



## F-DRILL / F-DRILL CB

FRONT HOPPER AND COULTER BAR

# 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.





The iM Farming logo appears when the implement can be connected to our smart farming systems and accessories, essential for managing your business.



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

# 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 should 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.

## 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





EFFICIENCY

SUSTAINABILITY

 Kverneland

FLEXIBILITY

INTELLIGENCE

## EFFECTIVE SOWING WITH FLEXIBILITY READY FOR THE FUTURE

### Flexibility

You want a machine that is flexible in use: ready to be combined with different implements, ready for multi-crop application, ready for operation in different working widths, ready for all kinds of different farming systems, ready for a wide range of seeds (from fine to large) and fertilisers, ready for the combined application of fertiliser and seeds, ready for the combined application of seeds and companion crops and ready for future challenges.

### Intelligent

You want an implement that is very precise in application, easy to calibrate, steer and monitor. You want a machine that is ready for farming 4.0. You can rely on the Kverneland ISOBUS systems – and concentrate on your business.



### Sustainability

Soil is your most valuable asset. A good soil structure is key for optimum plant development. An even seedbed will ensure consistent field emergence. Therefore, good weight balance, reduced passes and the right timing are key to avoid any soil compaction and wheeling. In addition, multi-cropping is supporting biodiversity and protecting the soil. A defined and precise application of fertiliser have been and will be one additional important aspect of your future farming practices.

### Efficiency

You invest in the best equipment for seeding and fertilising. In return, you want the best results and low cost of operation. The f-drill has been developed with a positive load balance to reduce axle loads. The proven venturi system keeps it easy and always in functionality. Increased manoeuvrability and the flexibility to combine the f-drill with different implements makes the machine highly efficient.

*In short, it's effective*

## F-DRILL - FOR EXTRA FLEXIBILITY READY FOR THE FUTURE



The range of Kverneland f-drill front hoppers are available in two sizes and each volume in two versions. The f-drill compact has a capacity of 1600 litres and the f-drill maxi up to 2200 litres. The standard version is equipped with one ELDOS metering unit. Either seeds or fertiliser can be filled into the hopper. Higher application rates can be achieved with the duo version, as two ELDOS units distribute two times up to 400kg/ha of one type of fertiliser or seeds.

The modern hopper design made from special plastic is lightweight but enables to take big volumes to distribute the weight and ensure good balance. The material is corrosion resistant and ensures a long lifetime. With the f-drill, it is possible to combine several jobs in one pass, which is saving time and money while protecting the soil.

### *Taking care of the environment*

In **spring**, the Kverneland f-drill can be used as a fertiliser hopper with the Optima F or in combination with the Kultistrip for strip tillage. In combination with a power harrow/drill combination, such as the Kverneland e-drill, the f-drill can be used as an additional seed hopper for sowing companion or spring crops.

In **summer and autumn**, the hopper can be combined with the Kverneland power harrow range and the well-known coulter bars to have a compact combination from 3.0 up to 6.0m working width. In combination with a stubble cultivator and a distribution system, the f-drill can be used for cover crop seeding and reduce one pass of operation. For precision rape seeding in rows the Optima F is the ideal partner for the f-drill range as fertiliser hopper.

Precise application at the right time is the basis for a good start. A quick vegetation through the simultaneous use of different crops at the same time e.g. companion crops, avoids the risk of erosion and ensures that weeds do not go out of control. It also enhances biodiversity. A healthy plant with good rooting is able to use the fertiliser and water efficiently, reduce leaching and increase humus and CO<sub>2</sub> storage.

Model	Liter	No. of ELDOS
f-drill compact	1,600	1
f-drill compact duo	1,600	2
f-drill maxi	2,200	1
f-drill maxi duo	2,200	2
f-drill compact plus	1,600	2 (hopper split 60:40)
f-drill maxi plus	2,200	2 (hopper split 60:40)



Strip-Tillage: Defined seedbed preparation and fertiliser application in one pass.



Fertiliser and seeds in one pass in combination with a precision drill, seed drill or power harrow coulter bar.



Different seeds in one pass as main and companion crop (in picture sunflowers and clover).



Stubble cultivation and sowing of cover crops in one pass.



## TWO HOPPER SIZES AND SYSTEMS ONE PASS IN COMBINATION

The f-drill has been designed to give farmers and contractors additional flexibility as it adapts to all kind of farming systems. The f-drill is available with capacities of 1,600l as compact and 2,200l as maxi implement. The standard version is equipped with one ELDOS metering unit. Either one item seeds or fertiliser can be filled into the hopper. Higher application rates are obtained with the duo version, as two ELDOS distribute two times up to 600kg/ha of one sort of fertiliser or seeds. The hoppers of the f-drill compact plus and f-drill maxi plus model are divided. Either two types of seeds or seeds and fertiliser can be applied in one pass. The ratio of the hopper split is 60:40. The f-drill models are ISOBUS implements and can work as a stand alone seed drill or can be combined with other implements like planters, hoes, strip-tiller, cultivators and more.

*One concept from one hand - That's fits together!*

1

### Easy filling and lifting

The f-drill has the complete seeder functionality "without" distribution system: integrated electronics, fan and metering device. The hopper made from plastic can easily be filled using e.g. big bags, a front loader or a telescopic handler. The large hopper capacity of up to 2,200 litres reduces the set-up time. The hopper covers open sidewise and lock automatically supported by gas cylinder.

