

# A complete range of heavy-duty rigid power harrows





# Kverneland - Range of Power Harrows

## Heavy-duty Technology for Tough Conditions



To meet the ever increasing demand from modern farming Kverneland have a range of heavy duty rigid power harrows with working widths of 2.5m to 4.5m.

### **The range consists of three models:**

- NG-M 101 for tractors up to 140hp
- NG-H 101 for tractors up to 180hp
- NG-S 101 for tractors up to 250hp

With farms increasing in size and being faced with new challenges, performance, reliability, versatility and good resale value will determine the standard for the farmers' choice.

### **Heavy-duty Construction**

The Kverneland Power Harrows are designed for heavy conditions and are built for tractors up to 250 HP. Special emphasis has been given to reliability

and a strong trough design. This has been achieved by having a large distance between the conical bearings, hardened gears in the trough and a heavy-duty rigid trough design.

### **New Quick-Fit Tines**

All models can be fitted with new quick-fit tines to meet customer's demand for efficiency. The tines are secured by a special pin and clip mounted in the tine holder. The tines can therefore be replaced quickly without tools.

'Active' forward facing tines can easily replace standard tines, and when in combination with an Kverneland Accord mounted seed drill fitted with disc coulters; these 'active' tines will provide improved performance in heavy mulch conditions.

### **The Trough Design**

For optimum performance in difficult soil conditions, the robust trough design provides a large clearance between the tine holder and trough bottom. This allows large amounts of residue and stones to pass freely without blocking and provides excellent results in mulch conditions.

### **Easy to use - easy to maintain**

Kverneland has focussed on ease-of-maintenance. The trough is filled with oil instead of grease to allow easier oil changes and positive rotor lubrication from initial start up. The tine carrier design of NG-H and NG-S is of two separate pieces, allowing the oil seal to be replaced without opening the trough. The rotors are sealed with cassette seals, ensuring no wear on the shaft and minimum maintenance.





## Kverneland NG-M 101 - for tractors up to 140 hp

### **Trough construction**

A 5mm profiled plate together with a 5mm top plate form the 120 x 400mm trough. In combination with a 10mm reinforcement plate, precise positioning of the rotors gives a light but strong bending resistant trough.

### **Tine dimension**

12 x 280mm.



## Kverneland NG-H 101 - for tractors up to 180 hp

### **Trough construction**

Two profiled 6mm plates, plus a 12mm reinforcement plate ensuring precise rotor spacing, high bending resistance in the 140 x 400mm trough

### **Tine dimension**

15 x 320mm.



## Kverneland NG-S 101 - for tractors up to 250 hp

### **Trough construction**

Two 10mm profiled plates forming the 150 x 400mm trough. The fully welded rotor housings add additional strength and bending resistance to the trough.

### **Tine dimension**

18 x 330mm.

