

# Kverneland u-drill & u-drill plus

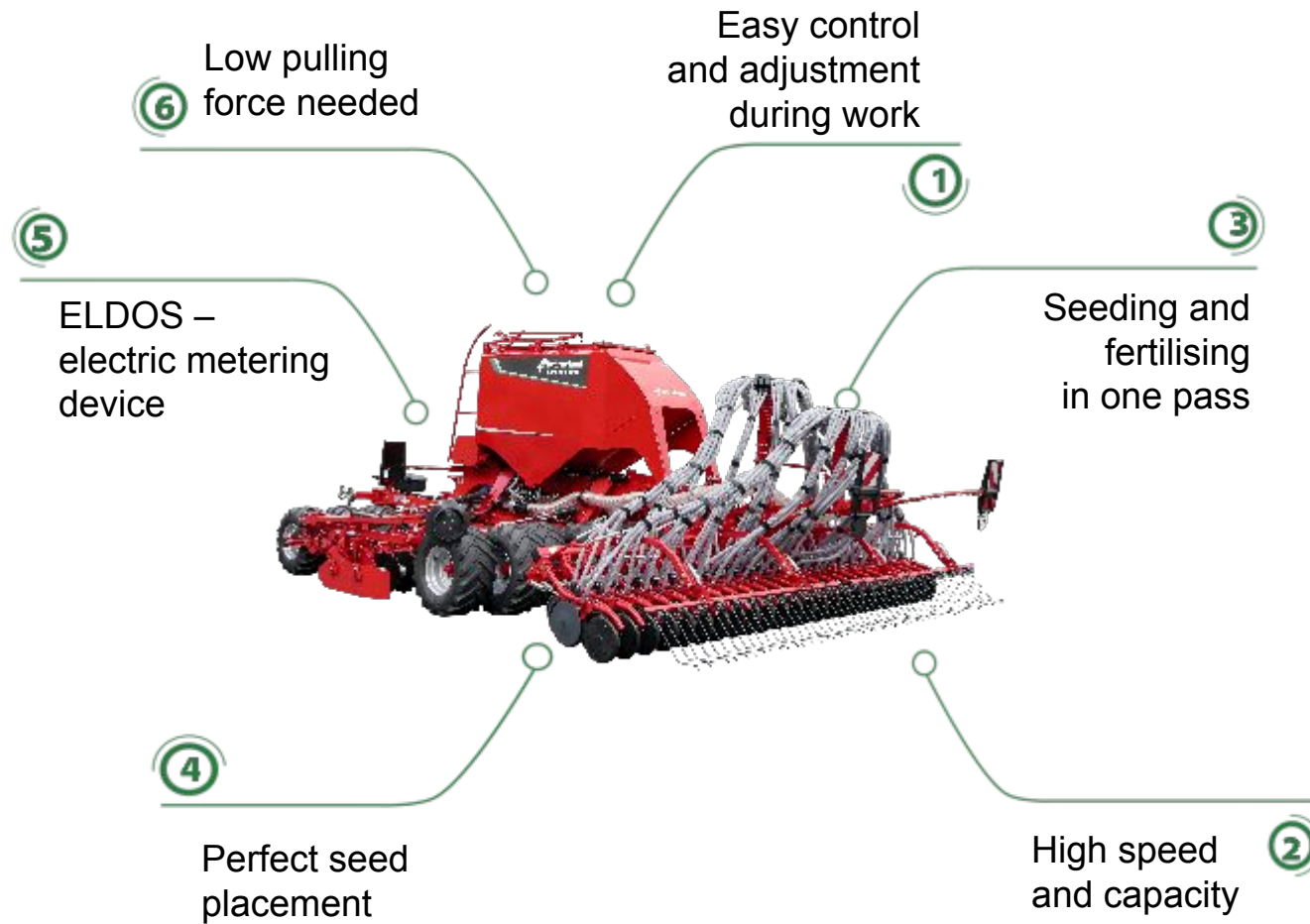
Product Information 2022

# Kverneland u-drill & u-drill plus

Seeding combination



# u-drill & u-drill plus- USPs



## Why

### Agricultural challenges

1. Spring sowing almost in wet soil conditions, in contrast the autumn season is mostly characterised by dry conditions i.e. shorter time windows;
2. A sowing combination must sow equally small seeds such as rape, cereals and legumes in the same quality (lateral and longitudinal distribution);
3. Summer or winter cereals, legumes or oilseeds need nutrients at different soil level/depth and stages of growth and development;

## How

### Technical solutions

1. Optimal weight of the seeder, a special packer arrangement and advanced seedbed preparation tools, enable to work in all conditions. An universal coulter design with adjustable coulter pressure and integrated press wheel can place all kind of seeds.
2. A precise metering device in combination with an advanced pneumatic is able to applicate all kind of seeds at any working speed.
3. Fertiliser placement with the coulter in the same seed furrow or with the short disc harrow as a kind of deposit below the seeds.

