



OPTIMA TFprofi & OPTIMA V

PRECISION DRILL

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.





Effective sowing means speeding up when the soil is exactly right, in order to give your crop a head start.

EFFICIENCY

VERSATILITY

PLACEMENT

INTELLIGENCE





EFFECTIVE SOWING TO MAKE SOWING PERFECT

Placement

The Optima is excellent in precise seed placement. You can be sure that the sowing unit follows the ground contour perfectly and the coulter forms a clean and clear furrow to ensure best seed-to-soil contact. You can seed perfectly in line and in relation to each other but also synchronised over the complete working width.

Intelligence

You invest in the best equipment for sowing your crop. In return you want the best results and to increase the yields significantly. With the Optima you have everything under control by ISOBUS Technology and Kverneland's Precision Farming solutions.

Versatility

You want a precision drill that is versatile. Ready for the various crops with smaller or bigger seeds, to sow shallow or deep. Ready to adjust to the various ways of tillage, standard or mulch seeding in different type of soils. Universal machines allow cost savings.

Efficiency

When the time is right, you want to sow immediately. The soil has to be prepared with care and the moment of sowing depends on the right conditions, like local weather. To be successful you need a precision drill that is reliable and effective.

*With Optima you can rely
on a perfect execution.*

SEEDING HEART WITHOUT SEALS NO FRICTION, NO WEAR.

Precise singulation of small, large, round, elongated and flat seeds. Scrapers can be infinitely adjusted to suit seed size and type. During calibration the correct filling of the seed disc can be monitored via a window.

Reduced maintenance costs.

①

By using a **vacuum**, the seeds are sucked out of the stock and transported directly to the seed disc. While turning the seed disc, the seeds are allocated to each of the holes.

②

The **filling height limiter** regulates the stream of small seeds.

③

The adjustable, **upper toothed scraper** singulates the seeds to every hole.

④

The adjustable, **lower scraper** prevents doubles of bigger seeds.

⑤

The **opto-electronic sensor** controls the correct allocation of seeds on the disc. In case of missing seeds, the sensor transfers a signal to the terminal. The opto-electronic sensor also serves as a low level sensor.

⑥

The **seed disc** turns on to the point of drop. The seed disc is directly fixed to the turning back of the vacuum heart. No sealing (only at the bearing) ensures constant vacuum. The patented Kverneland seeding heart is without a wearing sealing for minimised friction and power requirement for turning.

⑦

The **vacuum interruptor** closes the holes of the seed disc from the back side. The vacuum is interrupted and the seeds drop down controlled from the seed disc.