The hopper is resistant against corrosion, especially important by fertiliser. Parking wheels are available for quick and easy storage. The f-drill can easily be hitched as there is no PTO shaft needed. Pipes installed on the side of the cab convey the seed or fertiliser to the coulters by an air stream.

2

### ISOBUS electronics and ELDOS

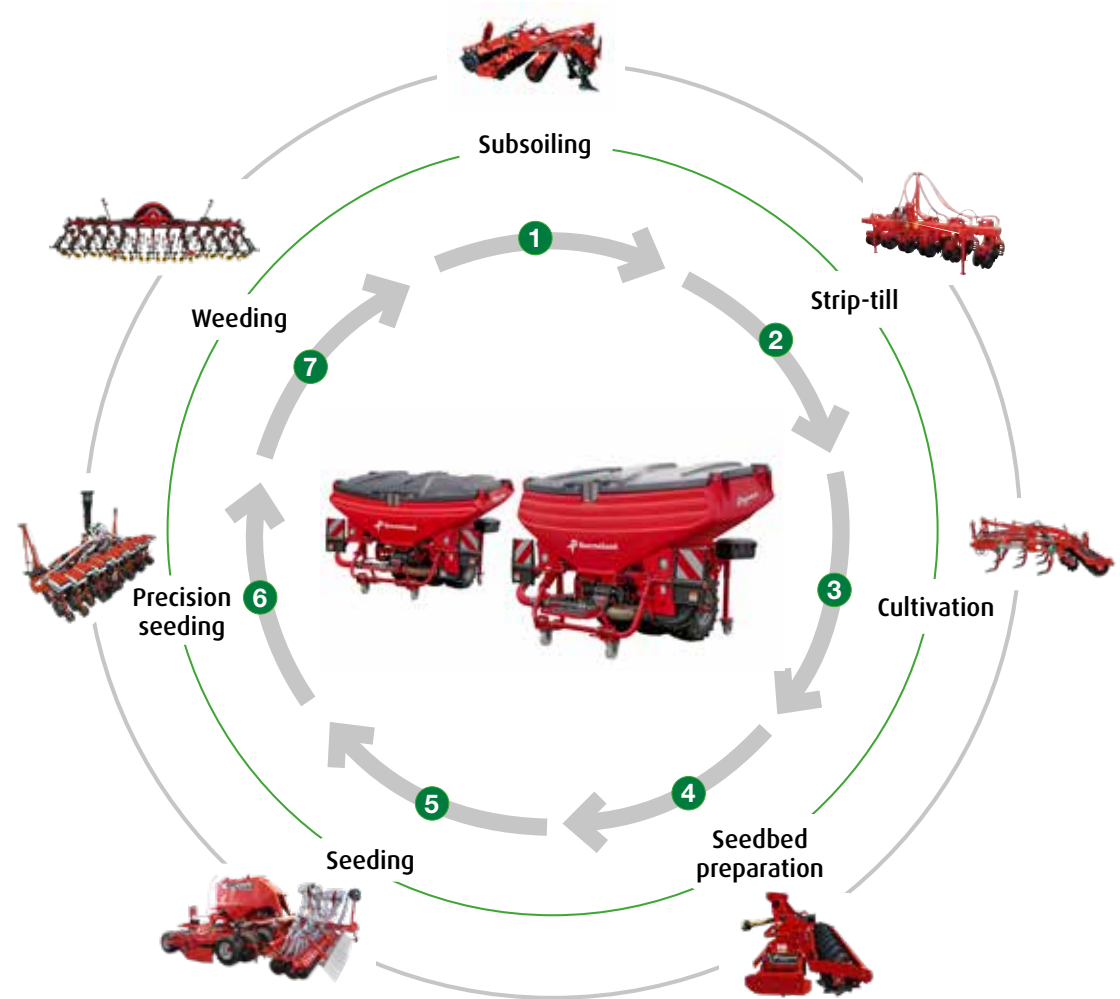
The easily accessible electric driven metering device, ELDOS, with exchangeable rotors is easy to adjust, without any tools. ELDOS is steered by Kverneland e-com software, which is fully ISOBUS compatible. By the automatic section control (GEOCONTROL), the metering device stops/ starts automatically for optimal driver comfort. Calibration is automatic and the sensors monitor the metering rotors and give a warning if a wrong metering rotor is accidentally installed. Calibration tests can be stored and reused afterwards when needed. Easy plug and play is possible due to the ISOBUS compatibility.

3

### Weight balance

The f-drill is well-balanced and offers even weight distribution. The optimised position of the hopper keeps the centre of gravity close to the tractor. Weights are important, and in many countries the permissible axle loads are regulated. In Germany, for example, a minimum front axle load of 20 % must be maintained. Instead of having only one implement at the rear, the front hopper combination already provides weight at the front. The additional wheel packer with lifting function relieves the load on the front axle while maintaining good steering ability. The packer is self-steering and pull-attached, which reduces power requirement and fuel consumption. A basic or ISOBUS steered comfort version is available. Optionally, a weight kit can be fitted.





*Subsoiling, cultivation, strip-till, hoing and sowing - all can be done together with the f-drill*

## F-DRILL - FLEXIBILITY MANY POSSIBILITIES AND COMBINATIONS

The front hopper models are ready to combine with different implements and for operation in various working widths. Seeding and fertilising, seeding and cultivation or fertilising and cultivation as strip-tillage in one pass is possible as well as the combined application of seeds and companion crops. The machine's clear layout and the high level of incorporated intelligent technology offers the user maximum ease of use, from set-up and filling, to balanced transport with good view in front and rear of the tractor. The combination makes it versatile to have everything done in one pass.

