



## **SEMI-MOUNTED REVERSIBLE PLOUGHS**

PROFITABLE PLOUGHING

# WHEN FARMING MEANS BUSINESS

Realising the full potential of farming is about growing and developing your business, not only your crop or livestock, but also your profit. Improve productivity and profitability by focusing on the positives and minimising disadvantageous aspects, through strong, dedicated management.

Success springs from determination and clear targets, from laying down the appropriate strategy and allocating correct investments for the future. Quality results require the right ideas and equipment. When there is work to be done, you need the optimal setup and smart solutions that support you towards an easier, more profitable way of working. You need solutions that make tough and demanding conditions less complicated.





## TILLAGE

Preparing and cultivating your soil in order to achieve the highest possible yield is about choosing the correct tillage system

# YOUR KVERNELAND

## INTELLIGENT FARMING SOLUTIONS



Choose the best farming solution for you and your land. Combine the highest possible yields with sustainability. This will start with the correct tillage. The choices you make depend on various factors and has to match your specific circumstances, like soil structure, crop rotation, residue management, economic and ecological viabilities.

*The choice is yours!*

You must consider environmental and legal issues. From conventional methods to conservation tillage: the balance of operations at the right time has to be found to achieve high yields with the best soil condition (air, moisture, biological activity, etc.) with a minimum amount of energy, time and investment. For this, Kverneland offers a full range of intelligent farming solutions.



### **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 aimed at the professional farming community, covering the areas of soil preparation, seeding, forage and bale equipment, spreading, spraying and electronic solutions for agricultural tractors and machinery.

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### CONVENTIONAL TILLAGE

#### Conventional Tillage

- **Intensive** method of cultivation
- Complete soil inversion e.g. by a plough
- Less than 15-30% crop residues left on soil surface
- Seedbed preparation done by an active tool or special seedbed harrow
- High phytosanitary effect by reduced pressure of weed and fungi diseases - fewer herbicides and fungicides needed
- Better dry-off and faster increase of soil temperature for better nutrients absorption

### CONSERVATION TILLAGE

#### Mulch Tillage

- **Reduced** intensity in terms of depth and frequency
- More than 30% of residues are left on soil surface
- Extended repose period of the soil
- Cultivator and/or discs incorporate the crop residues within the top 10cm of soil for stable bearing soil
- Full-width tillage - seedbed preparation and seeding in one pass
- Protection against soil erosion; reduce soil loss by run-off and improve water storage capacity.
- Improvement of soil moisture retention

#### Strip Tillage

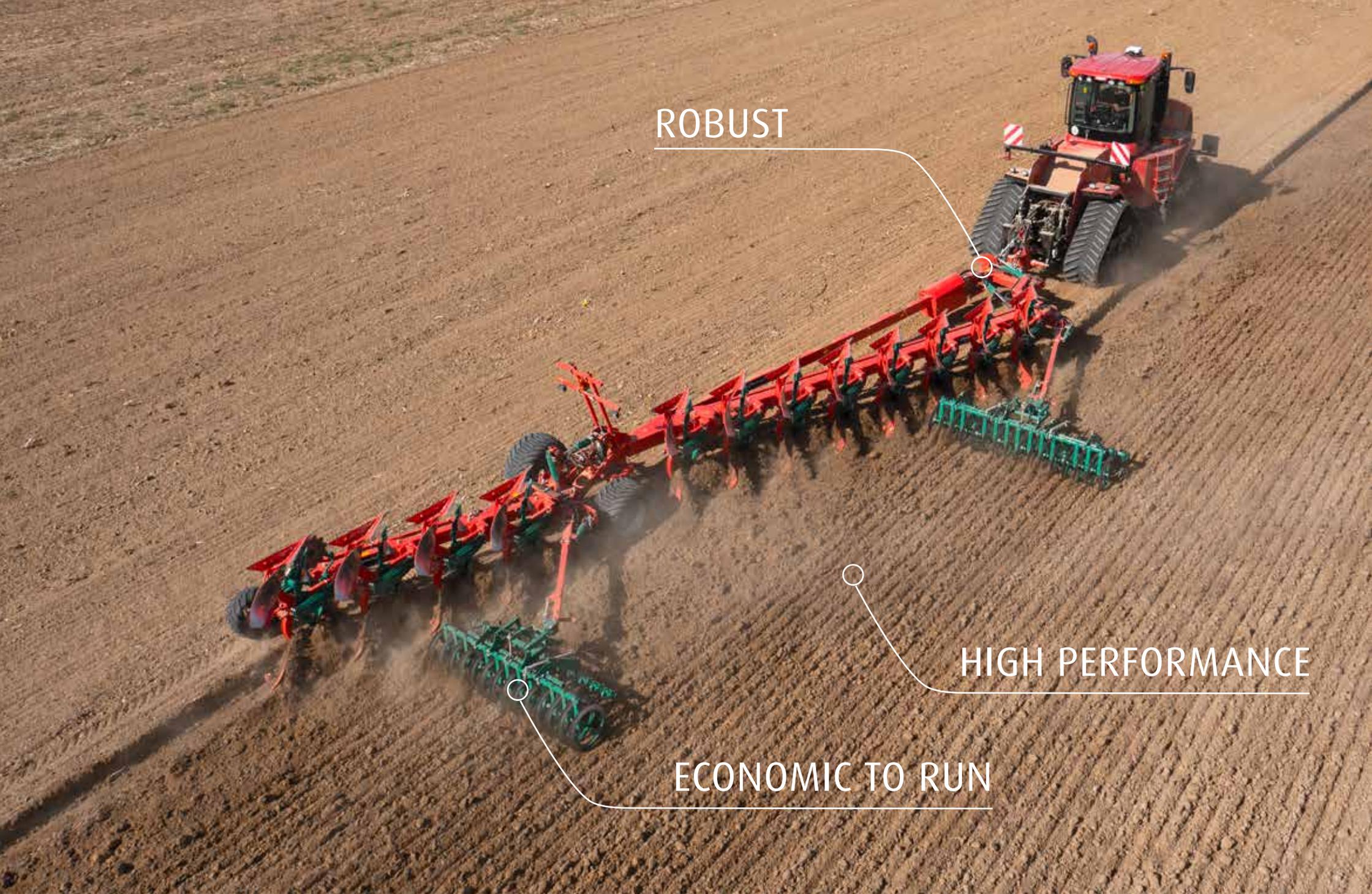
- **Zonal strip loosening** before or during seeding of up to 1/3 of the row width (Loibl, 2006). Up to 70% of the soil surface remains untouched
- Strip-till combines the soil drying and warming benefits of conventional tillage with the soil-protecting advantages of no-till by disturbing only the area of the soil where the seeds are placed
- Exact fertilising deposit
- Soil protection against erosion and drought