⑧

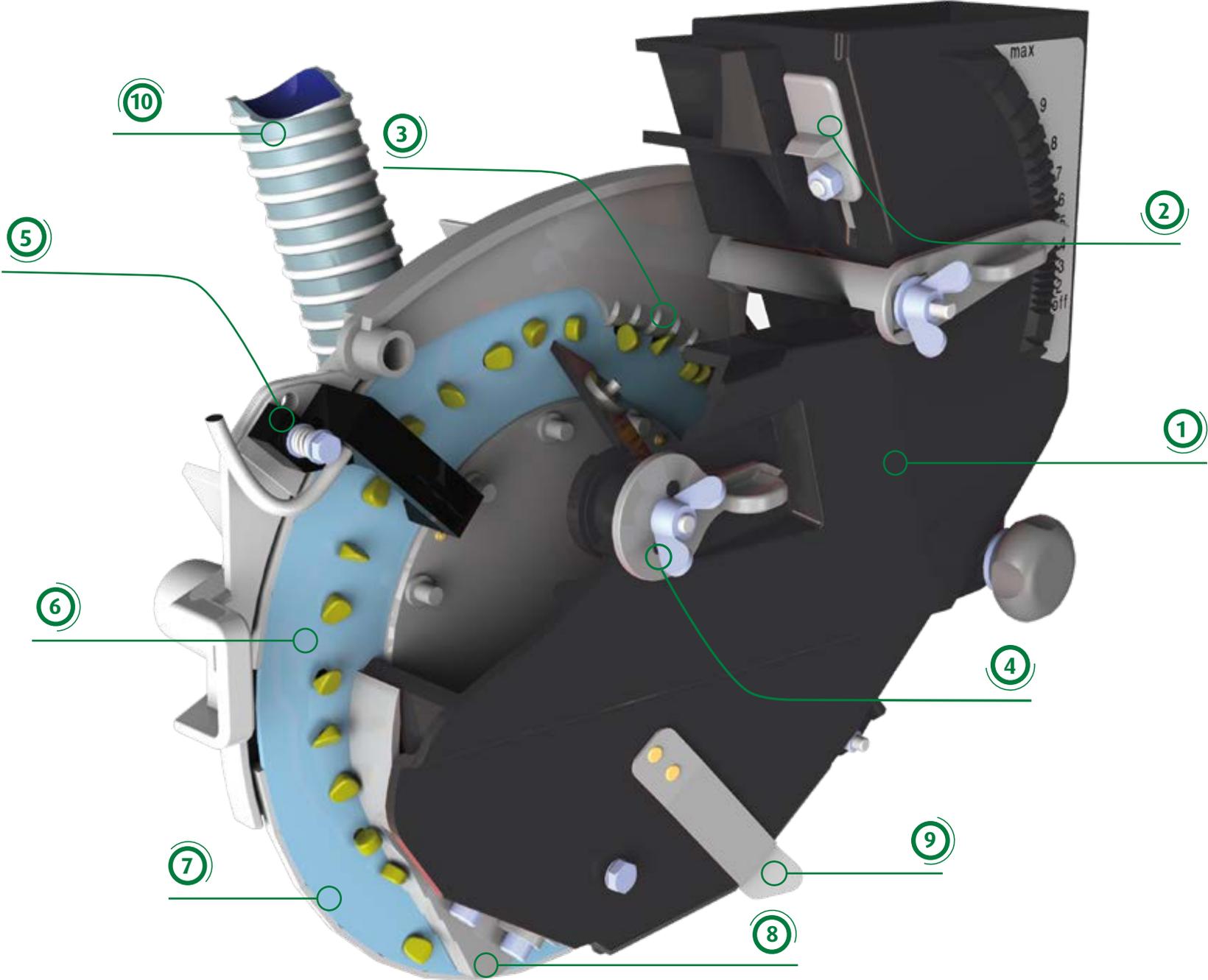
The **end-scraper** cleans the seed disc from seed residues, like coating or dust.

⑨

The **emptying flap** at the lowest point of the seeding heart enables a complete, easy emptying and cleaning of the seeding heart.

⑩

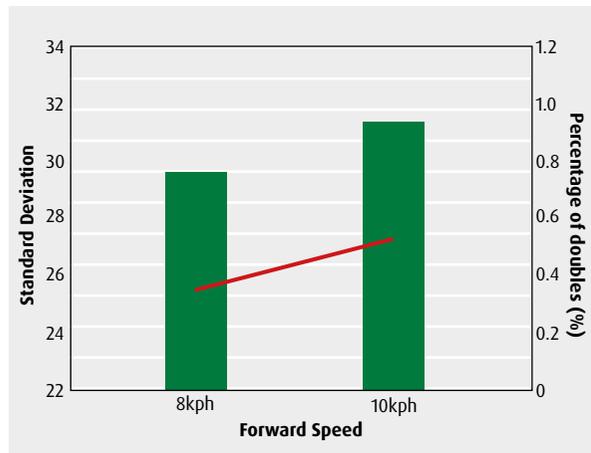
The **vacuum hose** connected with the fan or vacuum channel ensures constant vacuum. This is shown on a manometer, which is easily visible from the cab.



PERFECT SEED PLACEMENT WITH HD-II ROW MULCH AND CONVENTIONAL SOWING

- **Optimal depth control** even under extreme conditions, due to the heavy basic weight of the sowing unit with the possibility to add additional pressure (up to 100kg) onto each individual sowing unit via the spring-loaded system.
- **Effective ground contour following**, due to the large lateral depth control by open gauge wheels (ø 410mm, width 120mm).
- **Precise seed placement** by the small coulter which forms a clean furrow. Light re-compaction and seed covering is done by the intermediate press wheel (as option: heavy stainless steel) and the multi-adjustable V-press wheel - to ensure maximum field emergence.

Up to 100kg additional pressure.



Consistency of spacing

At both speeds Optima placed the seeds within an accurate range.