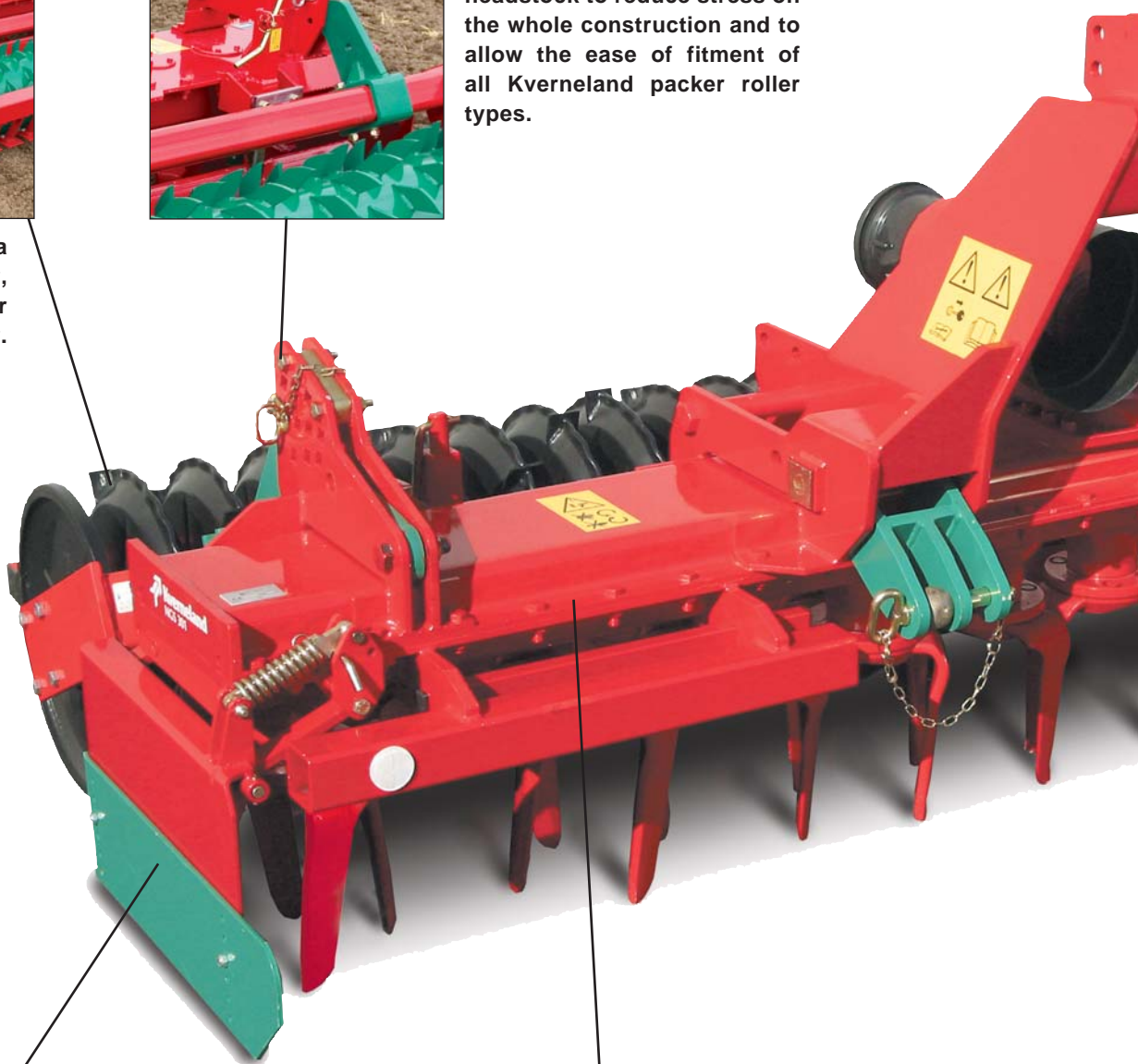
# 10 Good Reasons for Choosing a Kverneland Power Harrow



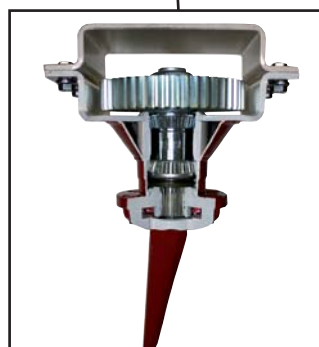
Possibility to fit a choice of: cage roller, tooth packer, cracker packer or flexline roller.



The depth adjustment bracket is positioned closer to the headstock to reduce stress on the whole construction and to allow the ease of fitment of all Kverneland packer roller types.