## What

### Kverneland's answer



# u-drill & u-drill plus - WHAT

100% ISOBUS - automation of hydraulic functions at headlands

Hydraulic sowing and disc depth adjustment

Coulter pressure - up to 100kg

Row spacing - 12.5 or 16.7cm

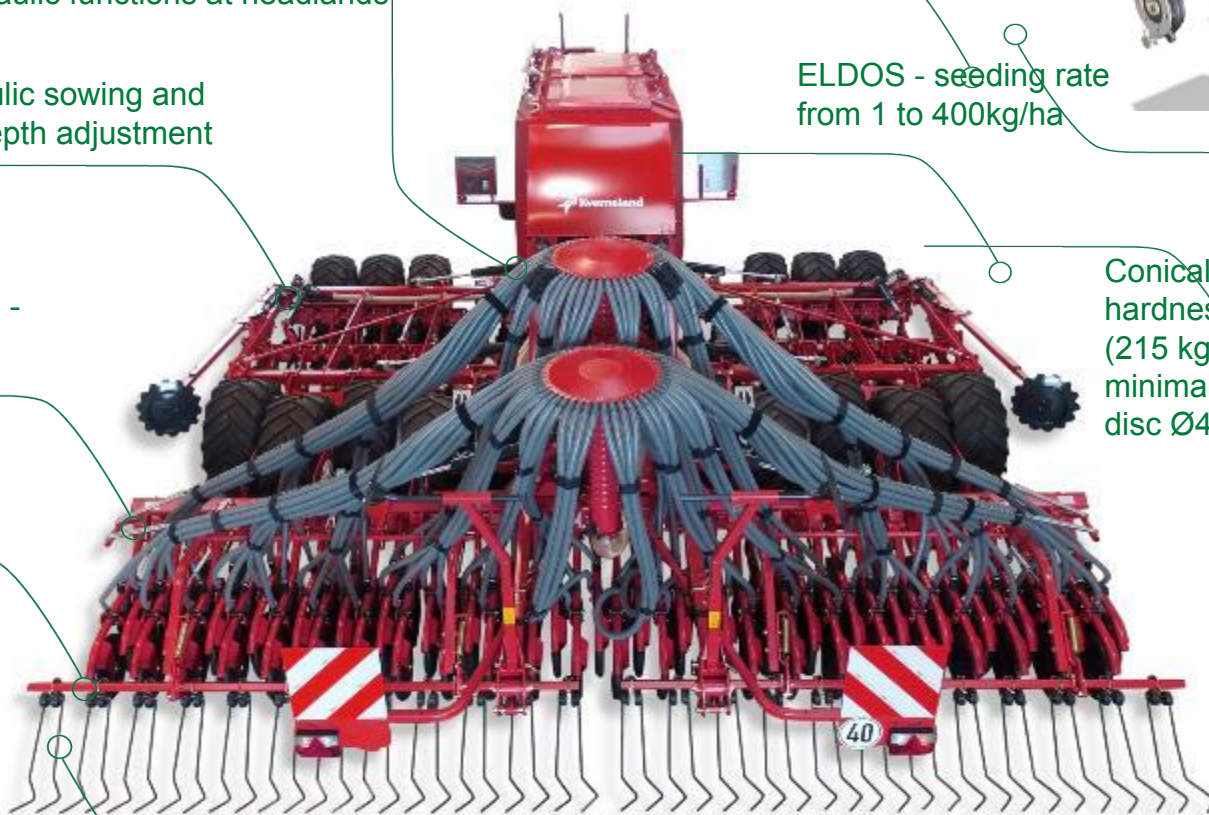
Central following harrow adjustment

Hopper volume - 3000/4350 l (60/40)

ELDOS - seeding rate from 1 to 400kg/ha

Conical discs Ø480mm, hardness 55-58 HRC (215 kg/mm<sup>2</sup>) or for minimal disturbance MD disc Ø430mm