#### Vertical Tillage / No-Till

- **Extensive** method
- Working soil vertically avoids additional horizontal layers or density changes
- Increasing water infiltration, root development and nutrient take-up
- Plants' roots dictate the overall health of the plant, as they deliver nutrients and water throughout the season, contributing to a higher yield
- A strong set of roots make plants more resistant to wind and drought.
- Lower energy input required

KVERNELAND'S INTELLIGENT FARMING SOLUTION			Deep Tillage (not a must)	Basic Tillage	Seedbed Preparation	Seeding	Spreading	Spraying
CROP ESTABLISHMENT SYSTEMS	CONVENTIONAL							
	intensive	Soil coverage after Seeding						
CONSERVATION	CONVENTIONAL							
	extensive	Soil coverage after Seeding						
			Vertical Tillage shallow tillage	Strip Tillage stripwise loosening	Mulch Seeding without soil inversion	Reduced Till without soil inversion	Conventional with soil inversion	up to 15%
								

CLASSIFICATION OF TILLAGE METHODS KVERNELAND (Source: adapted from KTBL)



ROBUST

HIGH PERFORMANCE

ECONOMIC TO RUN



## OPTIMISED ROBUSTNESS TO MAXIMISE PROFITABILITY

### **Robust**

Developed over 140 years, the Kverneland Steel Technology remains unsurpassed within the plough industry. It guarantees extra robustness **for extra life time** to the plough.

### **Economic to run**

The design of a Kverneland plough combined to the specific heat treatments of each and every part ensures low running cost. **Easy to lift, easy to pull** for a low fuel consumption; optimised **low wearing of parts...**

### **High performance**

Kverneland innovations and design of parts enable a quick set up and adjustments for the **perfect ploughed field.**

*Kverneland ploughs adapt to any tractor brands!*

## PERFORMANCE DRIVEN FOR THE FARMERS SATISFACTION



Ole Gabriel Kverneland

Kverneland is world renowned and unequalled in producing robust & light ploughs for high performance with low operating costs.

### Innovation from the start

In 1879 at the age of 25, Ole Gabriel Kverneland founded his smithy business in a small village south of Stavanger, Norway. Brought up on a farm and educated in agriculture, he subsequently understood all the machinery requirements of farmers. He strongly believed in innovation and manage to produce a mouldboard plough able to withstand the very tough stony soil conditions of Norway.

Over the years, he together with his team of engineers developed **special steel heat treatment processes** to allow his ploughs to work in the toughest of soil. Using these new **steels of unique strength**, Kverneland succeeded in manufacturing robust ploughs thus gaining a strong reputation for quality. Today, Kverneland is the leading manufacturer of ploughs with a very strong market position throughout the world.



Ole Gabriel Kverneland: black smith & ploughman. Here demonstrating how well balanced his ploughs are. Even today Kverneland R&D employees are ploughmen.

# THE CONTEXT

typical arable land in Norway



# PERFORMANCE DRIVEN FOR THE FARMERS SATISFACTION

## Customer orientated

The tradition of customer orientated product development has resulted in the long record of innovations and in becoming a **leading plough brand in the industry**. High priority is given to building close relationships with end users. Systematic follow up of individual customer experience helps Kverneland to adapt products to better match **farmer's requirements**.



Kverneland plough factory (Norway)



Forge (1879)

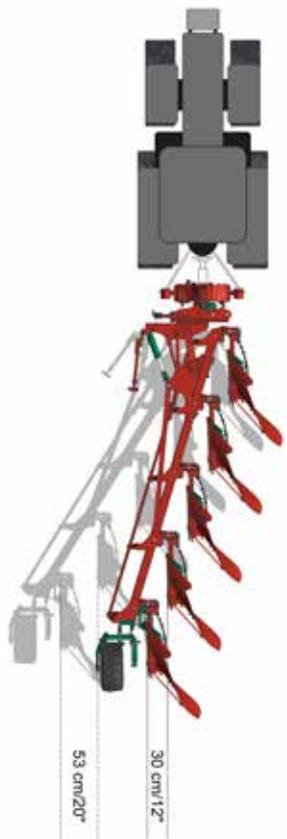


# THE RESULT

high performance ploughing

# VARIOMAT®

## OPTIMISED PRODUCTIVITY



### Efficient

The patented Kverneland Variomat® is the most reliable system on the market. It allows the **optimal match** between the soil conditions, the plough and the tractor for the **optimal output**. By varying the furrow width, the work can be kept **straighter**. It is also **easier to work up** to the hedges and **around obstacles**.

By being able to adapt not only the depth but also the width of the furrows, **the best results can hence be achieved**.

### Two different systems

Kverneland Variomat® is available in two variants: with hydraulic or mechanical adjustment of the furrow width. The hydraulic variant allows adjustments of the furrow width easily from the driver's seat "**On the Move**". The **pulling line adjusts automatically** thanks to the auto-line.

### Straight pull at all times

The position of the headstock remains in the center of the tractor, all the time, ensuring a favorable and an even geometry of the three point linkage. Side pull and unnecessary high landside pressure are therefore avoided. Consequently: **reduced wearing of parts, reduced fuel consumption and increased profits**.

### Optimise fuel consumption

By adapting the working width to the soil conditions, the fuel consumption is optimised. Furthermore, when increasing the ploughing width, the fuel consumption per Ha gets reduced and hence **profits are maximised**.

### Maintenance free

The Kverneland Variomat® system is maintenance free thanks to a **unique non wearing linkage joint** between the beams and the mainframe section. The system consists of a robust 24 mm bolt, a distance tube, two special heat-treated cones and replaceable bushes. No need to spend time on lubrications.

The heat-treatment of **high quality steels** and exacting manufacturing accuracy guarantee perfect beam and body alignment with minimum wear.



# VARIOMAT®

"On the Move" working width adjustments



50 cm/20"

30 cm/12"

## KVERNELAND STEEL TECHNOLOGY FOR THE COMPLETE PLOUGH

### **Kverneland's unique steel**

More than 140 years of experience in developing special steels and heat treatment processes have resulted in an unsurpassed quality and wear resistance.

The heat treatment processes are carried out and adapted not only to a few selected parts but to the complete plough. This results in ploughs lighter than competitors' and extremely robust while delivering outstanding performance.

### **Induction hardened frame**

To guarantee the durability of the plough, Kverneland heat treats the frame as well. Most competitors do not. The induction process allows using lesser steel than competitors, therefore less weight to pull and lift while ensuring a higher resistance.



# HARD

as a diamond for optimum wear resistance

# FLEXIBLE

to absorb shocks



**Kverneland 12 hours carburising process results in creating 2 steels in 1 sole mouldboard.**

For the highest ploughing performance, Kverneland also grinds the body to ensure a uniform surface for an even furrow.