Based on source: Top Agrar





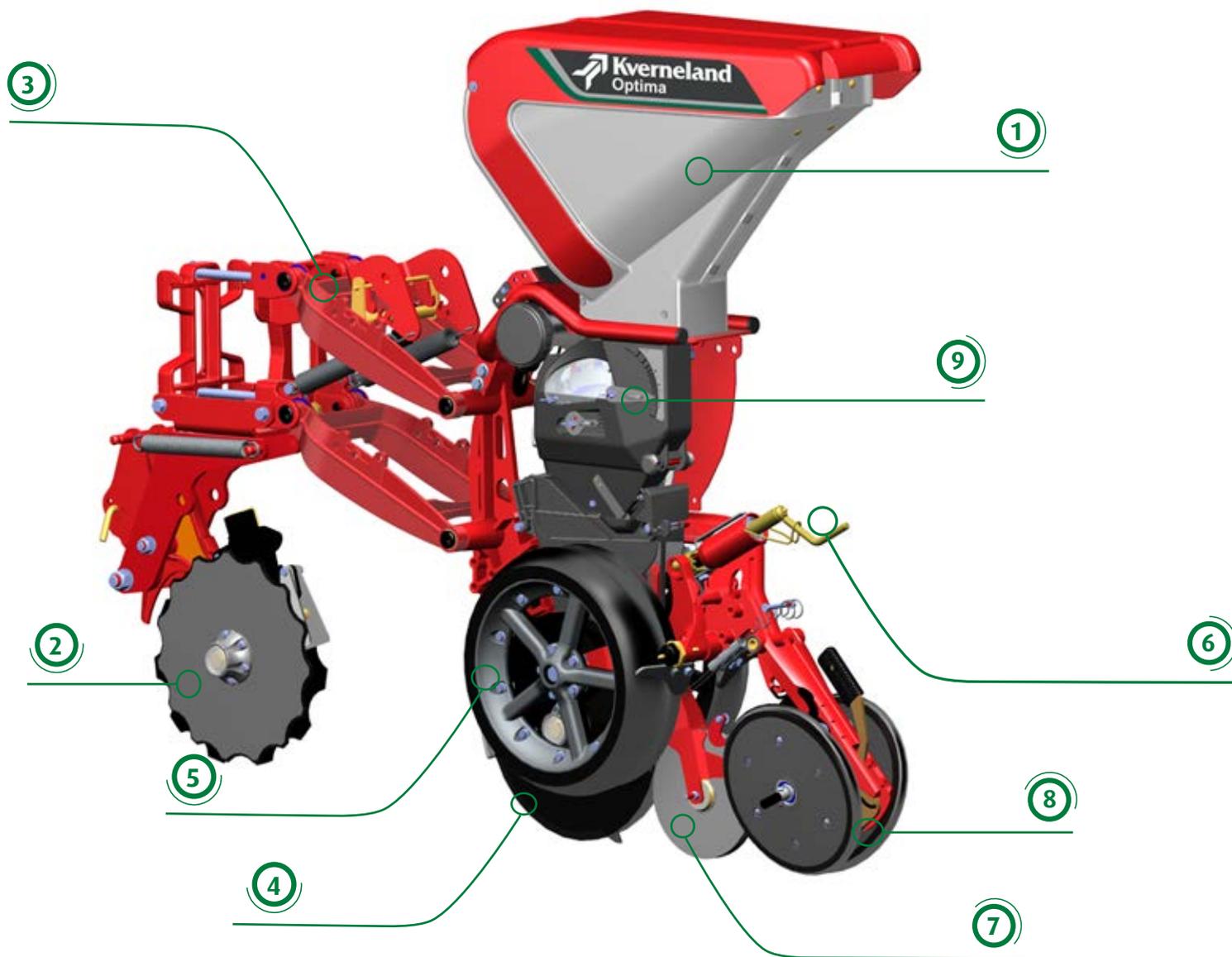
- Pressure adjustment of the sowing unit by lever
- Easy depth adjustment by spinning the gauge wheel up/down
- Cast-iron intermediate press wheel with self-cleaning rubber wheel
- Adjustable angle and pressure of the V-press wheel

SOWING ROW HD-II FOR LIGHT AND HEAVY SOIL

The new cast-iron HD-II single arm gives direct and easy access to the seeding heart with strong pivoting points (patent pending).

Versatility and reliability are key.