Application of fertilisers in rows and/or between rows



# u-drill & u-drill plus



# u-drill & u-drill plus

## Economical aspects of sowing

- **20%** more sowing capacity thanks to large fertiliser hopper. Save time and fuel by utilising the sowing capacity to the maximum.
- **< 2 minutes** is virtually all it takes to convert from transport to working position. Optimise output without wasting time.
- **8°** angle of double cutting disc for less soil movement, less pressure requirement and better penetration to achieve the sowing depth.
- **3x** per row long-life bearings for low maintenance

# u-drill

5 steps in one single pass



⑤

④

③

②

①

1. Levelling
2. Seedbed preparation
3. Consolidation before sowing
4. Seeding
5. Covering



# u-drill plus

5 steps in one single pass - plus fertiliser application



①

② +

③

④ +

⑤

1. Levelling
2. Seedbed preparation  
+ fertiliser/seed application
3. Recompaction before sowing
4. Seeding  
+ fertiliser/seed application
5. Covering

# u-drill 3001/4001 & u-drill plus 3001/4001

## Key data of rigid models

- Hopper capacity 3000l
- Hopper division of the u-drill plus:  
60:40, changeable to 50:50
- Length: 8.20m
- Width: 3 or 4m
- Weight empty: 4.6t
- Power requirement: 100 hp



# u-drill 4000 fold & u-drill 4000 fold plus

## Key data

- Hopper capacity 3000l
- Hopper division of the u-drill plus:  
60:40, changeable to 50:50
- Length: 8.20m
- Working width: 4m
- Transport width: 3m
- Weight empty (base machine): 5.7t
- Power requirement: 130 hp



# u-drill 6001 & u-drill plus 6001

## Key data

- Hopper capacity:  
u-drill 4350l; u-drill plus 4200l
- Hopper division of the u-drill plus:  
60:40
- Length: 8.37m
- Width: 6m
- Weight empty: 8.3t
- Power requirement: 190hp