# KVERNELAND AUTO-RESET SYSTEM

## EFFICIENT AND MAINTENANCE FREE

### Release characteristics

The diagram shows the differences between three different Auto-reset systems, and how the pressure varies as the body rises (1 cm).

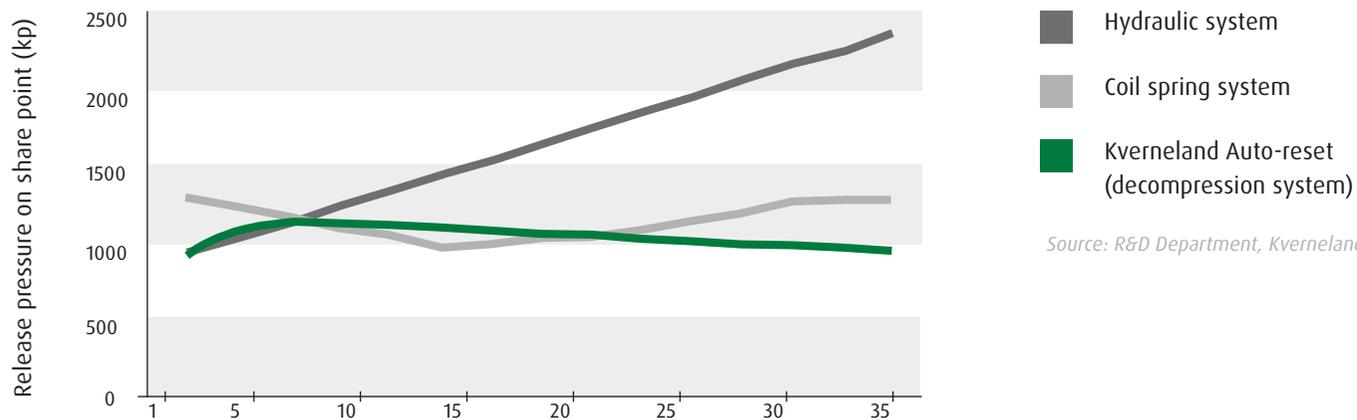
### Conclusion

The unique Kverneland leaf spring Auto-reset system is highly recommended.

### Benefits from Kverneland Auto-reset

When hitting an obstacle, the pressure on the point, frame, plough parts, decreases. The stress on the plough is therefore reduced which **guarantees a longer life** to the plough.

Each body releases independently one from another to come back to the correct ploughing depth once the obstacle passed. This ensures a **quality ploughing**.



Source: R&D Department, Kverneland Group, Klepp 2002



## BODY NO. 28

### THE ANSWER FOR PLOUGHING WITH WIDE TYRES

Body No. 28 is Kverneland's answer to ploughing with modern farm tractors equipped with wide tyres.

#### Wide empty furrow

Body No. 28 shape and action moves the soil further away from the landside, increases the furrow bottom width by as much as 25% compared to body No. 9. This allows wide tractor tyres, like a 710 serie type, to work in the furrow **without rolling down the previous furrow**.

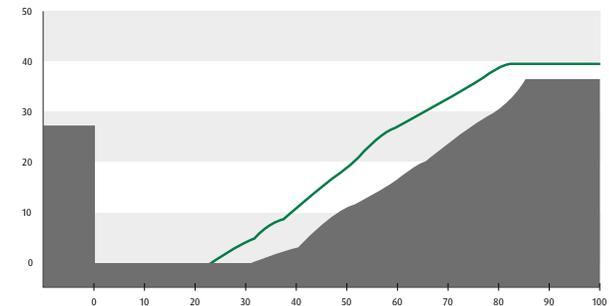
#### Low pulling forces

Body No. 28 is suitable for depths from 15 to 30 cm (6 to 12 inches) and widths from 35 to 50 cm (14 to 20 inches). Longer than body No. 8, it creates a flatter profile for an improved tilth. The furrow is well turned and packed. body No. 28 clever design will require **as little pulling force as body No. 8 or 9**.



#### Body No. 28

- universal body – easy to pull
- for any soil conditions
- **recommended for tractors with large tyres**
- creates a flatter profile for improved tilth
- perfect turning of the furrow slice
- working depth: 12-30 cm
- working width: 30-55 cm
- landside / mouldboard: 40°



furrow profile body No. 28  
working depth: 26 cm, bottom: 30 cm, width 73 cm



**Body No. 8**

- general purpose body
- for light to heavy soils
- working depth: 15-28 cm
- working width: 30-50 cm
- landside / mouldboard: 40°

**Body No. 9**

- universal body
- for light and medium soil
- easy to pull
- working depth: 18-30 cm
- working width: 30-50 cm
- landside / mouldboard: 40°

**Body No. 30**

- finger mouldboard with 4 exchangeable strips
- plastic spacers
- shape of body no.19
- for any soil conditions
- intensive crumbling
- working depth: 18-35 cm
- working width: 30-55 cm
- landside / mouldboard: 46°

**Body No. 19**

- universal body
- for medium to heavy soils
- specially designed for burying large quantities of chopped or stripped straw
- working depth: 18-35 cm
- working width: 30-55 cm
- landside / mouldboard: 46°

**Body No. 34**

- plastic mouldboard
- long and slim shape (similar to body No. 28)
- for soils with high humus content without stones
- advised for tractors with large tyres
- easy pulling
- working depth: 12-35 cm
- working width: 30-55 cm
- landside / mouldboard: 40°

**Body No. 38**

- universal body – easy to pull
- for any soil conditions
- recommended for tractors with large tyres
- from deep to shallow ploughing
- perfect turning of the furrow slice
- working depth: 12-38 cm
- working width: 30-55 cm
- landside / mouldboard: 40°

MAXIMISE PLOUGHING

ON-LAND/IN-FURROW

EASY TO ADJUST

# KVERNELAND PN/RN

## COST EFFICIENT, EASY TO ADJUST AND TO MAINTAIN

### Optimise Profitability

Kverneland PN/RN semi-mounted ploughs are robust, easy to handle, economic to run while delivering a **high quality output**.

They offer a strong and simple construction via a standard 200 x 200 mm frame from 5 to 9 furrows, a **manual working width adjustment** and an automatic steered center wheel.

The PN version is fitted with auto-reset beams for stony conditions whilst the RN has rigid beams with shearbolt protections.

### Maximise ploughing

The centre mounted wheel provides **easy ploughing out to fences, hedges and ditches**. The wheel assembly is linked to the turnover mechanism ensuring a safe reversal of the plough.

### High manoeuvrability

This unique headstock enables a **minimum turning circle**: the turning point of the plough is situated behind the headstock. The plough is linked to the tractor by means of a special joint for improved manoeuvrability. Headstock Cat. III or IV.

### In-Furrow and On-Land

The In-Furrow models can be retrofitted with an On-Land kit while the On-Land models can also plough In-Furrow. Either way, the adjustment is hydraulic.