*Flexible in combination*

The modular structure of the Kverneland f-drill ensures an even weight distribution across the machine arrangement, giving the tractor the best balance by maximum capacity. This improves both safety and manoeuvrability, whilst at the same time giving the driver an unrestricted view of the entire machine set-up.



## THE “PLUS” - TWO PRODUCTS IN ONE PASS COMBINED APPLICATION INCREASE EFFICIENCY

The Kverneland f-drill compact plus and f-drill maxi plus allows seeding and fertilising in one pass but also the combined application of seeds and companion crops. The dissolved set-up together with the combination of a power harrow and coulter bar shows an optimum weight balance and carries out seedbed preparation, fertilising and seeding in one pass.

Both “plus” hoppers either with a capacity of 1,600 or 2,200 litre hopper volume is using two independent electric driven metering ELDOS devices. The hoppers are divided to a ratio of 60:40 and allows to meter and apply two different products with different rates in one pass. If needed, the operator can also use the complete hopper for one product by quickly removing the separating wall, which is simply screwed in place. This offers full flexibility.

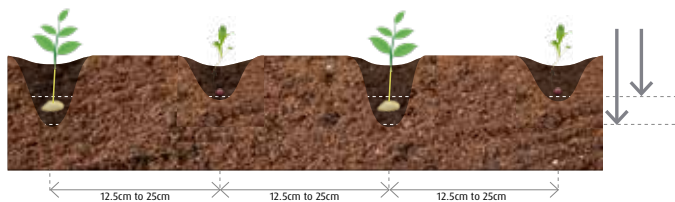
*A plus for more*

The Kverneland venturi metering system which is less sensitive enables also high application rates and allows the application of two types of different seeds or seed and fertiliser in one pass and in different application rates.

The flexible and individual depth setting of each CX-II coulter with press wheel via the hole and pin system allows different depth adjustment. This is extremely important when sowing two different products in one pass e.g. rape at a shallow depth and companion crops like beans deeper alternately row by row.

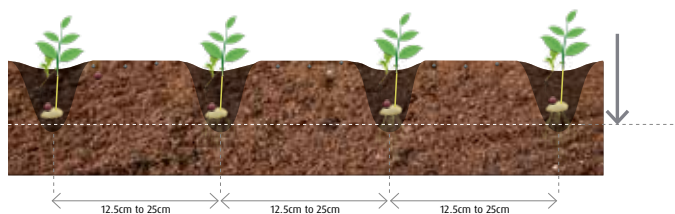


**TWO PRODUCTS IN ONE PASS**  
**TWO SORTS OF SEEDS ALTERNATING PER ROW AT DIFFERENT DEPTH LEVELS**



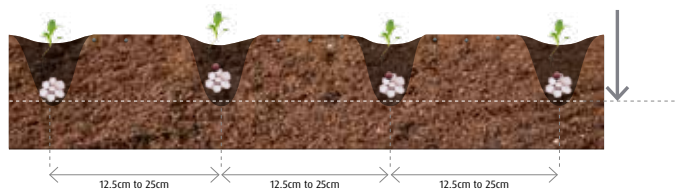
With the CX-II double-entry coultter with press wheel one sort of seed is placed in one row deeper e.g. beans as companion crop and in the next row another seed like rape is positioned shallower as main crop.

**TWO PRODUCTS IN ONE PASS**  
**TWO SORTS OF SEEDS IN ONE SEED FURROW**



With the CX-II double-entry coultter two different sorts of seeds are placed in the same sowing row e.g. beans and ray grass as undersown seeds.

**TWO PRODUCTS IN ONE PASS**  
**FERTILISER AND SEEDS IN SEED FURROW**



With the CX-II double-entry coultter one sort of seed is placed together with special fertiliser (without burning properties) in the same seed furrow.





## F-DRILL - EFFICIENT IN USE

### OPERATOR'S SAFETY AND EASY MANOEUVRABILITY

The compact design of the f-drill front hopper still gives the tractor driver excellent visibility. The f-drill will give optimal balance to the rear and front combination. With tractors able to carry much higher loads on their rear linkages, the need for ballast weight on the front of the tractor is essential. With a nominal volume of up to 2200 litres, the f-drill is that front end weight, adding stability to the tractor, but only when needed. From the tractor cab the operator has the entire machine in view, the working procedures can be monitored constantly and conveniently. The Kverneland f-drill offers the perfect balance between size and compactness!

*We make your life easier and more comfortable*

The hopper is fitted with an access platform, ideal for maintenance purposes and for the filling operation. A close-fitting 2-part hopper cover protects from dust and water and can easily be opened and closed. The wide opening of the hopper allows filling with a big bag or filling auger. The hopper sieves protect the ELDOS from stones etc. They are divided into smaller sections, making them easy to remove for cleaning the inside of the hopper. The positioning of all the major components is well-organised and clear. The hydraulic fan and the ELDOS metering device are located in front of the hopper for best access. A radar sensor records the speed in order to maintain the relevant distribution rate at the correct time.

The f-drill made of plastic has a modern design which ensures good emptying, low maintenance and long lifetime, especially when working with corrosive material such as fertilisers.

Weight cells for efficient filling and control working with ISOBUS and can be monitored with the Tellus terminals.