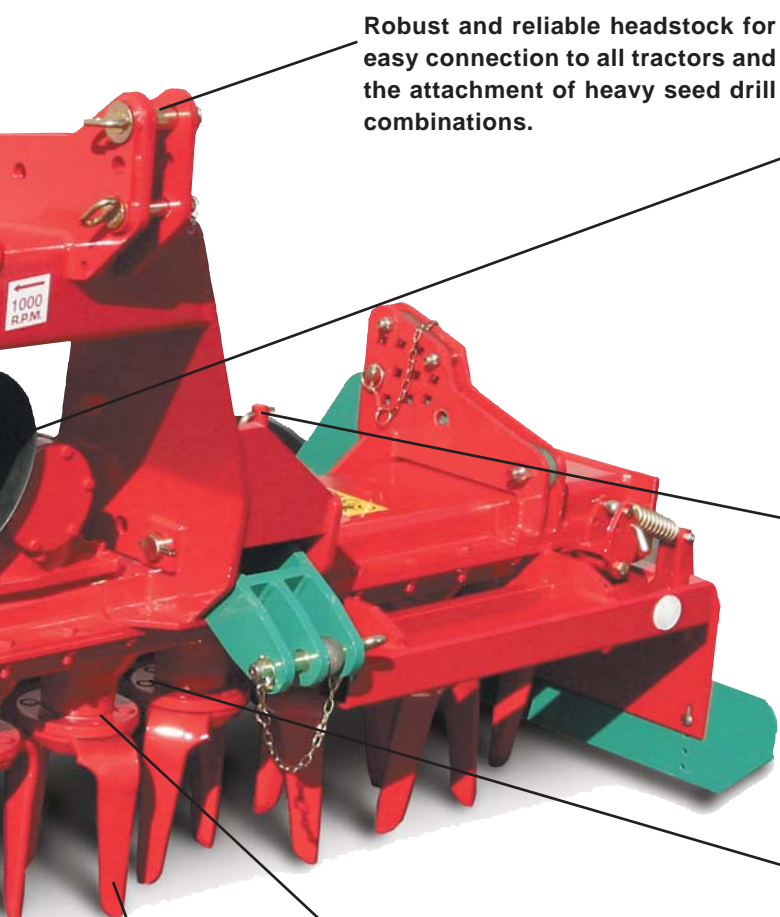


Floating side deflectors with overload protection allow smooth operation and a ridge free soil surface.



Robust, self-supporting trough design provide the necessary strength for trouble free operation.

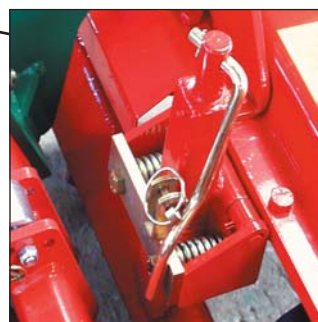




**Robust and reliable headstock for easy connection to all tractors and the attachment of heavy seed drill combinations.**



**Robust change gear box with replaceable gears as standard. Additional sets of gears are available.**



**Spring loaded, infinite adjustment of the rear levelling bar ensures a level surface.**



**Two large conical bearings with a wide distance provide rigidity and a long service life.**



**Quick-Fit tines – the tines are locked in position by a pin and clip. Tines are quickly replaced without tools.**



**Fully welded rotor housings (NG-S models) ensure high bending and torque resistance to the trough when working in very tough soil conditions. This also provides an optimum clearance between the trough bottom and tine holders and allows large amounts of residues and stones to pass freely without blocking. The tine holders can be easily removed to replace shaft seals if necessary.**



# Kverneland NG-M 101

## For tractors up to 140 hp

The Kverneland NG-M 101 is a medium sized power harrow for tractors up to 140 hp, built following the same design concept as the well known “H 101” and “S 101” models. The self-supporting trough construction, as well as optional ‘Quick-Fit’ tine holders and conical bearings offer optimum performance.





## Technical Specifications

Model	Working width (m)	Weight with packer (kg)	Weight with cracker packer (kg)	No. of rotors	Rotor speed
NG-M 251	2.50	1210	1320	10/20	219/311
NG-M 301	3.00	1330	1500	12/24	219/311

PTO speed: 540 rpm (1000 rpm as an option)

## The NG-M trough - high technology brought to the basic model

### Trough

One 5mm profiled plate and a 5mm top plate form the 120 x 400mm trough. In combination with a 10mm reinforcement plate, precise positioning of the rotors, and vertically strengthening ribs, it forms a light but strong bending resistant trough.