- 1 55l (30l) seed hopper
- 2 Notched double disc fertiliser coulters for all soil conditions
- 3 410mm (273mm) parallelogram with optional additional 100kg weight transfer
- 4 Double disc coulters with exclusive bearings and patented sealing
- 5 Open gauge wheel with oscillating connection for smooth depth guidance
- 6 Spindle for convenient and precise depth adjustment
- 7 Optional stainless steel intermediate press wheel for best seed-to-soil contact
- 8 25mm (50mm) V-press wheels with pressure and angle adjustment for a safe closing of the furrow
- 9 Optima seeding heart - precise and well-established



OPTIMA TFprofi

MAXIMUM OUTPUT

The Optima TFprofi is the perfect combination of high performance and low tractor power requirement. The trailed, foldable frame with eight rows can be equipped with a 2000l fertiliser hopper.

The Optima TFprofi can be operated by a 90hp tractor - requiring no lifting capacity. Equipped with either a hydraulic drive or with a direct fan drive via PTO shaft, this machine can also be used with tractors that have little hydraulic power.

Smooth running.

The Optima TFprofi can be equipped with 4 landwheels to ensure smooth running. Due to an intelligent adjustment system at the wheels, the sowing units perfectly follow the ground contour. The hydraulic cylinders of the landwheels are divided into two parts: one responsible for the lifting process and the other one for the following of the ground contours.



Optima TFprofi	
Working width (m)	6
Number of rows	8
Row width (cm)	70/75/80
HD-II row	●
e-drive II / GEOSEED®	●
Mechanical drive	●
Fertiliser	2000 l
Microgranule applicator	●





2000 LITRES

Reduced set-up time
due to large capacity of
fertiliser hopper.

≥90HP

Low pulling force, no
lifting capacity needed

8 ROWS

Each seed hopper has a
capacity of 55 litres

90°

Optimised pivoting
point for close
headland turning

40KM/H

Homologation for
road transport



- Compact and clear design
- Variable row width
- Integrated fertiliser system
- Optimised centre of gravity

OPTIMA V

MAXIMUM FLEXIBILITY

The Optima V is the perfect seed drill for farmers and contractors who need a machine with various row widths. The adjustment of the row width is done in next to no time which ensures a speedy response to changing requirements.

The headstock is made of round tubes which saves weight and increases the stiffness. Plastic glide parts integrated within the main telescopic frame (160mm square tube) guarantee a longterm usage of the machine. All inner rows are mounted on 8 maintenance free plastic rolls and are adjustable in different step widths.

- The Optima V is available with 6, 6+1 or 8 rows.
- The Optima V with 6 rows allows the flexible adjustment of the row width e.g. for the sowing of sugarbeet at 45cm or for maize at 75/80cm.
- The Optima V with 6+1 rows offers the additional option to work with either 6 or 7 rows at various row widths.
- The Optima V with 8 rows is ready for close row sowing for high yields.

Ready for GEOSEED®.

		Row width with different settings								
		Type	Rows	1	2	3	4	5	6	7
Number of rows	6	6	80cm	75cm	70cm	65cm	60cm	55cm	50cm	45cm
	6+1	6	80cm	75cm						
	6+1	7			65cm	60cm	55cm	50cm	45cm	
	8	8	55cm	50cm	45cm	40cm	37.5cm	35cm		33cm

Optima V			
Working width (m)	2.70 - 4.80	3.15 - 4.80	2.64 - 4.40
Number of rows	6	6 + 1	8
Row width (cm)	45-80	(6r) 75+80 (7R) 45-65	33-55
HD-II row	●	●	●
e-drive II / GEOSEED®	●	●	●
Mechanical drive	-	-	-
Mounted fertiliser	●	●	●
Filling auger	●*	-	-
DF1 / DF2	●	-	●
Microgranule applicator	●	●	●

*not in combination with microgranule applicator

OPTIMA E-DRIVE II

CONTROLLING AND STEERING FROM CAB



With e-drive II each sowing unit is driven individually via an electric motor. All the data is entered and read by an ISOBUS conform terminal like IsoMatch Tellus. The sowing distances are infinitely adjustable on the move. All the sowing units can be switched off individually. This solution saves seeds and money!