u-drill 6001



u-drill plus 6001

# Perfect Seed Placement



## u-drill & u-drill plus

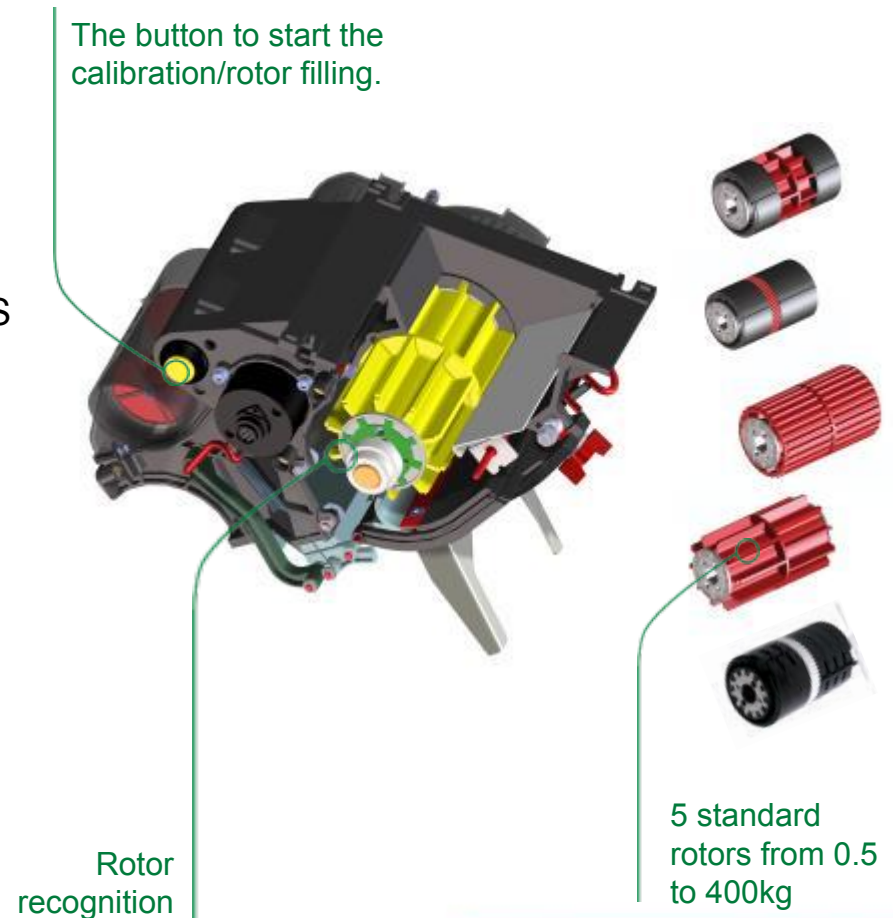
ELDOS – electric driven metering device



# u-drill & u-drill plus

## ELDOS – electric driven metering device

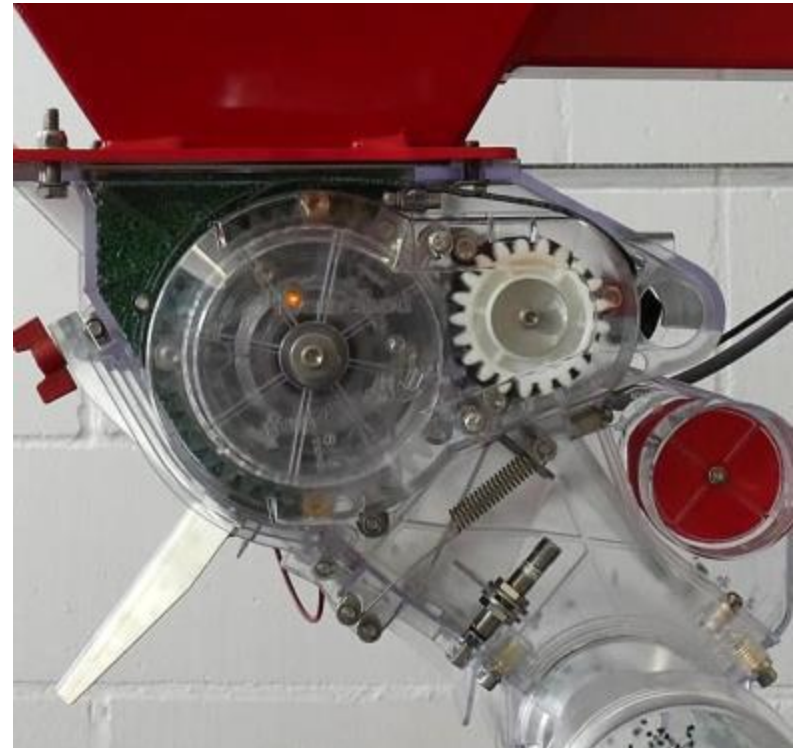
- For all types of seed
- Self-controlled system
- Seed rate from 1-400kg/ha (depending on speed and width)
  - u-drill 3001/4001/6001: 32kg/min/ELDOS
  - u-drill plus 3001/4001: 45kg/min/ELDOS
  - u-drill plus 6001: 65kg/min/ELDOS
- Electric driven e-com (ISOBUS)
- Start of calibration from cab
- Automatic rotor recognition
- Sensor remote control



# u-drill & u-drill plus

## ELDOS – electric driven metering device

- No seeds drop into the hose due to calibration flap with integrated gate
- Penstock
- Remote control for calibration test near to ELDOS
- Emptying flap
- No. of units:
  - u-drill 6001: 2
  - u-drill plus 6001: 2
  - u-drill rigid 3001/4001: 1
  - u-drill fold 4001: 1
  - u-drill plus 3001/4001: 2
  - u-drill plus fold 4001: 2





## u-drill plus

### Grain & Fertiliser version

- Pressurised system on u-drill plus 6001
- Gate flow
- Air to pressurise the hopper is taken from the fan
- Flap to reduce the airstream for e.g. lighter seeds and heavy fertiliser



