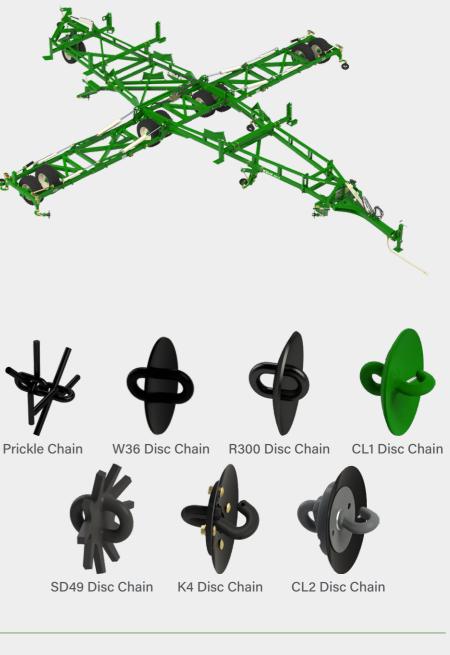
#### One machine for year-round tillage.

The KELLY Tillage System uses a range of Disc Chains to perform versatile ultra-shallow tillage operations in global crop production systems. Originally designed for managing crop residue after harvest, it is now used for levelling the seedbed, incorporating cover crops and removing weeds. With an earned reputation for strength and reliability, the KELLY Tillage System is available in multiple sizes and configurations.

## **Building Better Tillage**

#### **Diamond Harrow**

The KELLY Diamond Harrow provides a durable platform for KELLY Disc Chain. With a high-strength steel frame and a hydraulic fold system for ease of transport, this efficient harrow is available in a range of sizes.



#### **Disc Chains**

KELLY offers a full range of ground tool options, from the lightweight Prickle Chain to the powerful CL2. Heavy, widely spaced Disc Chains offer improved soil penetration and performance in wet conditions, while chains with closer spacing increase weed control and provide a finer seedbed.

**Pneumatic Seeder** 







#### Better Tillage. Better Tomorrow.

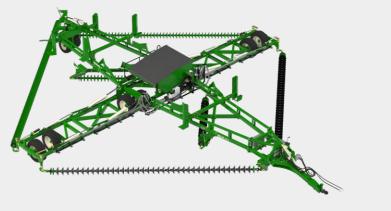
#### The addition of an aftermarket airseeder unit allows for single-pass residue management and cover crop



OPTIONAL

seeding.

Scan to learn about seeding cover crops with KELLY.



### Shallow Depth, Deep Impact

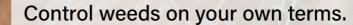
Pictured: KELLY Model 40 preparing a seedbed

Pictured: CL1 Disc Chain smashing crop residue

#### Start with a perfect seedbed.

KELLY Tillage is the global leader in seedbed preparation, designing and manufacturing shallow tillage technology that preserves soil moisture, improves seed/soil contact and creates an even surface for planting.

A level seedbed optimises planter performance and seed placement, leading to more consistent germination. KELLY Disc Chains create these ideal seeding conditions through a shallow tillage pass that gives each seed the best possible start.



Weeds won't resist a KELLY. Disc Chains uproot established weeds, leaving them on the surface to die. The shallow tillage action also stimulates the germination of weeds laying dormant in the upper layer of the soil seed bank.

By forcing uniform germination of seasonal weeds before planting, a KELLY can massively improve the effectiveness of a subsequent weed control pass as well as limiting the emergence of buried weed seeds throughout the growing season.



#### Take charge of your cover crops.

When fitted with an integrated pneumatic seeder unit, a KELLY can establish a cover crop while preparing a seedbed. At the other end of the season, the KELLY can terminate the cover crop to return organic matter to the soil, creating a fertile environment for the cash crop to flourish.

Using an airseeder allows the KELLY Tillage System to prepare the field and plant the cover crop in a single pass, saving time and money.

#### Make stubble management simple.

KELLY Disc Chains break stubble and split internodes to accelerate biological decomposition, returning nutrients to the seedbed.

Shallow-working Disc Chain technology allows farmers to start preparing early in the season, saving costs on labour and fuel. By knocking down residue, the KELLY Tillage System leaves a protective mulch layer that insulates the topsoil against erosion and conserves soil moisture.