ISOBUS Standard.

e-drive II	
Individual row start and stop function	●
Variable seed rate per row	●
Variable seed rate adjustment during sowing	●
Two independent tramlining systems	●
Opto-electronic control	●

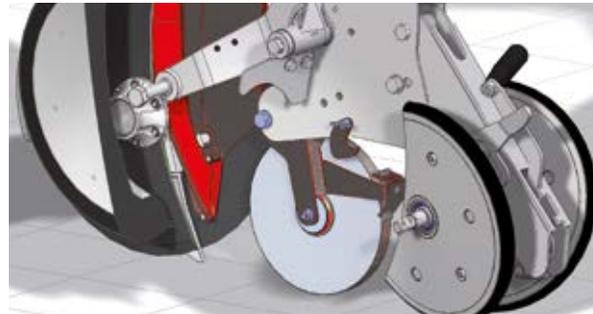
In conjunction with close row sowing widths of 37.5cm or 45/50cm another benefit of e-drive II comes into play: Individual tramline control. Tramlines can be set up for every sprayer width.

The e-drive II features complete electronic monitoring of all machine functions. This includes the seed monitoring by opto-electronic sensors as well as the steering of hydraulic functions such as the control of trackmarker arms and folding processes. Only the design of the seeding heart without a sealing enables the steering of all these functions without external power supply. All functions for every machine can be used without an extra generator or accumulator.



Rape Kit

Sowing rape with your precision drill enhances the range of application and improves the pay back of the machine costs. Results from various testing facilities have shown a high germination rate of precision-drilled rape, especially in difficult soil conditions. Thus each rape plant has best access to nutrients and water for high yields.



Channel Extra

The Channel Extra is aimed for shallow sowing of small seeds like sugarbeet and rape seed.

Perfect placement is guaranteed by the special design of this falling channel. Curling or jumping of seeds in the seed furrow is prevented.



Safe & Speed Kit

More extreme weather conditions and shorter drilling periods ask for higher performance of machines in the field. For that reason, Kverneland offers the safe & speed kit to increase the working speed.

The Optima safe & speed kit is specially designed for maize sowing.

*Adjust your Optima
according to your requirements.*

Operator-friendly

- Excellent overview
- Electronic monitoring of all functions
- Complete control of the machine from cab

Environmentally friendly

- Precise and defined application with GEOCONTROL and GEOSEED®
- Saving seeds and fertiliser

Return on investment

- Saving costs of seeds and fertiliser
- Increase in yield

State-of-the-art technology for the professional farmer.





- Perfect crop establishment systems
- For mulch or conventional sowing
- For all cultures from beans to rape

OPTIMISED CROP CARE

MICROGRANULE APPLICATOR

The demand for microgranule applicators is increasing. Micro nutrient and also small amounts of insecticides or fungicides ensure the best start of the crop.

The hoppers made of special grade plastics have a capacity of 35 litres. Depending on the working width, the hoppers supply 2 or 3 seeding rows. Application rates from 2.5kg up to 25kg are possible.

Alternative metering wheels are available to suit every application requirement for pesticides. Optionally, a SURE FILL adapter secures the filling process. An electric switch-off solution avoids that microgranules are spilt on the headlands.



Trash Wheel

Seeding in different conditions extends the usage of your Optima. For conditions with a high amount of residues, the Optima can be equipped with trash wheels that remove straw and other residues in front of the sowing unit.



Pressure Adjustment

With the optional pressure adjustment (from 0 - 100kg) the operator can individually adjust the coulter pressure of each row to any soil conditions: 0kg in light and sandy soils, 100kg in heavy clay.



Double Disc Fertiliser Coulter

The notches of the double disc fertiliser coulter give perfect traction in all soil conditions and allow perfect fertiliser placement. The overload protection ensures blockage-free operation especially in conditions with stones or with high amounts of residues. The integrated scrapers are useful for sticky soil.

CLOSE ROW SOWING

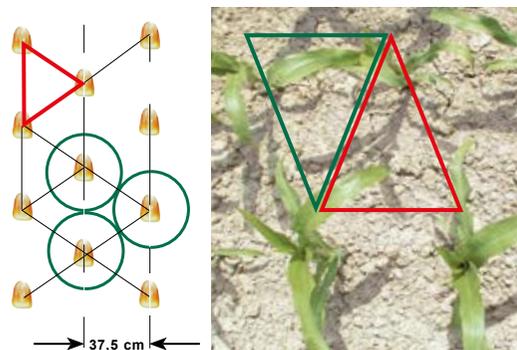
OPTIMUM CONDITIONS FOR GROWTH

Giving all plants the optimum growing conditions and same access to nutrients, water and sun is the basis for high yields.

With the sowing of maize, former harvesting processes had limited the standard row distance to 75cm. Due to the introduction of chopping and picking attachments which are independent of this former standard row width, close row sowing has become possible.