### Tine shaft of 45mm

Two large conical bearings, Ø40 and Ø45mm with a distance of 47mm and robust 30mm gears.

### Ample clearance

90mm clearance between the trough bottom and the tine holder.

### Tine dimension

12 x 280mm.



### Bolted tines.

The NG-M Power Harrow is equipped with bolted tines as standard.



### Quick-Fit tines.

The NG-M can be fitted with Quick-Fit tines as option.



# Kverneland NG-H Series

## For tractors up to 180 hp

A robust medium sized power harrow for effective operation in most conditions. Designed for use on tractors up to 180 hp, with the Kverneland heavy-duty trough design and Quick-Fit tines this power harrow is the ideal choice for medium sized farms.





## Technical Specifications

Model	Working width (m)	Weight with packer (kg)	Weight with cracker packer (kg)	No. of rotors	Rotor speed
NG-H 301	3.00	1660	1780	12	336 std. box
NG-H 351	3.50	1870	2010	14	336 std. box
NG-H 451	4.00	2080	2240	16	336 std. box

Oscillating lower link arms, NG-H 301 - Cat. II, NG-H 351/401 - Cat. II & III.



## The NG-H trough - designed for durability and reliability

### Trough

Two profiled 6mm plates, plus a 12mm reinforcement plate, ensuring precise rotor spacing, high bending resistance of the 140 x 400mm trough.

### Tine shaft of 50mm

With two large conical bearings, Ø45 and Ø50mm with a distance of 55mm and 40mm gears.

### Ample clearance

95mm clearance between the trough bottom and the tine holder ensure good soil flow and allow surface residues to pass easily through the machine.

### Tine dimension

15 x 320mm.





# Kverneland NG-S Series

For tractors up to 250 hp

A heavy-duty power harrow for all kinds of operations in all types of soil conditions. Robustly designed for use on tractors up to 250 hp, with the Kverneland heavy-duty trough design and Quick-Fit tines this power harrow is the right alternative for large farms and farm contractors.



## The NG-S trough - designed for reliability and optimum performance



### Trough

Two 10mm profiled plates forming the 150 x 400mm trough. The fully welded rotor housings add extra strength and bending resistance to the trough.

### Tine shaft of 60mm

With two large conical bearings, Ø55 and Ø60mm with a distance of 80mm and heat-treated 50mm gears.

### Ample clearance

125mm clearance between the trough bottom and the tine holder ensure good soil flow and allow residues to pass easily through the machine.

### Tine dimension

18 x 330mm.



## Technical Specifications

Model	Working width (m)	Weight with packer (kg)	Weight with cracker packer (kg)	No. of rotors	Rotor speed
NG-S 301	3.00	1810	1930	12	298 std. box*
NG-S 401	4.00	2280	2440	16	298 std. box*
NG-S 451	4.50	2650	2820	18	298 std. box*

Oscillating lower link arms, Cat. II and III.

\*2-speed gearbox 274/318 is available as option for model NG-S 301 and NG-S 401.



Kverneland power harrows  
- versatile in combination with all  
Kverneland Accord cultivator mounted drills



Gearbox.  
Robust change gearbox with replaceable gears as standard.  
Additional sets of gears are available.



Quick-Fit tines.  
The NG-S is fitted with Quick-Fit tines as standard.





## Heavy-duty trough design and transmission ensure a long working life

As the Kverneland Power Harrows are designed for tractors up to 250 HP (NG-S 101) the construction of the trough and transmission is very robust.

The trough, which is the backbone of the whole machine, is made of two folded profiled plates, forming a beam which is extremely rigid against bending and torsional stress.

There is a difference in dimensions between the three models, but they are all made following the same principles, see figures below.

### Reliability

Special emphasis has been given to reliability. This has been achieved by having a large distance between the conical bearings, hardened gears, and

precise distance between the gears and the heavy-duty rigid trough design.