#### Better Tillage. Better Tomorrow.



Pictured: KELLY Model 4614 with integrated airseede

## **Machine Features**

As any farmer knows, the job is never finished. KELLY products are the result of decades of applied experience and evolution, culminating in a modern design that optimises field performance, fuel efficiency and resilience.

KELLY machinery is intuitively designed, highly adaptable and offers multiple configurations to best suit the needs of the operator. The KELLY Tillage System brings consistency and durability to the forefront through innovative engineering and intelligent design.

> The durable 'T-Style' drawbar design distributes force throughout the frame to allow for smoother turns. This drawbar is featured on the 3009, 40 and 4614 Models.

T-Style drawbar

#### Centre frame module

The centre frame module generates overlap for the front and rear chain gangs, allowing feathering to provide an even cut across the full working width.

#### **KELLY Disc Chains**

KELLY Disc Chains roll over the soil, working the top 3-5cm to incorporate crop residue, terminate weeds and prepare a level seedbed for planting.

-----tractor seat. \*folding time may vary with tractor capacity and machine configuration

Tyres

High-flotation tyres provide reduced soil compaction, leaving the smoothest possible finish. Outer wing dual wheels are available on select models for increased stability.

#### Better Tillage. Better Tomorrow.

Pictured: KELLY Model 4614 with integrated airseeder

Sealed swivel bearing units connect each Disc Chain gang to the machine frame. Bearings are highly durable, with a twelve-

Swivel bearings

month wear warranty.

#### Load-sharing axles

4614 and 6218HDX models use unique loadsharing axles to spread weight throughout the frame. This low-maintenance design shines in wheel ruts and uneven soil conditions.



#### Pneumatic seeder

Aftermarket seeder units can be fitted to all KELLY models. The addition of an integrated seeder allows the KELLY to be used for both establishing and terminating cover crops.

#### Hydraulic manifold

Customised hydraulic valve manifolds incorporate a range of safety features for burst protection and operator security. KELLY products exclusively use high-quality Ryco hose and fittings, facilitating operation with only three pairs of hoses.

#### Framework

High-grade KELLY fabrications are the result of millions of hectares of experience. Designs are tested using Finite Element Analysis to ensure that each machine will stand up to the stress and rigour of years of use.

#### Hydraulic fold

The hydraulic folding system allows operators to move from road to field in under three minutes\* and can be fully operated from the

## KELLY **MODEL RANGE**

The KELLY Tillage System is simple to operate and requires minimal maintenance due to a user-friendly hydraulic folding system, sealed swivel bearings and stress-tested framework.

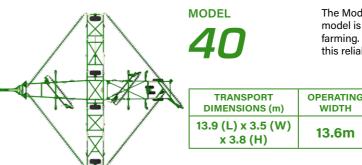
Exact product specifications may vary pending design updates. For current information visit www.kellytillage.com

num power requirements assume each machine is fitted with CL1 Disc Chain on the front and rear chain sets. v power requirements are guidelines only. The power required to effectively operate each machine may vary base sc Chain configuration and soil conditions.

MODEL

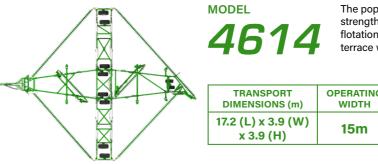
MODE

204



The Model 1204 is designed to leave a smooth, flat floor between orchard rows for improved nut harvest efficiency. This model can level soil, control weeds and prepare for almond harvest - all in one pass. Fuel, labour and herbicide savings ensure rapid return on investment. This unique model is configurable to suit a range of tree row spacings.