This opened up for enhanced growth. Various tests have shown that with row distances between 30cm to 45cm yield increases by up to 10%. In fact, close row sowing at 37.5cm has turned out as the optimum setting for prosperous maize population.

Up to 10% higher yields.



Close row spacing and defined seed placement by GEOSEED® ensures optimum growth





- From 37.5 to 45cm
- 2-D Placement with GEOSEED®
- Optimum growing space
- Yield increase up to 10%



GEOCONTROL

COST SAVING WITH PAYBACK

The more precisely and evenly a seed is sown, the easier it is to work and harvest, and the greater the possible yield.

Seeding with GPS and GEOCONTROL in combination with an Optima e-drive II is a major step towards precision and cost saving. These machines are all equipped with ISOBUS technology which, with the help of the IsoMatch Tellus terminal, can be easily controlled.

Each electric driven seeding element, in combination with GPS and GEOCONTROL, is automatically switched on or off in exactly the right place, ensuring there is no overlap with any row that has already been sown. This is especially handy in triangular fields, on curved or irregular shaped headlands. You can also continue seeding at night since the switching on/off of the seed elements is completely reliable.

iM CALCULATOR APP - free to download

After filling in the required data, the calculator clearly shows what you can save in terms of money. With GPS it is possible to accurately seed, spread and spray without any overlap. The iM Calculator app calculates the cost saving by using those GPS functionalities.

The amount of **seeds saved** depends on the size and shape of the field and may amount to more than 5%.

The iM Calculator app for tablets is free to download from the App Store or Google Play. Please find the online calculator on our homepage:

<http://imcalculator.kvernelandgroup.com/#/>





GEOSEED®

PATENTED 2-D SEED PLACEMENT



GEOSEED® increases the yields of row crops and ensures maximum efficiency. Seeds are placed perfectly in line and in relation to each other.

GEOSEED® Level 1 is the synchronization within the working width. This improves the distribution of seeds up to perfection in parallel or diamond pattern: Positive effects are the best use of nutrients, water and sun. Also the wind and water erosion is decreased.

GEOSEED® Level 2 is the synchronization over the whole field. This is the necessary requirement for interrow cultivation, also across the seeding direction. GEOSEED® is the only system in the world, that makes this mechanical weed control possible!

Biologically working farmers are also able to use a mechanic weed control across the seeding direction without injuring the plant. This saves costs and increases the turnover. With an exactness of 2.5cm yields are increased. With RTK GPS signal the synchronization of rows can be done over the whole field of sugarbeet or maize, pumpkins or beans.

- **Increase in yield**
- **Best use of nutrients, water and sun**
- **Reduces the risk of water and wind erosion in hilly conditions**
- **Allows interrow weed control**



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.





NEW

100%

100% focus on the result
in the field with
IsoMatch AutoDrive-E

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.



100% focus, maximum performance

IsoMatch AutoDrive-E provides automatic tractor steering. Manage your work to be more efficient and avoid overlaps which leads to cost savings of up to 15%, better growing conditions and increased yield. (Only in combination with IsoMatch Tellus PRO).

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

ORIGINAL PARTS & SERVICE

ONLY ORIGINAL PARTS WILL KEEP YOUR MACHINE A KVERNELAND

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

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.