The On-Land models suit tractors with up to 3,60 m outer wheel/track width.

### For any conditions

**Generous underbeam clearances** for trashy conditions:

- 70/75 cm for the PN
- 70/80 cm for the RN

Most models are extendable with one furrow (maximum 9 furrow plough).

### Optional equipment

The Kverneland PN/RN are available with a choice of body types, skimmers and disc coulters, whilst hydraulic front furrow width adjustment is optional.

### Easy furrow width adjustment

The furrow width can be adjusted from 35 to 45 cm (14, 16, 18") in steps of 5 cm. The adjustment is carried out **by repositioning only one bolt** in each leg assembly.

The position of the wheel must be adjusted when altering the furrow width. This is easily done via a turnbuckle.

The front furrow adjustment can be done either via a turnbuckle or hydraulically.



EASY TO PULL

OPTIMISE PERFORMANCE

EASY TO MANOEUVRE

# KVERNELAND PG/RG VARIOMAT®

## FOR EASY PLOUGHING RIGHT OUT TO THE FIELD EDGE

PG/RG offer good stability in work and in transport, tight turning circle for narrow headlands and the opportunity to plough right up to field boundaries.

### Easy “On the Move” working width adjustments

Kverneland Variomat® adjustment is standard. Infinitely variable furrow widths from 35 to 50 cm (14 to 20”). The work rate can therefore be increased up to 30%. The Variomat® cylinder is placed into the towing tube for best protection. This design protects the cylinder and hoses from possible damage and guarantees an operational simplicity.

The mid frame wheel position and the compact headstock design (which places the front body as close to the tractor as possible) ensures tight turning ability both on headlands and into narrow gateways.

### Auto-Reset system

The PG version is fitted with the well-known Kverneland Auto-reset system, while the RG version has rigid legs with shearbolt protection.

### Optimise performance

The PG/RG ploughs are easy to pull even with 8 furrows. Smooth turnovers, high manoeuvrability and “On the Move” working width adjustments make ploughing comfortable and performant.



Kverneland RG with furrow widener



OPTIMISED WEIGHT TRANSFER

HIGH PERFORMANCE

HIGH MANOEUVRABILITY

# KVERNELAND 6300 S VARIOMAT®

## LOW OPERATING COST AND IDEAL WEIGHT TRANSFER

### Maximise profitability

The Kverneland 6300 S Variomat® plough features a rear mounted wheel. It results in a **well balance weight transfer** from the wheel of the plough to the tractors rear wheels. Consequently, the plough is easy to pull. **Fuel consumption is hence optimised to its strick minimum**. The easy pulling effect minimises the wear of parts while the **ploughing performance are maximised**.

The three point linkage feature prevents high forces on the tractor during ploughing and transportation which lingers the tractor life time. Choice of Cat. III/IV.

### Outstanding Kverneland auto-reset

The **aero-profile legs** and the 80 cm under beam clearance enable **easy ploughing in high residues**. Not least, the famous Kverneland auto-reset system enables high ploughing performance even in **heavy and stony soils conditions**. Easy adjustment of releasing forces (P. 39)

### Variations “On the Move”

The Kverneland 6300 S ploughs consist of robust 5-8 furrow models designed for large acreages. The Variomat® facilitates easy “On the Move” **working width changes** whenever necessary.

### Easy furrow width adjustments

As with all Kverneland ploughs, manual front furrow width adjustment is by means of a turnbuckle. For “On the Move” adjustments when ploughing on sloping ground, an hydraulic cylinder can be fitted as an alternative.

### High ploughing performance

The large rear wheel enables a **high stability** especially in wet conditions. It limits sinking and compaction.

High ploughing performance will also be achieved by adjusting skimmers to the correct depth. The Kverneland 6300 S is equipped with a **right/left central skimmer adjustment** system for quick operations (P. 39).

### Robust for long lasting

The induction heat treated 200 x 200 mm frame, one box section with no welding that could weaken it, ensures the robustness of the plough. As for any Kverneland models, the Kverneland **steel heat treatments** are applied to **the complete plough** for an outstanding durability.

### Easy headland

The rear wheel assembly is linked hydraulically to a robust turnover mechanism ensuring that the plough is always positioned correctly for re-entry into work. The hydraulic system provides a small reversing radius and an **excellent manoeuvrability during work and transportation**.

### Easy changeover from work to transport position

For **transport**, the plough is placed in half-reversed position **within seconds**. Its low centre of gravity ensures a safe transport. Even where space is restricted, the plough can be steered with ease around obstacles.

EASY TO OPERATE

FLEXIBLE

EFFICIENT

# KVERNELAND PW/RW AND PW/RW VARIOMAT®

## OPTIMISE PROFITABILITY

### Efficient

These ploughs are designed to **maximise output** and to keep ploughing performance at their highest level. The integrated **Packomat** enables the immediate re-consolidation of the soil: **2 operations in 1 pass**. Productivity is maximised.

### Flexible

The PW/RW ploughs offer different versions in size and features in order to **adapt to your needs**.

The «3 in 1» concept gives the opportunity to either plough at maximum capacity or to uncouple the front from the rear parts. Hence, to adapt to **any fields configurations and soils conditions** thanks to a semi-mounted wagon plough or a mounted reversible plough.

Both ploughs can also be used **simultaneously in 2 different fields** at the same time when needed.

### Easy to operate

Kverneland ploughs are designed for the simplest and most efficient way to be operated. The PW/RW ploughs benefit from the **ATS / ISOBUS** user friendly technology to be operated.

For instance, only 3 finger tips on the Isomatch Tellus screen to turnover the plough (and Packomats) at headlands. And just a few minutes to uncouple the front from the rear part.



# KVERNELAND PW/RW AND PW/RW VARIOMAT®

## EFFICIENT AND FLEXIBLE



A unique patented concept in building a semi-mounted reversible plough.

### Kverneland "3 in 1" Concept

The Kverneland PW/RW semi-mounted ploughs consist of a **robust central wheel wagon plough** at the front and a **mounted reversible plough** at the rear. The latter can be either a standard Kverneland mounted reversible EG/LB or ED/LD.

### Flexibility

This unique design gives you the flexibility to **choose the right combination of ploughs** to suit any soil conditions: either the whole wagon plough or only the front or the rear plough: "3 ploughs in 1".

In some situations, it may be advantageous to use only the front part in very wet or very hard conditions, or due to the availability of a tractor. The heavy front section alone will provide optimum performance **in any conditions**.

Likewise, you can use the rear mounted reversible plough for ploughing smaller areas or headlands.

### Simple and quick

The rear plough can be **uncoupled within a few minutes** and be ready for use. Likewise, it only takes a short time to join them together. At any time, you have the freedom to choose.

### Quality ploughing

The wagon plough **follows the ground undulations** in a smooth way thanks to the centre section consisting of a 3 point linkage system. It therefore behaves like a normal mounted plough.