1,500kg

Load support



## F-DRILL - SOIL THE MOST VALUABLE ASSET WEIGHT BALANCE

Soil compaction caused by the use of heavy agriculture machinery in not optimal soil conditions affects crucial soil functions. Tire pressure, traction and wheel load are well-known key drivers of compaction. Soil structural deformation increased with higher drawbar pull and number of wheeling passes. Especially in wet periods, the separate tillage and seeding system reduced the impact on the soil structure due to better weight distribution.

The optional self-steering and pull-attached wheel packer with lifting function relieves the load on the front axle while maintaining good steering ability. The packer consists from three wheels (3x 31x15.50-15) and takes a bearing load of up to 1,500kg. A bulldozing effect is avoided. The packer can pivot 15° to the right and left while driving and ensures the self-steering effect. The passive self-steering and pull-attached packer reduce power requirement and fuel consumption.

A basic or ISOBUS steered comfort version with an intelligent overload protection is available. The comfort packer is lowered/lifted automatically, if ELDOS will start or stop.

Optionally, weight kits from 100kg up to maximum 600kg are available and can be used as additional ballast for the front axle.

*Precision, flexibility and adaptability*





## PRECISE SEED METERING WITH ELDOS AUTOMATIC AND SAFE



ELDOS metering device fully controlled via the Kverneland Tellus 700 or Tellus 1200 terminals. Kverneland Tellus 1200 the ISOBUS terminal with up to four fully customizable touch screens.

ELDOS is the electric driven metering device for Kverneland pneumatic seed drills. It is state-of-the-art technology for perfect seed placement.

ELDOS is steered by Kverneland e-com software, which is fully ISOBUS compatible. By the automatic section control, GEOCONTROL, the metering device stops/starts automatically. Double and/or missed seeding on headlands or odd-shaped fields is avoided. Special sensors ensure complete functionality from the tractor cab.

Calibration is automatic, and a range of interchangeable seed metering rotors can be swapped - even when the hopper is full - without the need for tools. Sensors monitor the metering rotors, and give a warning if the wrong metering rotors are accidentally installed. Additional rotors, a scale and calibration bag are always ready to hand and stored well-protected against dust in a tool box near the metering device.

*Good results of seed rate variation across the drill.*

The f-drill is available with one or two ELDOS metering units. As duo version, two ELDOS are installed for higher application rates.

The entire system is based on the venturi principle. No additional effort is required to keep the system tight, as with a pressurised system. The venturi system guarantees the accuracy of the desired dosage and even at high application rates.



## SAFE ON THE ROAD – UNRESTRICTED VIEW, WELL-BALANCED AND EASY

The front hopper gives the driver an unrestricted view onto the field and the road during transport. This is ensured by its low height and by the distribution pipes running alongside the tractor.

*Increasing driver's comfort -reducing tractor's wear and tear*

Made of special plastic the hopper offers large capacity and is at the same time light to carry. Fitted in front of the tractor, the weight balance on both axles is optimal for a smooth run – which is good for both the tractor and driver's comfort.

Quick in the field and quick on the road – the foldable coulter bar versions can be effortlessly switched from working to transport position (< 3 m) directly from the cab. For improved load balance, extra stability, and legal compliance during road transport, an additional support wheel is available, which can be mounted either on the power harrow or the coulter bar. No uncoupling of the top linkage is required. The constant hydraulic supporting force on the wheel guarantees smooth operation, enhancing both safety and comfort. The Rotago F models equipped with a support wheel are homologated\* for 40 km/h transport within Europe. For improved visibility and to meet regional homologation requirements, Kverneland also offers a camera system. Two cameras with a dedicated screen and connection provide maximum safety and control.

LED road lights are standard on the f-drill and f-drill CB coulter bars, while optional LED working lights ensure safe and efficient operation during night shifts.

\* see local road regulations





Automatically steered folding sequence of power harrow and coulters bar increase drivers comfort.



The support wheel features passive steering for safe maneuverability and allows the machine to be lifted when driving backwards. The wheel is also adjustable in height to adapt easily to different working and transport conditions. A hydraulic cylinder with an accumulator absorbs shocks and prevents bouncing.



## F-DRILL CB - IN COMBINATION FOR HIGHER UTILISATION

Increasing performance and utilization is important to reduce farm and production costs. Combining machines and applications by reducing passes is a key strategy for maximizing productivity on the farm. The one pass operation will not only save time and labour but also minimises fuel consumption and reduces wear and tear on machinery.

The modular structure of the Kverneland coulters bars ensure an even weight distribution across the machine arrangement.

The foldable coulters bar versions perfectly complements for the Rotago F power harrow. It is available in working widths from 4 to 6m and allows a quick coupling with the Rotago F power harrow. The rigid coulters bars are easily combined to the power harrow via the Kverneland EURO CONNECTION.

*High performance in combination*

Different distribution heads and a certain amount of shut-off valves are available to regulate the seed flow.

The coulters bars in combination with the front hopper f-drill can be fitted with CX-II or CX-II double entry coulters which allow an additional application of seeds, the combined application of seeds and fertiliser as well as of seeds and companion crops. The coulters are clamped to the toolbar to allow various sowing distances. The coulters bar can be ordered with 12.5cm and 25cm row spacing in order to meet the individual farming system. The right finish is ensured by the S-tine following harrow.



Solo power harrow operation at the headland is made possible by the ability to lift the coulters bar.