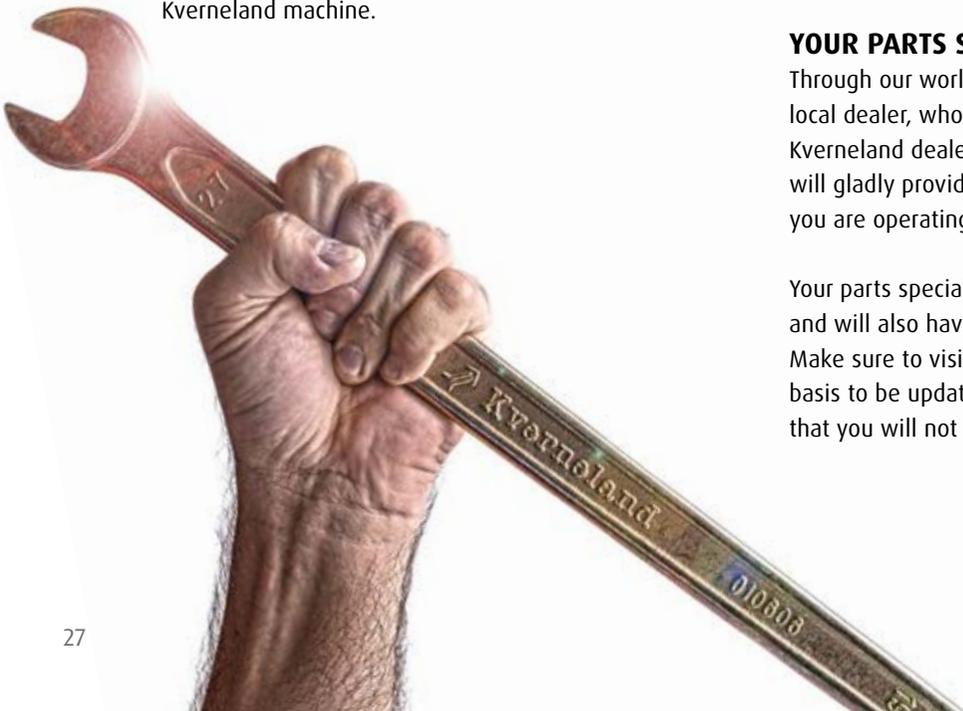
Your parts specialist has got all the parts that you need and will also have the facilities to service your machine. Make sure to visit your Kverneland dealer on a regular basis to be updated on promotions and product news that you will not find elsewhere.



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!





Key to success

"In spring, I use the precision drill for maize sowing and in the summer for the sowing of oilseed rape. This is not only an additional pay-off of machine costs but it meets the often arid conditions we face in our area in the summer. Here it is of major importance to achieve a maximum seed-to-soil contact for an even germination.

Our Optima V is fitted with GEOCONTROL. Thus we avoid any overlapping or missing of seeds - saving costs on surplus seeds and in addition facilitating any following crop care operations as well as harvesting. Our benefit is the increased yield due to evenly matured crops.

The Optima V offers me an extra in flexibility and with the optimised ISOBUS controlled seed placement, we benefit from a profitable return on investment."

Georg Springorum, Germany
500 ha, Crops: Wheat, Oilseed rape, Barley, Sugar beet, Triticale, Maize
Climate: Continental

TECHNICAL DATA

Model	Optima V	Optima TFprofi
Frame type	variable	trailed folding
Working width (m)	2.70 - 4.50	6.00
No. of HD-II sowing rows	6 / 6+1 / 8	8
Row width HD-II row (cm)	33 - 80 ¹⁾	70 - 80
Transport width (m)	3.00	3.00 ²⁾
Sowing row		
Mechanical drive of row	-	○
e-drive II, ready for GEOSEED®	●	○
Fan drive 1000rpm	●	●
Hydraulic fan drive	○	○
Hydraulic row lifting device	○ (6+1)	-
Frame		
Linkage	Cat. 2	Cat. 3/Cat. 3N Crossshaft ³⁾
Tyres 26x12.00STG	●	-
Tyres 12.5/80-18	-	●
Hydraulically operated track marker	●	●
Hydraulically frame ballasting kit	○	-
Fertiliser		
Mounted fertiliser spreader	○	○
Maximum number of rows with mounted fertiliser spreader	8	8
Mechanical drive of fertiliser spreader	●	●
Electro-hydraulic drive of fertiliser spreader	○	○
Fertiliser hopper capacity in litres	1000	2000
Filling auger	○	○
Weigh cells	-	○
No. of rows in combination with front hopper DF1/DF2	6 / 8	-
Micro granule		
Micro granule applicator	○	○

Optima HD-II row	HD-II	HD-II e-drive II
Hopper 55l	●	●
Hopper 30l	○	○
Parallelogram 20kg weight transfer	●	●
Parallelogram adjustable up to 100kg weight transfer	○	○
Clod deflector	○	○
Trash wheel	○	○
V-press wheel 25mm	●	●
V-press wheel 50mm	○	○
Gauge wheel 120mm	○	○
Open gauge wheel	●	●
Intermediate press wheel stainless steel with scraper	○	○
Intermediate press wheel cast iron with rubber ring	○	○
Electronic drive	-	●
Mechanical drive	●	-
Lifting device	○	○
Rape kit	○	○
Channel extra	○	○
Safe & Speed kit	○	○
Weight (kg)	129	129

¹⁾ Depending on no. of rows

²⁾ 3.40m if 80cm row width

³⁾ Optional K80 pulling eye

● Standard equipment
○ Option
- Not available

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