# u-drill - ELDOS

ELDOS – 5 rotors for different sizes and quantities



**Rotor 1:**  
high amount of grain  
and fertiliser

**Rotor 2:**  
for grass

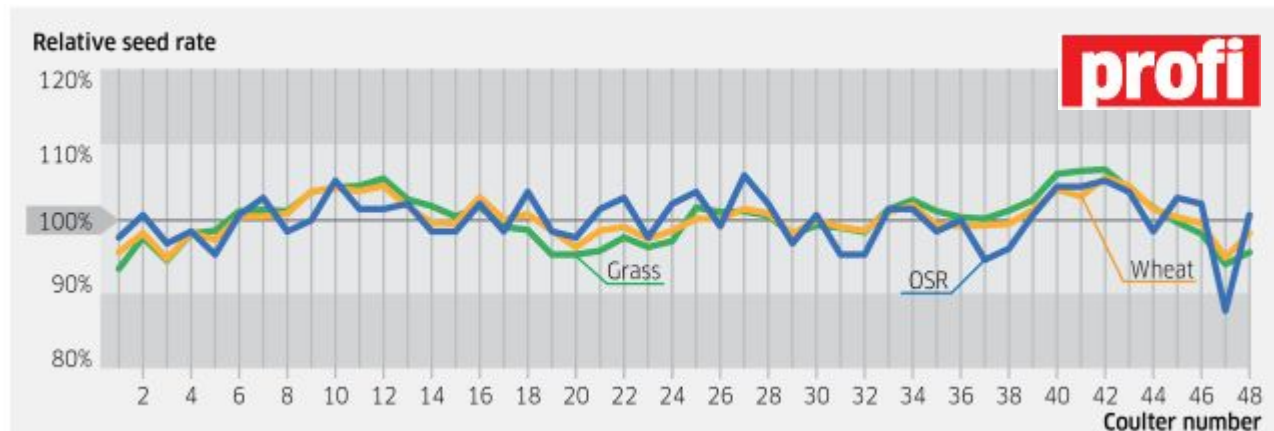
**Rotor 3:**  
for rape or mustard

**Rotor 4:**  
low to medium amount of  
grain and fertiliser

**Rotor 5:**  
for maize, sunflowers  
and greening seeds

# u-drill & u-drill plus

## Rate variation across the drill



*Seed rate is pretty consistent across the width of the drill, showing maximum errors of 12% (OSR), 7% (wheat) and 7% (grass). Graph: ST.*

# u-drill & u-drill plus

Coulter bar and CD Coulter



# u-drill & u-drill plus

## Coulter bar

- 1 central coulter bar box-tube
- 3-point parallelogram-linkage
- Central depth adjustment from cab (ISOBUS terminal)
- Hydraulic coulter pressure
- Distribution head directly on top



# u-drill & u-drill plus

## Choice of sowing distance

Sowing distance 12.5cm

- ✓ Best distribution for high seed rates
- ✓ Rows close quickly
- ✓ Reduced weed pressure
- ✓ Efficient use of nutrients, water and sun



Sowing distance 16.7cm

- ✓ Optimised microclimate reduces fungal infestation
- ✓ Less seeds needed per m<sup>2</sup> with new type of seeds (hybrid)
- ✓ Saving on water resources
- ✓ Reduced pulling force requested
- ✓ Better clearance in wet conditions

| Seeding distance | u-drill 3.0m | u-drill 4.0m | u-drill 6.0m |
|------------------|--------------|--------------|--------------|
| 12.5cm           | 24 coulters  | 32 coulters  | 48 coulters  |
| 16.7cm           | 18 coulters  | 24 coulters  | 36 coulters  |

# u-drill & u-drill plus

## CD Coulter

- 1 type of coulter (no left or right; no long or short) – less wearing parts
- Robust simple design
- Staggering 200mm for small furrows
- Central coulter pressure adjustment infinitely from 0-100kg
- Row spacing 12.5 or 16,7 cm
- Reliable coulter spring loaded system with constant pressure



# u-drill & u-drill plus

## CD Coulter: Cutting disc

- 2 steel discs Ø380mm
- 8° angle - very shallow for less soil movement, easy penetration and low power requirement
- Plastic inner disc scraper
  - Exchange without tools
  - Less wearing
- Integrated bearings for good soil flow
- Maintenance-free bearings
- Changeable front disc guard as bolt-on system