### Heavy-duty conical bearings

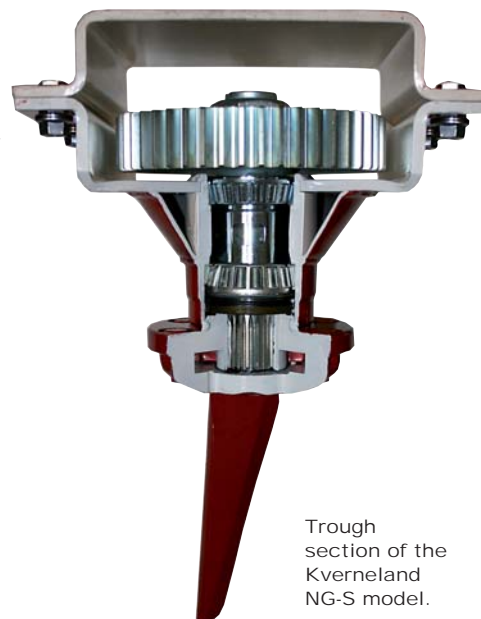
The robust shaft and two heavy-duty conical bearings with large distance ensure trouble free operation;

For the NG-M 101 model:  
Ø40/45mm with a distance of 47mm.

For the NG-H 101 model:  
Ø45/50mm with a distance of 55mm.

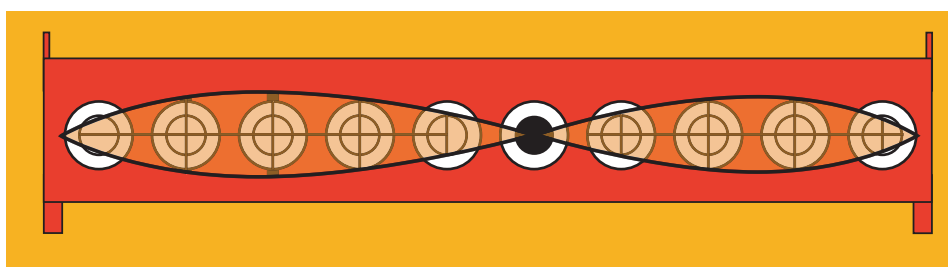
For the NG-S 101 model:  
Ø55/60mm with a distance of 80mm.

In addition, the massive clearance between the trough bottom and the tine holder gives perfect passing of residues and stones.



Trough section of the Kverneland NG-S model.

Dimensions:	NG-M 101	NG-H 101	NG-S 101
Plate thickness:	5mm	6mm	10mm
Reinforcement plate:	10mm	12mm	—
Through mm:	120x400	140x400	150x400



### Helical tine positioning

The tines are arranged in varying angle positions in order to prevent damage caused by stones and ensure even levelling. This reduces also peak loads on the driveline and results in smoother running and less fuel consumption.

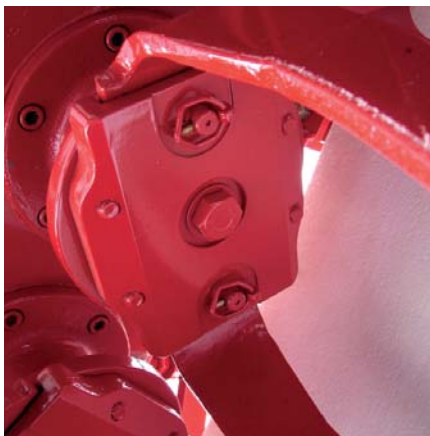




## The Kverneland "Pro-Fit" Active Tines make a big difference

The "Pro-Fit" Active tines ensure optimum penetration in hard soil. The tine, due to its shape, pulls itself into the ground. This gives a constant working depth and also prevents the machine from lifting out of the ground in hard dry soil conditions. In addition it creates additional recompaction at the packer roller.

The "Pro-Fit" Active tine lifts the material and pushes it in front of the power harrow. This gives an optimum levelling effect even in tractor tracks. In mulch conditions the active tines can work directly into stubble and hard soil. The special shape of the tines keeps residues on the surface and this gives a big advantage against erosion.