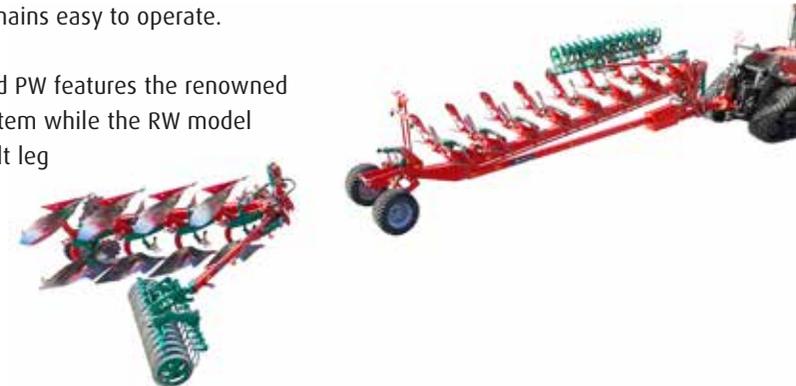
### Increased output

The plough is available with either manual adjustable working width or with the famous Kverneland Variomat® system, allowing "On the Move" furrow width adjustments from the tractor seat. The ploughing width can be adjusted from 35 to 50 cm (14-20"). The output is then increased up to 30%.

### Robust design and very easy to operate

Kverneland engineering skills have made it possible to construct a plough capable to withstand the high stresses on such a large reversible plough, particularly when ploughing at depth and at speed. Not least, the plough remains easy to operate.

The Kverneland PW features the renowned Auto-reset system while the RW model offers shearbolt leg protections.



# KVERNELAND PW/RW AND PW/RW VARIOMAT®

## EASY TO OPERATE



Transport position

### Optimised management

A large plough may look very difficult to manage but the Kverneland PW/RW “3 in 1” model is equipped with an advanced management system which makes it **very easy to operate**.

You can choose between different systems:

- ATS Control (Automatic Turning Sequence).  
Option: ISOBUS compatible.
- manual management with the addition of a valve controller.
- manual management via tractor control.

When equipped with the ATS system, the plough is very easy to operate on the headlands. It is only necessary to lift the plough at the front, press the ATS button 3 times and the plough reversing functions **operate automatically** in accordance to the driving on the headland. The plough will then be ready for the next ploughing operation.

The rear plough section, equipped with an hydraulic topline, is held in a raised position during the turning phase. This **secures perfect “ins” and “outs” at the headlands**.

### Safe and easy turning

When turning on the headland, the centre section lowers the plough for **optimum stability and safety**. With 80% of the plough’s weight on the centre section, the tractor is free to make tight turns. The centre

section design also provides **excellent manoeuvrability** during work and transport.

### Generous clearance

Choose between an underbeam clearance of 70 or 75 cm on the PW and 70 or 80 cm on the RW, for trashy conditions.

The PW/RW “3 in 1” plough are available with a choice of bodies, skimmers, disc coulters and wheel equipments to suit all soils and tractor types.

### 3 versions for the PW/RW ploughs:

- In-Furrow
- In-Furrow and narrow On-Land (approx. 3.2 m track width)
- On-land (approx. 4.5 m track width)

Off-set adjustment to correct the driving position is via in-cab hydraulic control.

### Safe in transport

Changeover from work to transport is carried out in a **few seconds**: the plough is turned half way and then lowered on its centre section.

In “butterfly” position the plough is very **stable and manoeuvrable** with approximately 20% of its weight being transferred on to the tractor’s linkage. As an option, both PW/RW can be equipped with brakes and full road lightings.

# EASY SHORT HEADLANDS



## IsoMatch Tellus PRO

- Firm grip for an accurate control
- Robust aluminium body
- Ergonomic rubber grip bar
- User friendly touch screen



## ATS display control



EASY HANDLING

100% INTEGRATED

ECONOMIC

# KVERNELAND PACKOMAT

## EFFICIENT SOIL PREPARATION

### 100% integrated Packer

Packomat follows the plough from transport to work. Compared to other packers, the Packomat offers **high productivity gains**.

### Easy handling

From the tractor cabin, it is **easy to position** the Packomat for transport or work or even lifted for ploughing on field boundaries.

### Optimised levelling

Choice of front harrows to crush clods and ring diameters to re-consolidate the soil.

*Packomat is a Kverneland invention*

### Maximised profits

Packomat contributes to the balance of the plough in work. **No extra pulling forces** are needed and hence no extra fuel. The landside pressure is actually reduced and therefore the wear of the landsides.

Ploughing and re-consolidating are two operations carried out in **only one pass with no extra cost**. Packomat contributes to maximise profitability.

### Efficient

Packomat **works in any ploughing conditions**. Soil preparation can be extended to seedbed. Available from 4 to 12 furrow Kverneland ploughs, Packomat is an efficient tool. No need for extra manpower for a safe transport.

### Agronomic benefits

The combination of ploughing and re-consolidating is both **efficient and environmentally friendly**. Soils are loosened, organic matters are incorporated to enrich the soils. Weeds are controlled mechanically. The elevation of temperature of the ploughed soil is actually positive. The associated water evaporation is limited by the immediate re-consolidation by the Packomat rings. **Water capilarity is hence re-established** for the benefit of the soil life.





# KVERNELAND KNOCK-ON®

## QUICK & EASY

### Smart

The Knock-on® system consists of **only 2 parts**: a holder fixed to a regular Kverneland share and a Knock-on® point.

### Clever

Kverneland Knock-on® is a **universal system**. Plough Knock-on® points can also be used for cultivators.

### Long lasting

Knock-on® benefits from the **Kverneland steel technology** (quality steels + Kverneland heat treatments). The quality of the steel combined with a clever design ensure a long life to the Knock-on® system. Therefore, Knock-on® points can be used **in any soil conditions**.

### Quick

Knock-on® points are **changed in a few seconds**. It makes sense to save 90% of your time in changing points when working in abrasive soils (points wear quicker) or when having a 5+ furrow plough.

### Easy

The only tools needed are a chisel and a hammer (2 kg). Field tests reveal that, as an average, 3 points can be mounted on the same Knock-on® holder. **No bolt to unscrew** helps save time. In addition, when the holder is worn out, it is normally also time to change the share, without unscrewing the holder. **Very handy!**

### Agronomic benefits

#### Good soil penetration & Stable in work

Knock-on® has been tested in several soil conditions. Even in the hardest soils, the points ensure a **good penetration**.

#### Low pulling forces

Kverneland bodies are reknown for their unrivalled low pulling forces. With Knock-on® points, the pulling forces remain **low** and hence the **fuel consumption**.

#### Soil flow protection

The clever design of Knock-on® actually protects the other parts of the body while allowing an **efficient soil flow**.