CX-II COULTER WITHOUT PRESS WHEEL



CX-II coulters with press wheel



CX-II double entry coulters



CX-II coulters without press wheel



Fixed press wheel setting



Lifted press wheel setting

**CX-II coulters with press wheel**

The coulters depth and thereby the sowing depth is finely adjusted via the press wheel without the need for tools. This ensures precise, individual seed placement for each coulters in all soil conditions. The system delivers always smooth operation, optimal ground following, and the flexibility to set different sowing depths coulters by coulters across the working width for example, placing beans deeper as a companion crop while sowing the main crop, such as rape, shallower. In extremely wet conditions, the press wheel can be lifted to allow operation without it or optional scraper are available.

## CX-II COULTERS FOR PRECISE APPLICATION TO ENSURE BEST GERMINATION CONDITIONS

Precision in the placement of seeds and fertilisers is crucial for efficient and sustainable agriculture. The development of the f-drill CB coulters, along with the CX-II coulters, aims to achieve high yields while minimising environmental impact through reduced soil disturbance, targeted application and wheel compaction.

The CX-II disc coulters ensure smooth operation, minimal soil disturbance, and precise seed placement. Its flat cutting angle of only 5.4° requires less pulling force to reach a constant sowing depth of up to 6cm. By combining a 325mm steel disc with a flexible plastic disc, independent scrapers are unnecessary. The CX-II coulters are maintenance-free and can achieve up to 50kg coulters pressure with a pre-loaded spring. Safe operation is ensured even at high working speeds and with plant residues on the soil surface. With an inter-row coulters staggering of 445mm and a following press wheel for optimum seed/soil contact, it performs well in all conditions.

### CX-II coulters with press wheel

Press wheels can be adjusted in fixed position or can be lifted out to adapt quickly to changing conditions. The individual depth settings allow different depths even within one machine width alternately row by row. This can be crucial for sowing multiple products in a single pass e.g. rape at a shallower depth and companion crops like beans deeper.

### CX-II coulters without press wheel

Alternatively, Kverneland provides a cost-efficient CX-II coulters version without a press wheel for wet and sticky soils. The special curved disc design provides sufficient bearing capacity even in lighter conditions. This option may also be appealing for reducing lifting capacity, allowing smaller tractors to operate the seed drill.

### CX-II coulters double entry

The CX-II coulters with double entry application tubes allows to apply two items in one pass. Different distribution heads and a certain amount of shut-off valves are available to regulate the seed flow. Two products placed with one coulters e.g. as seed mixture or seeds together with special fertiliser which will not burn the seeds. This is especially suitable for example phosphoric fertiliser to support the initial germination and youth development of the plants in the most efficient way.



Clamped CX-II coulters to be flexible in row spacing.



On slightly sticky soils an optional scraper is recommended.



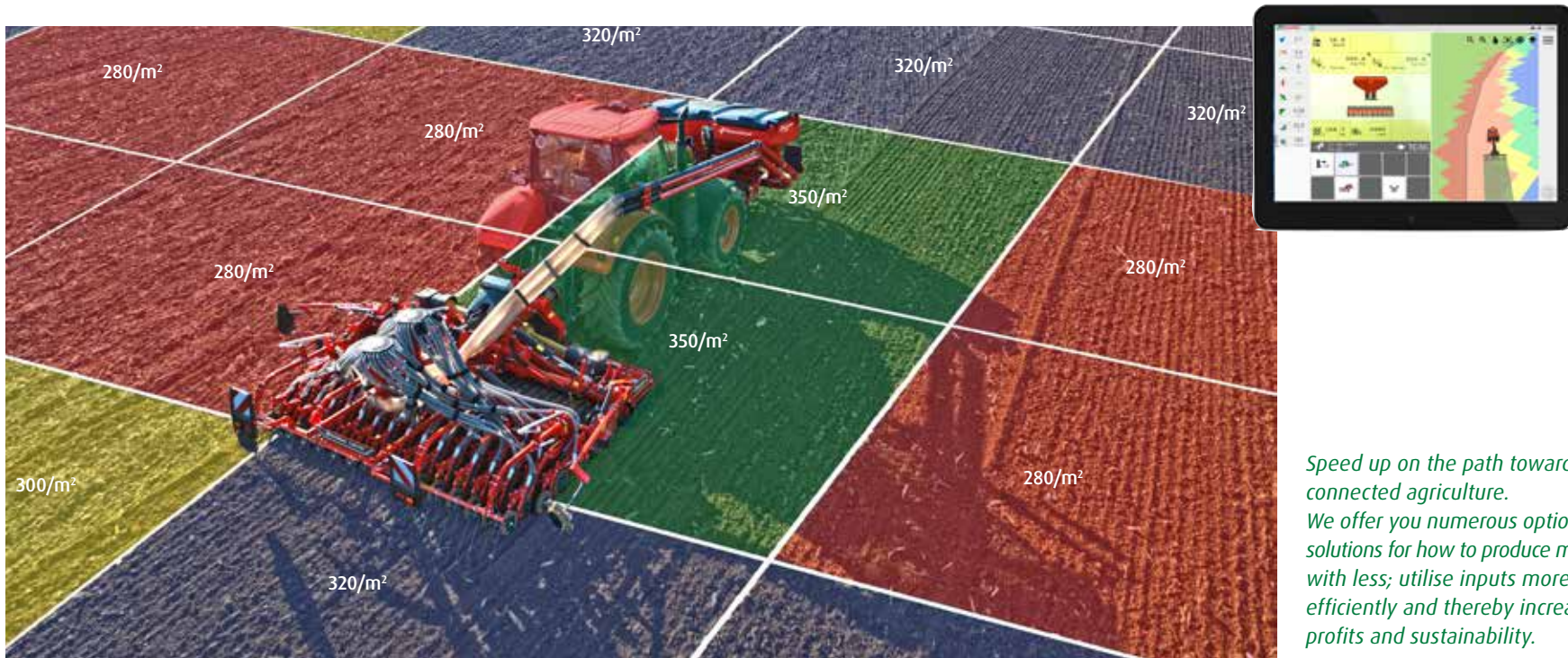
CX-II coulters with double entry for two sorts of application and seeding in one pass.