## Kverneland Quick-Fit tines make the day easier

To meet the demand from farmers, all models are equipped with Quick-Fit tines. The tines are simply fixed to the tine holder by a pin and a clip. All tines can be quickly replaced without any tools.

## Carbide tines

Down time can be minimised by optional carbide layered Quick-Fit tines. These tines ensure a long lifetime and minimum wearing even in tough and abrasive soils. The Quick-Fit system ensures an easy change of tines without the need for tools.



# Kverneland Packer Rollers

Soil conditions as well as crop establishment systems are different from one location to another. The choice of suitable equipment is vital with regards to preparing an optimal seedbed as a good start for perfect growth and high yields.

When it comes to power harrows it is the rear roller which makes the difference. Though being a part of the machine, some roller types might even be mentioned as a soil working tool themselves.

Finally, it should be the farmer, knowing best about his demands.

The Kverneland range of rollers makes sure that this demand will be met, in the best possible way. Recommendations of use, based on soil conditions and crop establishment systems, allow a quick indication about which roller variant can be used for what purpose – in order to meet the different soils` demands!

The choice includes all roller variants being available in combination with a power harrow from:

- Cage roller Ø 450 + 550mm
- Packer roller Ø 500 + 585mm
- Flexline roller Ø 585mm
- Cracker roller Ø 550mm
- Actipack roller Ø 560mm

		Recommendations of use		
		Conventional tillage	Mix of different systems	Mulch Seeding
Soil type	Light (Sand + Loamy Sand)	Packer Roller, Ø 585mm		Flexline, Roller, Ø 585mm
	Medium (Sandy Loam + Silty Loam)	Cage Roller, Ø 450mm Ø 550mm		
	Medium - heavy (Clayey Loam)	Packer Roller, Ø 500 mm Ø 585mm		Cracker Roller, Ø 550mm
	Heavy (Loamy Clay + Silty Clay)	Actipack Roller, Ø 560mm		



# Features and benefits



Kverneland Tooth Packer Roller Ø 500 + 585mm

- Soil surface gets completely rolled good carrying capacity
- Optimum performance on medium to heavy soils
- Single, independently weld on teeth
- Good self cleaning effect
- Central adjustable scraper bar with independently adjusted scrapers
- Carbide-coated scrapers on request
- Most versatile roller – especially as part of heavy power harrow / seed drill combinations



Flexline Roller Ø 585mm

- For light to medium-heavy soils – especially under varying soil conditions
- Large diameter gives perfect carrying capacity
- Beneficial for heavy power harrow mounted seed drills and large hopper volumes
- Stripe-wise reconsolidation (12,5cm) in front of seed coulters but roller resting on soil surface completely
- Scraper bar with independently adjustable scrapers
- Smooth roller surface – no blocking when used in mulch conditions



Cracker Roller Ø 550mm

- Real stripe-wise reconsolidation (12,5cm) in front of seed coulters – only 50% of the soil surface is rolled
- Good absorption of water
- Sufficient soil left loose for covering of seeds
- Optimum performance on medium to the heaviest of soils
- Spring-loaded, adjustable knives cut clods in between the rings
- Good crumbling effect on heavy soils
- Smooth rings and passive-angled knives - no blocking when used in mulch conditions



Cage Roller Ø 450 + 550mm

- Basic variant; mainly for depth control of the power harrow
- Suitable for light to medium soils and dry working conditions e.g. seed bed preparation for potato-planting
- 550mm version is a must when the power harrow is intended to be used with a seed drill on top
- Included in the front-mounting kit for additional depth control in front of the machine



Actipack Roller Ø 560mm

- Scraper between the discs
- Optional knives for intensive crumbling effect
- Pressure on knives is adjustable and provides equal firming on the entire working width
- Out of work position possible to leave rough surface and protect the top layer
- Superb working quality especially on medium to heavy soils