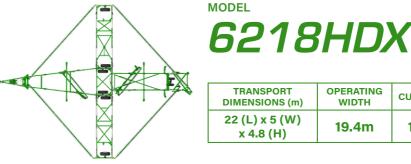
70-	TRANSPORT DIMENSIONS (m)	OPERATING WIDTH	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
NARROW	9 (L) x 2.3 (W) x 2.1 (H)	3.8m	3.5m		3.6ha/h	
MEDIUM	9 (L) x 2.3 (W) x 2.3 (H)	4.3m	4m	2150kg	4.1ha/h	90HP (67kW)
WIDE	9 (L) x 2.3 (W) x 2.6 (H)	4.8m	4.5m		4.6ha/h	(0/KVV)



The Model 2006 uses an offset diamond chain layout for improved centreline overlap. This compact model incorporates hydraulic chain tensioning and has uniform wing and transport wheels, increasing stability and serviceability. The floating wings of the Model 2006 closely follow soil contours to achieve an even cut in undulating terrain.

TRANSPORT DIMENSIONS (m)	OPERATING WIDTH	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
10.4 (L) x 2.4 (W) x 3.9 (H)**	7.2m	6.4m	2750kg	6.5ha/h	120HP (90kW)

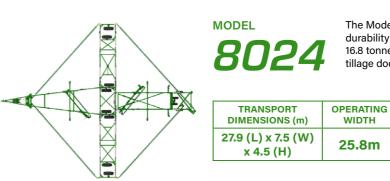
\*\*\* Model 2006 transport height can be reduced to 3.6m by dumping pressure in the wing tension cylinders



MODEL

The reliable and robust Model 3009 is suitable for a wide range of applications. With a reworked drawbar for improved manoeuvrability and a full contour-tracking frame, this mid-sized model performs consistently across its 9m cut width.

•	TRANSPORT DIMENSIONS (m)	OPERATING WIDTH	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
	12 (L) x 3.5 (W) x 4.1 (H)	10m	9m	4640kg	9.2ha/h	150HP (110kW)



The Model 40 is built for longevity, efficiency and manoeuvrability. This model is designed with 3m wheel tracks, suitable for 12m controlled traffic farming. With a 12.4m cut width and versatile shallow tillage capabilities, this reliable tool is ready to tackle any job you throw at it.

NG	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
ו	12.4m	5545kg	12.8ha/h	(150kW)

The popular Model 4614 is designed with upsized jockey wheels, a high-strength reinforced frame and optional dual outer wing wheels for improved flotation. This heavy-duty model has higher underframe clearance for terrace work and high residue loads.

NG	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
	14m	7800kg	14.3ha/h	230HP (170kW)



The powerful Model 6218HDX is built for taking care of business. With twin drawbar cylinders, load-sharing axles and optional outer wing dual wheels, this heavy-duty model has exceptional durability. The Model 6218HDX has higher underframe clearance for rolling over terraces.

NG	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
ו	18.1m	13420kg	18.5ha/h	310HP (230kW)

The Model 8024 is the largest KELLY model. Building on the enhanced durability and features of the Model 6218HDX with a 24.7m cut width and 16.8 tonne frame, this machine covers ground like nothing else. Shallow tillage doesn't get any bigger than this!

NG	CUT WIDTH	FRAME WEIGHT	PERFORMANCE (AT 12km/h)	MIN. POWER REQUIRED*
n	24.7m	16800kg	24.9ha/h	400HP (295kW)

## KELLY **DISC CHAINS**

With the inbuilt versatility afforded by different Disc Chain configurations, the KELLY Tillage system becomes a year-round tool for seedbed preparation, weed control, residue management and more.



Scan to learn more about KELLY Disc Chains.



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CHAIN	WEIGHT

UNIT WEIGHT	CHAIN WEIGHT	DISC CONCAVITY	DIAMETER	SPACING	THICKNESS
11kg	70kg/m	35°	323mm	163mm	8mm



CL2 **Disc Chain** 

**K4** 

A powerful disc with a replaceable cutting blade, built for rough conditions and heavy stubble. The sharp edge of the heavy-duty CL2 penetrates the toughest of soils, while the weight and shape of the boss keeps the disc cutting and limits the working depth.

UNIT WEIGHT	CHAIN WEIGHT	DISC CONCAVITY	DIAMETER	SPACING	THICKNESS
24kg	110kg/m	25°	360mm	220mm	5mm





UNIT WEIGHT CHAIN WEIGHT 9kg 73kg/m



A mid-weighted cutting disc built for enhanced weed control, especially effective in loam soils. The sharp edge of the replaceable K4 blade 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 Disc Chain die. Far density.