# F-DRILL'S ARE WITH E-COM FULLY ISOBUS COMPATIBLE

## VARIABLE RATE FOR EVEN ESTABLISHMENT OF CROPS

Variable rate control with a f-drill can be done via an application map, where in combination with GPS, the f-drill automatically changes its seed rate based on a pre-determined amount. The software, working alongside the electrically driven metering device ELDOS, controls and adjusts seed rates for specific areas efficiently. When most of the seeder is within a specific zone defined by the application map, the seed rate for that zone is applied.



Example: wheat seeds/ha depending on yield expectation and soil condition. Grid 10x10m

*Speed up on the path towards connected agriculture. We offer you numerous options and solutions for how to produce more with less; utilise inputs more efficiently and thereby increase profits and sustainability.*



**Tellus 700 - Single Screen, Multiple Options**

Tellus 700 simplifies precision farming with smart features, custom mapping, and a user-friendly design. With ISOBUS compatibility and flexible packages, it boosts in-field efficiency and control.



**Tellus 1200 - Multiple Screens, Even More Options**

Tellus 1200, the 12-inch universal Terminal offers intelligent hopper monitoring and precise variable rate application for fertiliser and seed. With an intuitive interface, multi-screen functionality, and GEOCONTROL compatibility, it delivers smart, all-in-one control beyond standard tractor systems.



**The best overview in farm management**

IsoMatch FarmCentre is a cloud-based farm management tool that works seamlessly with Tellus 700 and Tellus 1200 terminals. It allows you to monitor machine activity, send tasks remotely to the terminal, and access real-time data and job reports - anytime, anywhere for smarter, more efficient farming.



**Kverneland Global 3**

A precision GPS antenna delivering 30-50cm DGPS accuracy for guidance, section control, and advanced farming - boosting efficiency and minimising overlap.

**Kverneland Sync – the Implement Gateway**

**Always Connected – Easy and Direct**

With Kverneland Sync, your implement stays connected to Kverneland online services, ensuring efficient, user-friendly data transfer to IsoMatch FarmCentre and Kverneland ServiceCentre.



**Kverneland ServiceCentre**

Minimize downtime with remote diagnostics via Kverneland ServiceCentre, enabling technicians to quickly resolve electronic issues from a distance.

**Task Management**

Enhance reporting and transparency with real-time tracking, performance measurement, and secure data storage in IsoMatch FarmCentre. Perfect for managing logistics and invoicing in machine cooperations.

**GEOFENCING**

Protect your implement against theft with GEOFENCING and a backup battery, ensuring localization even when the implement is not connected to a tractor.

# ORIGINAL PARTS & SERVICE

## LET'S FOCUS ON YOUR BUSINESS

ORIGINAL  
PARTS

- 
- ① LONG LASTING, HIGH QUALITY SPARE PARTS
  - ② OVER 100 YEARS OF PARTS KNOWLEDGE
  - ③ SUPPORT FROM A WIDE NETWORK OF DEALERS
  - ④ 24/7 SPARE PARTS SERVICE
  - ⑤ HIGHLY SKILLED DEALER TECHNICIANS

# MYKVERNELAND SMARTER FARMING ON THE GO

## A personalised online platform tailored to your machine needs

With MYKVERNELAND you will benefit from easy access to Kverneland's online service tools.

Receive first hand access to information on future developments and updates, operator and spare part manuals, FAQs and local VIP offers. All information is gathered in one place.



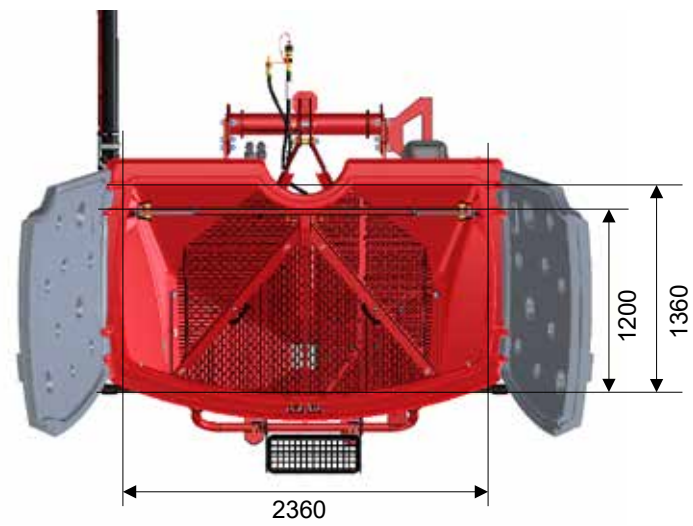
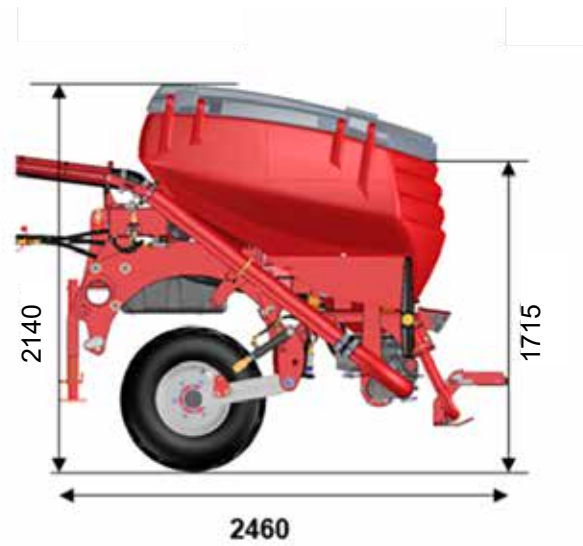
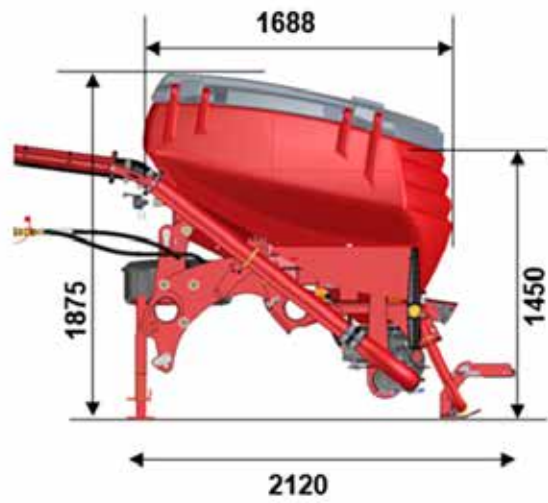
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**TECHNICAL DATA - FRONT HOPPER**