# Kverneland Power Harrow Programme

## - feature by feature



### Effective rear levelling bar

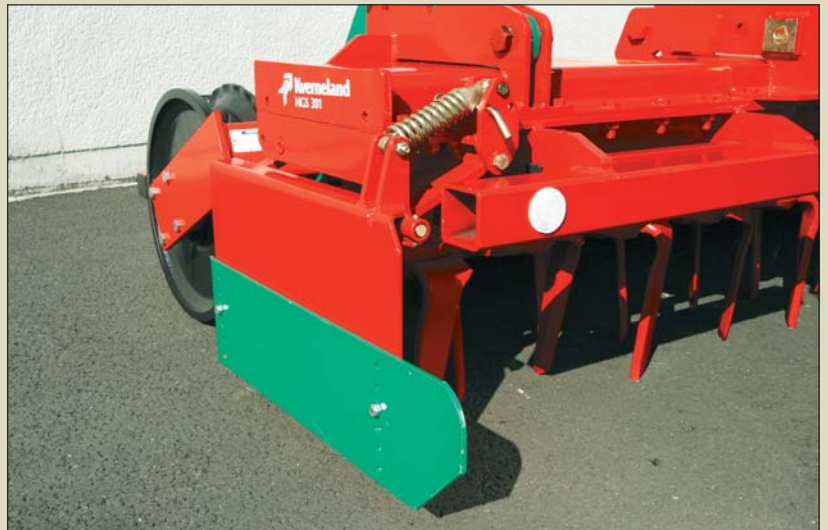
Kverneland's high performance rear levelling bar is infinitely height adjustable. The turnbuckle adjustment is easy to use, even with a seed drill mounted.

A scale ensures an even height is achieved across the full working width. An in-built spring system maintains the bar in an effective and consistent operating position.

### Side deflector with parallelogram

With its unique parallel guided linkage, the side deflector can move up and down, following ground contours. If stones are trapped between deflector and outer rotor, the deflector can open via coil spring overload protection.

For strict transport regulations, the deflectors can easily be set in a raised transport position, just by removing one pin.



### Auto-reset leaf spring protection - shock system

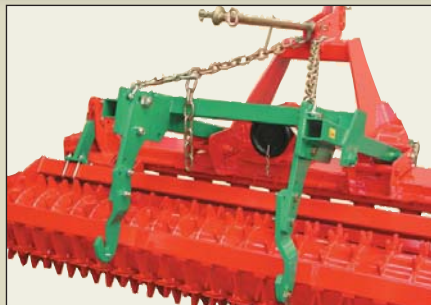
The comprehensive range of Kverneland power harrows features an optional unique auto-reset system for working in difficult soil conditions with stones.

Via spindle adjustment the springs can be pre-loaded to adjust the weight release of the power harrow. This helps the power harrow to pass over stones freely when encountered in the field.





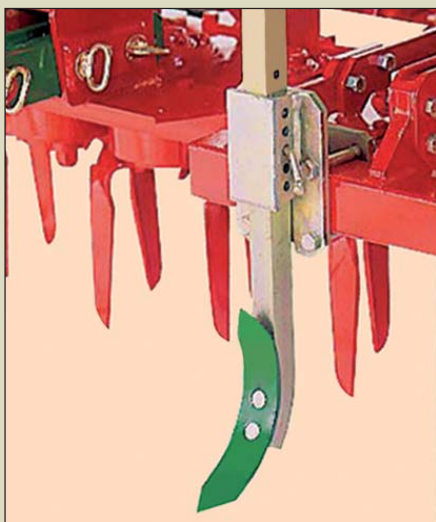
**Kverneland Accord quick-hitch**  
All models can be fitted with a Kverneland Accord seed drill quick hitch for fast and easy attachment and demounting.



**Mechanical hitch**  
A mechanical 3 point seed drill hitch is available for conventional seed drills.



**Hydrolift**  
Ensuring the closest possible positioning of the drill behind the tractor during transport, the robust Kverneland hydrolift is fitted with twin hydraulic cylinders for easy and even lifting of heavy seed-filled drill hoppers. A mechanical locking device ensures safe road transport.