UNIT WEIGHT	CHAIN WEIGHT	DISC CONCAVITY	DIAMETER	SPACING	THICKNESS
11kg	72kg/m	25°	330mm	160mm	4mm



### **W36** Disc Chain from a light operation.

UNIT WEIGHT	CHAIN WEIGHT	DISC CONCAVITY	DIAMETER	SPACING	THICKNESS
9kg	55kg/m	25°	325mm	165mm	8mm



SD49 is fast and effective. The light touch breaks clods, levels soil, airs the SD49 surface and plucks out weed seedlings. The rolling spikes lift residue and weeds to the surface, making SD49 ideal for pre or post seeding clean up. **Disc Chain** The shallow working depth makes SD49 Disc Chain light to pull, allowing it to cover more hectares more quickly.

UNIT WEIGH	CHAIN WEIGHT	DISC CONCAVITY	DIAMETER	SPACING	THICKNESS
10kg	80kg/m	20°	317mm	125mm	20mm





CHAIN WEIGHT	CHAIN LINK LENGTH	BLADE THICKNESS
25kg/m	90mm (132 spikes per metre)	20mm

extraordinary wear life and unmatched versatility, CL1 Disc Chain is eal tool for stubble management. The CL1 works at a constant, shallow for weed control and levelling, while retaining subsoil moisture and cting soil structure to give farmers a perfect seedbed for planting.

The sand specialist. The design of the R300 reduces penetration, improving performance in light and sandy soils. Closer disc spacing offers complete coverage when working shallow for improved surface levelling and a smooth, even seedbed.

35°	325mm	125mm	8mm
DISC CONCAVITY	DIAMETER	SPACING	THICKNESS

The highly durable W36 works wonders in wet weather. Used alone or in combination with another Disc Chain, the shallow face of the W36 performs in damp and sticky soils like nothing else can. This Disc Chain also benefits from a lighter weight, resulting in reduced power requirements for effective

KELLY Prickle Chain is well-suited to levelling tilled soil, managing lighter stubble loads and incorporating pre-emergent herbicides. Weighing only 25kg/m, this chain has minimal horsepower requirements and a higher working speed than other chains in the KELLY range.

## Built For Your Farm

KELLY Disc Chains offer many of the benefits of a traditional tillage pass without the associated drawbacks. A KELLY pass protects the soil structure and preserves subsoil moisture by minimising aggression through reduced weight and a shallow working depth. Each KELLY chain is designed for a different application and soil type, providing optimal results for soil health without compromising on fuel economy.

### The right disc for the right job.

Application	*		4	•	Ŕ	$\bullet$	•G
Chain Type	РСН	W36	R300	CL1	SD49	K4	CL2
Seedbed preparation (fine tilth)	0	•	•	•	•	•	0
Levelling ruts & ridges	0	•	•	•	•	•	•
Weed control	×	0	0	0	0	•	•
Light stubble work (<3t/ha)	•	•	•	•	•	•	•
Medium stubble work (3-6t/ha)	0	0	0	•	•	•	•
Heavy stubble work (>6t/ha)	×	0	0	0	0	•	•
Cover crop termination	×	0	0	0	×	•	•
Fertiliser incorporation	0	0	0	•	•	•	0

#### Soil Conditions

Chain Type	PCH	W36	R300	CL1	SD49	K4	CL2
Sand (dry)	•	0	•	0	٠	0	×
Sand (wet)	•	0	•	0	٠	•	×
Sandy loam (dry)	•	•	•	•	•	•	•
Sandy loam (wet)	•	•	•	٠	٠	•	•
Loam (dry)	•	•	•	٠	٠	•	•
Loam (wet)	•	•	•	•	٠	•	•
Clay loam (dry)	0	•	0	٠	٠	•	•
Clay loam (wet)	0	•	0	•	•	•	•
Clay (dry)	×	0	×	•	٠	0	•
Clay (wet)	×	•	×	0	٠	•	•

 $\times$  = not suitable  $\circ$  = suitable  $\bullet$  = high performing



#### **KELLY** has you covered.

Farmers can rest easy with KELLY's industry-leading warranty program.