<b>Model</b>	<b>f-drill</b>					
<b>Model</b>	<b>f-drill compact</b>	<b>f-drill maxi</b>	<b>f-drill compact duo</b>	<b>f-drill maxi duo</b>	<b>f-drill compact plus</b>	<b>f-drill maxi plus</b>
Machine type	modular mounted					
Hopper capacity (l)	1,600	2,200	1,600	2,200	1,600 (60:40)	2,200 (60:40)
Machine width (m)	2.75	2.75	2.75	2.75	2.75	2.75
Weight base machine (kg)	658	678	732	752	747	767
Weight optional front packer (3x 31x15.50-15) (kg)	361	361	361	361	361	361
Ballasting weights 100 - 600kg (steps 2 x 50kg)	Option	Option	Option	Option	Option	Option
Min. power requirement (HP/Kw)	106/80	173/130	106/80	173/130	106/80	173/130
Hydraulic fan drive closed centre	Standard	Standard	Standard	Standard	Standard	Standard
Hydraulic fan drive open centre with adjustment valve	Option	Option	Option	Option	Option	Option
Hydraulic fan drive power beyond load sensing	Option	Option	Option	Option	Option	Option
Oil charge hydr. fan (l/min)	30	30	40	40	44	44
ELDOS electric driven metering device (no.)	1	1	2	2	2	2
Metering units in relation to the no. of distribution heads	1	1	2	2	2	2
e-com electronic (Tellus 700 / Tellus 1200)	Standard	Standard	Standard	Standard	Standard	Standard
Working switch for metering unit (start/stop) on top link	Option	Option	Option	Option	Option	Option
Metering device control	Standard	Standard	Standard	Standard	Standard	Standard
Seed rate adjustment	Standard	Standard	Standard	Standard	Standard	Standard
Seed quantity (min-max.) - kg/ha*	1-400	1-400	2-600	2-600	2 x 1-400	2 x 1-400
Ø 100mm distribution system	Standard	Standard	Standard	Standard	Standard	Standard
Ø 135mm distribution system	Option	Option	Option	Option	Option	Option
Radar speed signal	Standard	Standard	Standard	Standard	Standard	Standard
Weight cells	Option	Option	Option	Option	Option	Option
Camera system	Option	Option	Option	Option	Option	Option
Calibration set	Standard	Standard	Standard	Standard	Standard	Standard
Quick emptying chute	Standard	Standard	Standard	Standard	Standard	Standard
Low level sensor (no.)	Standard (1)	Standard (1)	Standard (2)	Standard (2)	Standard (2)	Standard (2)
Platform	Standard	Standard	Standard	Standard	Standard	Standard
Lighting equipment	Standard	Standard	Standard	Standard	Standard	Standard
Working lights	Option	Option	Option	Option	Option	Option
Working width coulter bar (m)	rigid and fold versions (3.0 - 6.0m) with CX-II coulter		fold: 5.0m; 6.0m with CX-II coulter		rigid and fold versions (3.0 - 6.0m) with CX-II double entry coulter	
No. of precision planter rows	4 - 8	4 - 8	12 + 16	12 + 16	12** + 16**	12** + 16**
Hydr. spool valves 1 sa + pressless return for fan drive	Standard	Standard	Standard	Standard	Standard	Standard
Hydr. spool valves 1 sa + pressless return for fan drive and optional comfort front packer	Option	Option	Option	Option	Option	Option
Additional hydr. spool valves 1 da for optional basic front packer lifting	Option	Option	Option	Option	Option	Option