**Track eradicators**  
Various types of track eradicator are available to suit all situations.



**Hydraulic track marker brackets**  
Brackets for hydraulic track markers are available as option. Beneficial when working in conjunction with a seed drill combination.



# Kverneland Power Harrows - especially made



**Kverneland NG-H 101/Kverneland Accord i-drill PRO**



**Kverneland NG-S 101/Kverneland Accord DA-S**



**Kverneland NG-H 101/CL/Kverneland Accord DA-X**



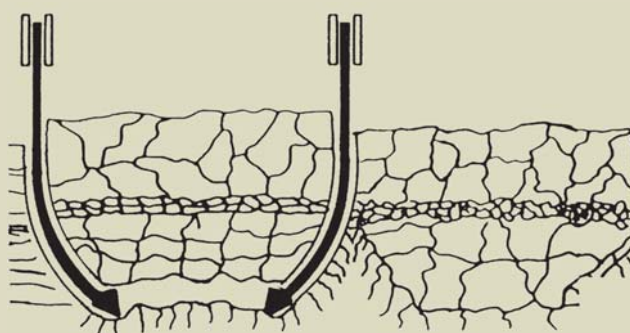
# to match all Kverneland Accord seed drills



Kverneland CLC/CLI/NG-H 101/Kverneland Accord DA-X

## Kverneland "Pro-Fit" Active tines in combination with subsoiler CLI

If necessary the power harrows can be combined with the Kverneland CLI subsoiler to loosen deep tracks. The special shape lifts the material but keeps the ground surface level.



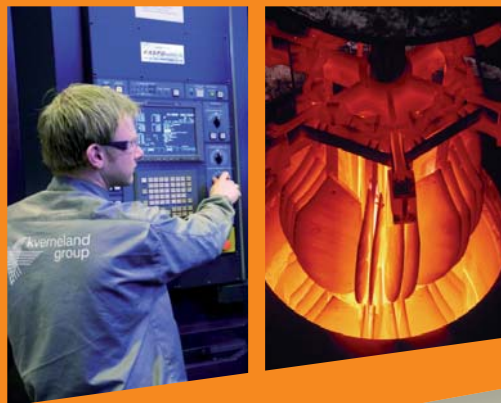
### A soil loosening blade that does not turn the ground over

The advantage of the curved CLI blade is that it lifts the soil without inverting the surface. Operational costs are kept to a minimum by fitting wear plates and reversible tips as standard. Shear bolts ensure that the blades are protected when in operation. The point of rotation during shear bolt failure is located at the front to reduce the risk of bending when in use.

### A very robust frame

The blade supports together with an optional hitching systems are secured to a heavy duty beam, 200x200x10mm, offering unrivalled robustness. The use of robust curved blades gives a massive underbeam clearance of 1175mm to ensure unobstructed working at depths of 15-40cm. Hitching heights can be varied to optimise traction.





## Kverneland Group

Kverneland Group is a leading international company developing, producing and distributing agricultural machinery and services.

Strong focus on innovation allows us to provide a unique and broad product range with high quality. Kverneland Group offers an extensive package of systems and solutions to the professional farming community. The offering covers soil preparation, seeding, forage- and bale equipment, spreading and spraying.



## Original Spare Parts

Kverneland Group spare parts are designed to give reliable, safe and optimal machinery performance - whilst ensuring a low cost life-cycle. High quality standards are achieved by using innovative production methods and patented processes in all our production sites.

Kverneland Group has a very professional network of partners to support you with service, technical knowledge and genuine parts. To assist our partners, we provide high quality spare parts and an efficient spare parts distribution worldwide.

Kverneland Group UK Ltd.  
Walkers Lane, Lea Green, St. Helens  
Merseyside, WA9 4AF  
Phone + 44 1744 8532 00

Kverneland Group Ireland Ltd.  
Hebron Industrial Estate  
Kilkenny, Ireland  
Phone + 353 56 51597

[www.kverneland.com](http://www.kverneland.com)