Soil flow protects other parts.

## KVERNELAND QUICK-FIT FOR TOUGH CONDITIONS

### High quality for low wear

The patented Quick-Fit system consists of a share, a special holder and a very unique point. All parts are made of **Kverneland Top Quality Steel** which benefit from a unique Kverneland heat treatment to guaranty their robustness and low wear for an **optimal life time**.

The share and holder are bolted to the body, while the Quick-Fit point is fitted to the holder by a **unique locking system**. It fits just by a few sharp taps with a hammer. Not least, when the points need to be changed, it is simply removed by means of a taper drift and a hammer.

### Maximise productivity

The Quick-Fit points take far less time to change than conventional equivalents. Hence the machine is back in work **much quicker**.

One farmer from North Yorkshire, UK, comments "We have reduced downtime from about 30 minutes to five minutes when changing points on our 8 furrow reversible plough ... the Quick-Fit system is also quite versatile. If we are in some very hard, dry conditions and are struggling for penetration, we can simply knock-off a set of partly worn points and put on new ones while in the field to get the plough in the ground."





**The Quick-Fit plough share system fits to all Kverneland bodies. It minimizes downtime during change of wearing parts.**

#### **Benefits**

- safe and quick change
- cost efficient
- easy to use
- no bolt required for the points
- better utilisation of parts
- long lifetime
- top steel quality
- good soil penetration in tough conditions

## ACCESSORIES TO MAXIMISE EFFICIENCY



### Easy adjustable skimmers

To ensure optimum positioning of the skimmer, a quick adjusting system is incorporated on all plough models. The skimmers are available in two versions: standard manure and maize skimmers for those difficult conditions with large amounts of trash.



### Trashboards

Particularly useful when large quantities of surface trash are present (manure, straw etc.)



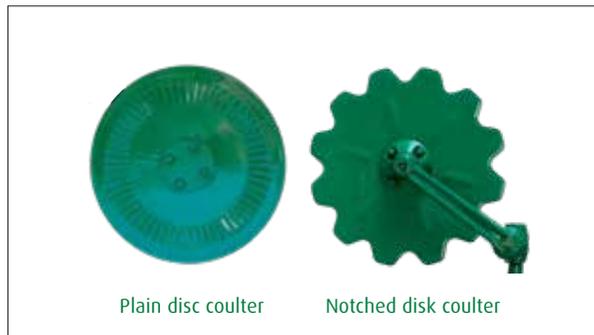
### Shares

Shares with Reversible Points:

The most cost efficient system to plough in difficult conditions like hard or abrasive soils.

Shares with Flush Fit Points:

Recommended for ploughing in sticky soil conditions. The point is fixed by means of a single bolt and is therefore quickly replaced.



### Disc Coulters

Available in sizes 45, 50 and 55 cm (18, 20 or 22") diameter, plain or notched. Disc coulters are mounted on single arms. Easy to adjust to suit all conditions.



### Sword Share Knives

These are an alternative to disc coulters, either to reduce weight or to avoid blockage from trash and stones. It can only be used on ploughs fitted with reversible points.



### Landside Knives

A very good alternative to disc coulters, either to reduce weight or to avoid blockage from trash and stones. A good combination with skimmers.



### Eco share

Designed to 10 cm below the normal ploughing depth. Also an alternative for up to 10 cm narrower ploughing depth.



### Furrow Opener

For use on the rear body to increase the width of the furrow bottom in order to accept tractors with larger tyres: up to 30" wide for example.



### Furrow Splitter

Bolted to any parts of the mouldboard or share, the furrow splitter is designed to cut through heavy soils making it easier for the following operations.

# LEG PROTECTIONS

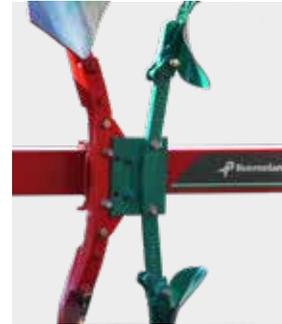
## LINGER THE EQUIPMENT LIFE TIME



HD package  
with 9 leaves (900 kp)



Double spring package  
with 14 leaves (1400 kp)



**Shear bolt legs**  
Release pressure: 4500 kg



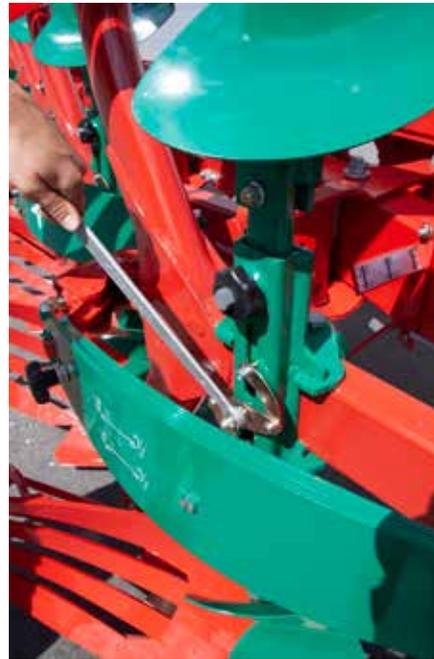
**Hydraulic stone protection**  
Adjustable release pressure  
from 600 to 2100 kg

**Auto-reset protection: add extra leaves when needed**

The standard Auto-reset system includes 7 Kverneland heat treated springs (640 kp). For heavier to extreme soil conditions, extra leaf springs are added for up to 1400 kp.

# ACCESSORIES

## FOR KVERNELAND 6300 S



### Aero-profile legs protected by:

- mechanical leaf spring Auto-reset system
- easy adjustable releasing forces (add/remove springs)

Leaf springs	Release Pressure kN
Standard Pack 6 leaf springs	11,7
Standard Pack 6+1 leaf springs	13,0
HD 7 leaf springs	12,7
HD 7+1 leaf springs	14,2
Extra HD 8 leaf springs	15,3
Extra HD 8+1 leaf springs	16,9

### Central adjustment of skimmers

- Right/left skimmers adjust simultaneously, centrally



# ACCESSORIES

## WIDE CHOICE OF WHEELS

Model	400 x 15.5	400 x 22.5	500 x 22.5	14.9 x 24	440/80 x 24
PN/RN	•	•	•		
PG/RG	•	•	•		
6300 S Variomat	•	•	•	•	•
PW/RW		•	•		