\* with 15km/h working speed

\*\* only if the dividing hopper plate is removed



## TECHNICAL DATA - COULTER BAR

Model	f-drill CB			f-drill CB F			
Type	3000 / 3000 plus	3500 / 3500 plus	4000 / 4000 plus	4000 F / 4000 F plus	4500 F / 4500 F plus	5000 F / 5000 F plus	6000 F / 6000 F plus
Frame	rigid	rigid	rigid	foldable	foldable	foldable	foldable
Working width (m)	3.00	3.50	4.00	4.00	4.50	5.00	6.00
Transport width (m)	3.00	3.50	4.00	3.00	3.00	3.00	3.00
Linkage to power harrow*	EURO CONNECTION or HITCH CAT. II	EURO CONNECTION or HITCH CAT. II	EURO CONNECTION or HITCH CAT. II	CAT. II - Rotago F	CAT. II - Rotago F	CAT. II - Rotago F	CAT. II - Rotago F
Clamped CX-II coulters with press wheel	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Clamped CX-II coulters without press wheel	Option	Option	Option	Option	Option	Option	Option
Clamped CX-II double entry coulters*	Option	Option	Option	Option	Option	Option	Option
Row distance (cm)	12.5 / 15.0 / 25.0	12.5 / 14.6 / 25.0	12.5 / 15.4 / 25.0	12.5 / 25	12.5 / 25	12.5 / 25	12.5 / 15 / 25
No. of coulters	24 / 20 / 12	28 / 24 / 14	32 / 26 / 16	32 / 16	36 / 18	40 / 20	48 / 40 / 24
Press wheel Ø (mm)	250 x 42	250 x 42	250 x 42	250 x 42	250 x 42	250 x 42	250 x 42
Press wheel scraper	Option	Option	Option	Option	Option	Option	Option
Coulter pressure CX-II coulters (kg)	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50	5 - 50
Mechanic coulters pressure adjustment by crank	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Hydraulic coulters pressure adjustment	Option	Option	Option	Option	Option	Option	Option
Hydraulic central seed depth setting	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Mechanic coulters bar lifting	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Hydraulic coulters bar lifting	Option	Option	Option	Option	Option	Option	Option
No. of conveyor line and no. distribution heads	1 / 2*	1 / 2*	1 / 2*	1 / 2*	1 / 2	1 / 2	1 / 2
Ø of the distribution system (mm)	1 x 100 2 x 100* (135 as option)	1 x 100 2 x 100* (135 as option)	1 x 100 2 x 100* (135 as option)	1 x 135 or 2 x 135*	1 x 135 or 2 x 135*	1 x 135 or 2 x 100** or 2 x 135*	1 x 135 or 2 x 100** or 2 x 135*
Seed flow sensor	Option	Option	Option	Option	Option	Option	Option
Trackmarker	Option	Option	Option	Option	Option	Option	Option
Pre-emergence marker	Option	Option	Option	Option	Option	Option	Option
S-tine harrow (10mm)	Option	Option	Option	Option	Option	Option	Option
Road light kit	Option	Option	Option	Option	Option	Option	Option
Weight with CX-II coulters with press wheels, 12.5cm row distance and following harrow (kg)	-	-	-	1220	1325	1395	1520
Weight with CX-II double-entry coulters, 12.5cm row distance and following harrow (kg)	-	-	-	1275	-	-	-
Weight with CX-II coulters with press wheels, 12.5cm row distance and following harrow and transport supporting wheel (kg)	-	-	-	-	-	1610	1735
Weight (kg) (depending on configuration and equipment)	420 - 1020	460 - 1120	520 - 1230	-	-	-	-
Combination with Kverneland front hopper	f-drill compact f-drill maxi f-drill compact plus* f-drill maxi plus*	f-drill compact f-drill maxi f-drill compact plus* f-drill maxi plus*	f-drill compact f-drill maxi f-drill compact plus* f-drill maxi plus*	f-drill compact f-drill maxi f-drill compact plus* f-drill maxi plus*	f-drill compact f-drill maxi f-drill compact plus* f-drill maxi plus*	f-drill compact duo f-drill maxi duo f-drill compact plus* f-drill maxi plus*	f-drill compact duo f-drill maxi duo f-drill compact plus* f-drill maxi plus*

\*Only in combination with front hopper f-drill compact plus or f-drill maxi plus and coulters bar with CX-II double entry coulters. "f-drill CB plus"; the rigid version always with EURO-CONNECTION.

\*\* In combination with front hopper f-drill compact duo or f-drill maxi duo

Matrix of f-drill combinations with coulters bar or precision drill rows																				
Front hopper f-drill	No. of ELDOS	Seed coulters bar														Precision drill row				
Coulter/rows		CX-II							CX-II double entry							Optima rows				
Machine type		rigid			fold				rigid			fold								
Working width		3.0m	3.5m	4.0m	4.0m	4.5m	5.0m	6.0m	3.0m	3.5m	4.0m	4.0m	4.5m	5.0m	6.0m	4	6	8	12	16
f-drill compact (1,600l)	1	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	✓	✓	✓	-	-
f-drill maxi (2,200l)	1	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-	✓	✓	✓	-	-
f-drill compact duo (1,600l)	2	-	-	-	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-	✓	✓
f-drill maxi duo (2,200l)	2	-	-	-	-	-	✓	✓	-	-	-	-	-	✓	✓	-	-	-	✓	✓
f-drill compact plus (1,600l)	2	-	-	-	-	-	✓*	✓*	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓*	✓*
f-drill maxi plus (2,200l)	2	-	-	-	-	-	✓*	✓*	✓	✓	✓	✓	✓	✓	✓	-	-	-	✓*	✓*
ø 100mm distribution system		✓	✓	✓	-	-	✓	✓	✓	✓	✓	-	-	-	-	✓	✓	✓	✓	✓
ø 135mm distribution system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	✓	✓

\*Possible only when the hopper dividing plate is removed

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