KELLY guarantees all products against faulty workmanship and materials for twelve months from delivery to the customer. If the machine is registered within two months of delivery, KELLY offers an additional thirty-six month frame warranty, for a total warranty period of four years. For reliable long-term performance, there's nothing like a KELLY.

## Cutting Back On Chemicals

NAME:	Lance Wise
LOCATION:	QLD, Australia
FARM SIZE:	1650ha
SOIL TYPE:	black clay and red ridge soils
CROPS:	sorghum, wheat, barley, chickpeas and mung beans
MODEL:	Model 3009 Model 40
CHAINS:	CL1 Disc Chain CL2 Disc Chain SD49 Disc Chain

Wise has been able to cut out three to four sprays per year, and weed pressure on his farm has decreased significantly.



Pictured: SD49 Disc Chain

Lance Wise has four KELLY Tillage Systems (two Model 3009s and two Model 40s), which he uses on his own farm as well as renting them out to others as part of his dry hire business. He first purchased a KELLY as a way to supplement his weed control. He uses the Disc Chains 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.

#### **KEY FINDINGS**

- operations.



Pictured: Lance Wise (left) with KELLY Model 3009

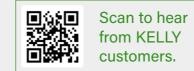
Wise has found that the KELLY kills 85-90% of weeds when used before spraying herbicide. When paired with a light spray, he estimates that weed kill goes up to 99%. Since integrating the KELLY into his weed control program Wise has been able to cut out a total of 3-4 sprays per year.

Wise also uses the KELLY to help soil moisture levels. Improving water retention is the biggest challenge for Wise, who has begun to use subsoil 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.

- A combination of shallow surface tillage and subsoil 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 has increased working speed for all field

Managing stubble with the KELLY has led to improved crop establishment.

## **Customer Testimonials**





From our perspective, in this country the KELLY is such a versatile tool because it'll handle rocks, it handles most ground conditions, and is extremely efficient.

We're doing 10 hectares an hour and our fuel cost is practically nothing, cultivation costs are less than 20 bucks a hectare.

It's insane compared to other machines.

Simon Burgess Conara, TAS

We have owned a KELLY Disc Chain for 4 years 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

We bought the KELLY because we'd started looking at weed control and trash management, and were convinced that if we didn't start doing some light mechanical tilling we'd run into resistance problems in summer sprays.

The machine is doing a lovely job of mulching the soil down but also taking out those summer weeds.

We're getting a very good germination when sowing, with **better** seed/soil contact... we're absolutely rapt with the job that it's doing.

> David Gillett Anakie, VIC

The KELLY has changed a lot of the paradigm of how we grow some of our crops. The immediate benefit was less horsepower, less fuel and all of that.

We've come to understand that the **benefits are also soil related**.

We're not working our soil more than an inch deep, and compaction issues are reduced.

We've covered a lot of acres and the wear has been phenomenal.

The main reason we purchased this machine was to reduce our spending on chemicals.

By doing some testing, we found that we had **improved** emergence, improved seed germination and savings in fuel.

Green vegetation index imaging showed further improvements in seeding and plant health.

This led to us acquiring a second machine to incorporate the rest of our land.

One of the biggest results I've seen in a short space of time is an improvement of our seedbed.

In addition to that it's the improved stubble management and improved weed control.

Last year we cut out a spray on our entire farm because we used the KELLY.

With more experience, I think we can cut out further sprays.

Better Tillage. Better Tomorrow.

Davis Farms Kentucky, USA

Jenaro Valinotto Córdoba, Argentina

David Evans Free State, South Africa



## Save on fuel, labour and herbicide.

# Ask what a KELLY can do for your farm.



Scan to contact KELLY for pricing and availability.

#### Australia

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Monday - Friday 8am - 4pm ACDT

#### **Global Locations**

United States Hood & Company

Eastern Canada Leading Edge Equipment www.leadingedgeequipment.ca

Western Canada Adair Sales & Marketing Co Inc www.adairreps.com South Africa Desmond Whitfield CC

**Europe** kellytillage.com

Argentina Giorgi Sa Maquinarias Agricolas www.giorgi.com.ar

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