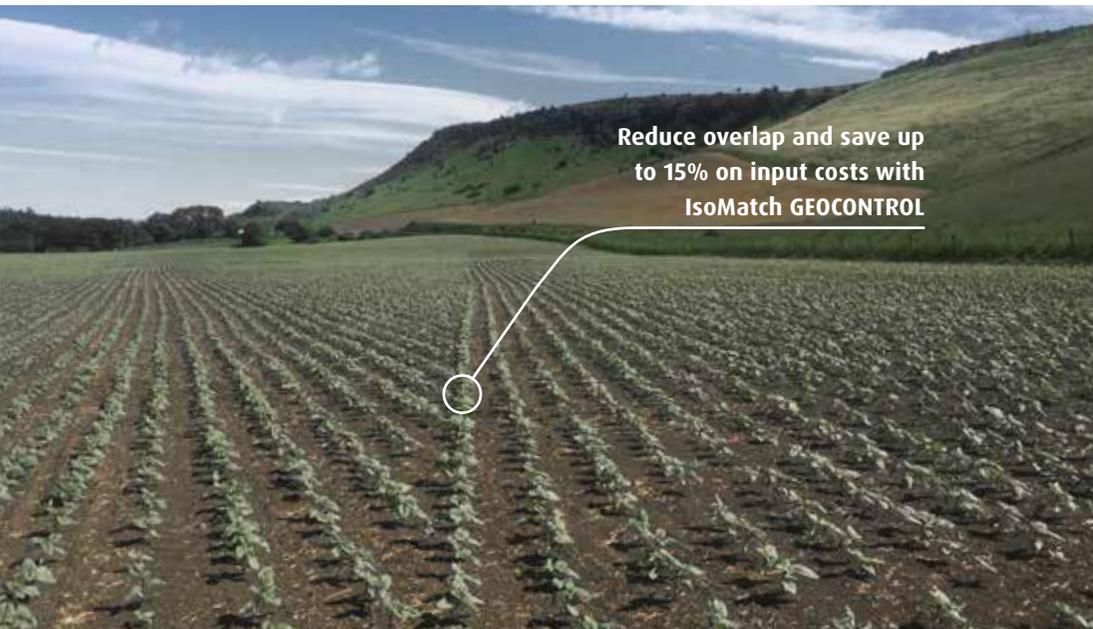




# MANAGE YOUR FARM AS A BUSINESS WITH OUR ISOMATCH PRECISION FARMING OFFERING

Our precision farming offering is essential in managing your farming business with success. Applying electronics, software, satellite-technology, online tools and Big Data enables you to use your farming equipment more effectively and reach higher profitability of your crops.

*iM FARMING - smart, efficient, easy farming*



Reduce overlap and save up to 15% on input costs with IsoMatch GEOCONTROL

**Maximum savings!**  
*The IsoMatch GEOCONTROL precision farming application includes Manual Guidance and Data Management free of charge. It is possible to expand this application with Section Control and/or Variable Rate Control.*

## Enhance your success with e-learning

**IsoMatch Simulator** is a free downloadable virtual training program. It simulates all functions of the IsoMatch Universal Terminals and Kverneland ISOBUS machines. Train yourself and make yourself familiar with your machine to avoid errors and enhance your machine performance.

## The best overview in farm management

**IsoMatch FarmCentre** is the first of a series of telematics solutions. This fleet management solution is applicable for your ISOBUS machines in combination with an IsoMatch Tellus GO/PRO. Whether you wish to control your fleet, manage tasks remotely or analyse machine performance data, IsoMatch FarmCentre provides this in an efficient web application, linking implements, tractors, terminals and the cloud in one continuous flow of data and connectivity.





100%

focus on the result

### Be a PRO in increasing productivity

The **IsoMatch Tellus PRO** 12-inch terminal provides you with the optimal solution for an all-in-one control system inside the tractor cab including automatic steering. It is the centre for connecting all ISOBUS machines, running precision farming applications and Farm Management Systems. It offers everything you need to get the maximum out of your machines and crop, as well as cost savings in fertiliser, chemicals and seeds by using automatic section control and variable rate control. With the unique dual screen functionality it gives you the opportunity to view and manage two machines and/or processes simultaneously.



### Easy control management

The **IsoMatch Tellus GO** is a cost-efficient 7-inch terminal, especially developed for managing the machine in a simple way. Easily set up the machine with the soft keys and simply use the hard keys and rotary switch for optimal control while driving.

*Improve your performance  
Maximum efficiency, minimum waste*



NEW

### IsoMatch Global PRO

GPS antenna system with RTK precision for the highest accuracy (2-3 cm) and best productivity.



NEW

### IsoMatch Grip

This ISOBUS auxiliary device is made for maximum machine control and efficient farming. Operate up to 44 implement functions from one device.



### IsoMatch InLine

Light bar for manual guidance including section status information. Manage the distance from the A-B line and steer for the ideal position.

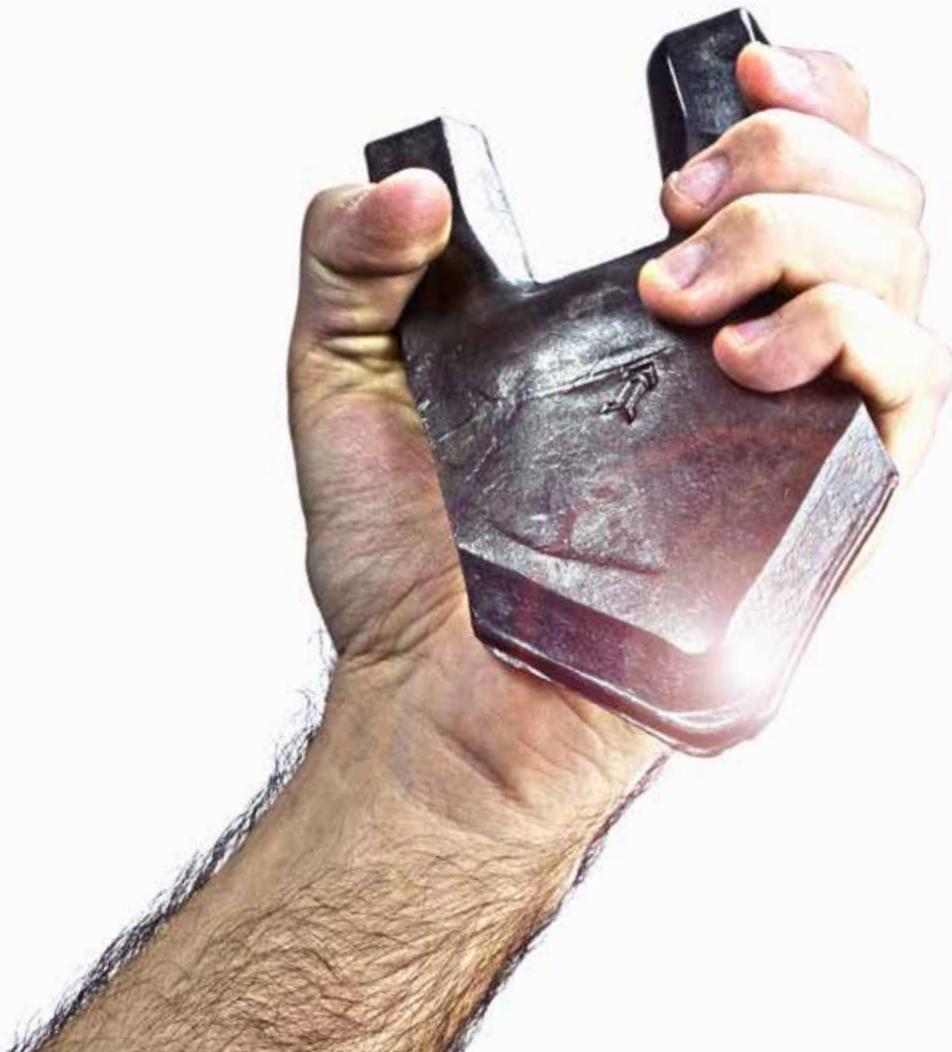


### IsoMatch (Multi)Eye

Connect up to 4 cameras to the IsoMatch Universal Terminals. It gives you full control and overview of the entire machine operation.

## ORIGINAL PARTS & SERVICE

# ONLY ORIGINAL PARTS WILL KEEP YOUR MACHINE A KVERNELAND



Did you know that our parts are manufactured to the same high standards and strict specifications as the Kverneland machines? Original Parts will always work and fit as intended, and are guaranteed to keep your machine running at maximum performance.

Kverneland has been a symbol of quality since 1879; the experience we have, combined with a constant strive to improve our products, ensures you the best parts available for your Kverneland machine. Parts and Service surrounds your machine with a safety-net; the quality ensures optimal usage of the machine, the quality of the parts refers to a low life-cycle cost and longer wearing time.

Our long term relationship starts at the purchase of your Kverneland machine, and we will continuously stay by your side for support and assistance. We will guide you on the way to make sure you achieve maximum performance, productivity and profit.

Do not compromise quality with cheap solutions, remember that only Original Kverneland parts are the guaranteed solution to achieve what is expected by a Kverneland machine.



### YOUR PARTS SPECIALIST

Through our worldwide dealer network you will find your local dealer, whom is always prepared to assist you. Your Kverneland dealer knows every inch of your machine and will gladly provide the expertise needed to ensure that you are operating at maximum potential.

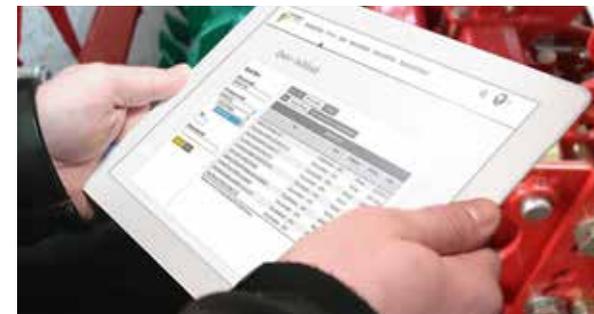
Your parts specialist has got all the parts that you need and will also have the facilities to service your machine. Make sure to visit your Kverneland dealer on a regular basis to be updated on promotions and product news that you will not find elsewhere.



### ALWAYS AVAILABLE

Time is money, and we know the importance of receiving the right parts at the right time! Your Kverneland dealer is supported by a massive distribution network to supply you with exactly what you need, when you need it.

Our main distribution centre is located in Metz, France. A strategic location for distributing parts to all corners of the world. With over 70.000 parts in stock and 24/7 service, we are ready to supply you with parts – at any time!



### EASY ACCESS TO INFORMATION

Are you looking for a complete overview of parts for your machine? Maybe you are searching for more technical information? Our Online Search Database, *Quest*, provides all information available for your machine.

Various documentation like Parts Manuals, Operation Manuals, Software updates and FAQ's, it is all there. *Quest* is available in several different languages and can be accessed wherever and whenever. All answers are easy to find – just a few clicks away !

# TECHNICAL DATA

Model	Interbody clearance cm	Type of beam	Working width cm	Underbeam clearance cm	No. of furrows	Weight (kg)												Horse power requirement (hp)											
						4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12						
PN	100	Autom.	35-40-45	70/75	5-9	-	2820	3090	3360	3630	3900	-	-	-	-	125	150	175	200	225	-	-	-						
PN	115	Autom.	40-45	70/75	5-7	-	2920	3200	3500	-	-	-	-	-	-	125	150	175	-	-	-	-	-						
RN	100	Shearbolt	35-40-45	70/80	5-9	-	2650	2885	3120	3360	3600	-	-	-	-	125	150	175	200	225	-	-	-						
RN	115	Shearbolt	40-45	70/80	5-7	-	2750	3000	3250	-	-	-	-	-	-	125	150	175	-	-	-	-	-						
PG V	100	Autom.	35-50	70/75	6-8	-	-	2940	3370	3800	-	-	-	-	-	-	150	175	200	-	-	-	-						
PG V	115	Autom.	35-50	70/75	5-8	-	2970	3060	3150	3240	-	-	-	-	-	125	150	175	200	-	-	-	-						
RG V	100	Shearbolt	35-50	70/80	6-8	-	-	2760	3150	3570	-	-	-	-	-	-	150	175	200	-	-	-	-						
RG V	115	Shearbolt	35-50	70/80	5-8	-	2470	2880	3290	3700	-	-	-	-	-	125	150	175	200	-	-	-	-						
6300 S V	100	Autom.	35-55	80	6-8	-	-	3340	3720	4100	-	-	-	-	-	-	150	175	200	-	-	-	-						
6300 S V	115	Autom.	35-55	80	5-7	-	3060	3430	3820	-	-	-	-	-	-	125	150	175	-	-	-	-	-						
PW	100	Autom.	35-50	70/75	7-12	-	-	-	5045	5510	6015	6480	6945	7440	-	-	-	210	240	270	300	330	360						
RW	100	Shearbolt	35-50	70/80	7-12	-	-	-	4695	5130	5565	6050	6495	6940	-	-	-	210	240	270	300	330	360						
PW V	100	Autom.	35-50	70/75	7-12	-	-	-	5150	5630	6150	6630	7130	7620	-	-	-	210	240	270	300	330	360						
PW V	115	Autom.	35-50	70/75	7-10	-	-	-	5185	5670	6195	6680	-	-	-	-	-	210	240	270	300	-	-						
RW V	100	Shearbolt	35-50	70/80	7-12	-	-	-	4800	5250	5700	6200	6660	7120	-	-	-	210	240	270	300	330	360						
RW V	115	Shearbolt	35-50	70/80	7-10	-	-	-	4835	5290	5745	6250	-	-	-	-	-	210	240	270	300	-	-						

Weights are given for ploughs with 100 cm 'interbody clearance' without optional equipment. For ploughs with 115 cm clearance, please add 15 kg/body.

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