# u-drill & u-drill plus

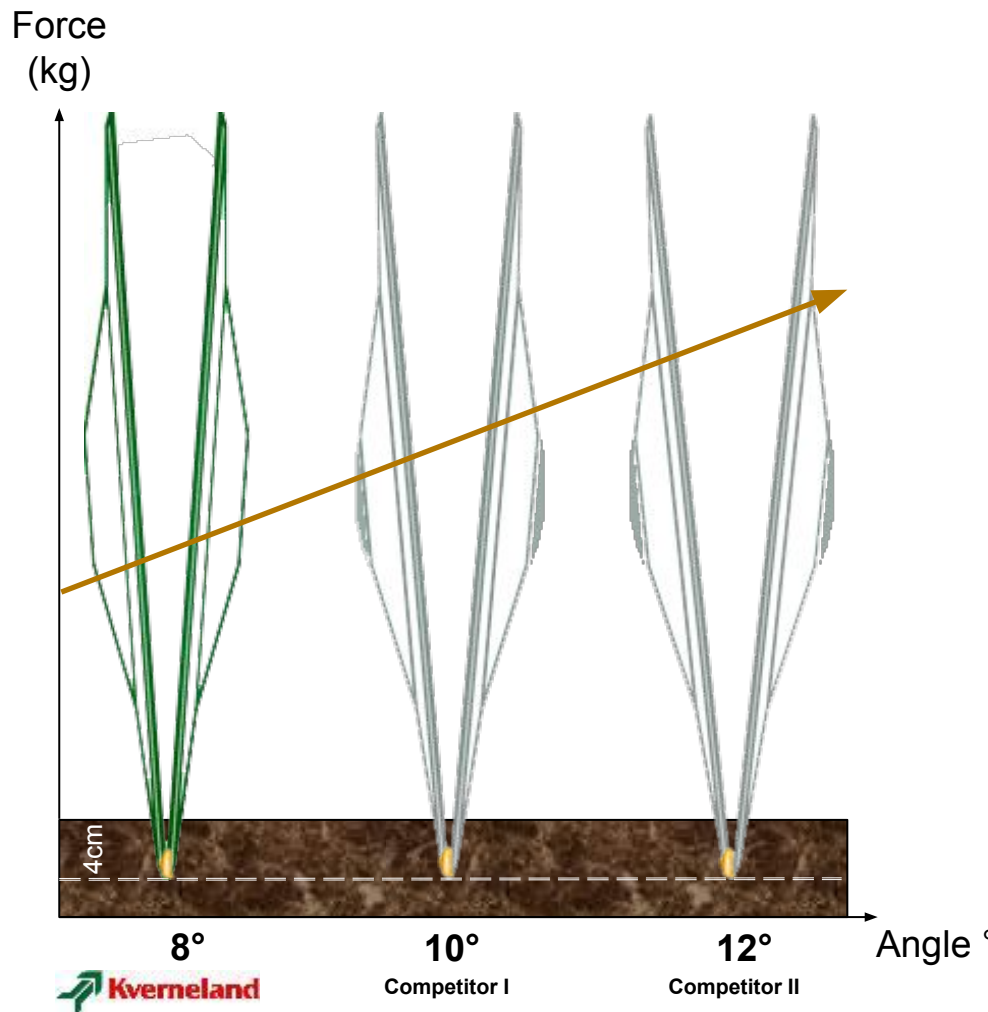
## Slim design 8°

- Less soil movement
- Easy penetration
- Low pulling force needed
- Low power requirement

### □ Saving fuel and time

*Relation of the seed disc angle to the pressing force needed to deposit the seed at a sowing depth of 4 cm:*

*The more narrow the disc angle, the lower the force requirement to place the seed at the sowing depth.*



## u-drill & u-drill plus

### CD Coulter: Press wheel

- Max. 100kg coulter pressure transferred to the press wheel
- Ø380 x 50mm
- Integrated depth-guidance
- Recompaction
- Scraper for sticky soil
- Self-cleaning effect due to flexible rubber



# u-drill & u-drill plus

## Scraper

- Additional scraper available; recommended on sticky soil



## u-drill plus

### CD coultter - grain & fertiliser application in the seed row

- Double entry coultter
- Fertiliser application in the shadow of the seeds
- Same number of fertiliser rows as of seed rows
- Fertiliser application depth according to CD coultter depth setting



# u-drill plus

## Distribution head

### ① PLACEMENT WITH DISC HARROW & CD COULTER (2 DISTRIBUTION HEADS)

#### 1<sup>ST</sup> POSSIBILITY: FERTILISER PLACED BETWEEN THE ROWS



The fertiliser is placed in-between the seed rows, the depth of the fertiliser is determined by the disc harrow

#### 2<sup>RD</sup> POSSIBILITY: 2 SORTS OF SEEDS AT 2 DIFFERENT SEEDING DEPTHS



The disc harrow outlets place e.g. the beans in-between the rape seeds



# u-drill plus

## Distribution head

### ② PLACEMENT WITH CD DOUBLE-ENTRY COULTER (2 DISTRIBUTION HEADS)

#### 1<sup>ST</sup> POSSIBILITY: FERTILISER PLACED IN THE SEEDING ROW



With the CD double-entry coulters the fertiliser is placed in the seeding row.

#### 2<sup>ND</sup> POSSIBILITY: 2 SORTS OF SEEDS IN THE SEEDING ROW



With the CD double-entry coulters two sorts of seeds are placed in the same seeding row.



# u-drill plus

## Distribution head

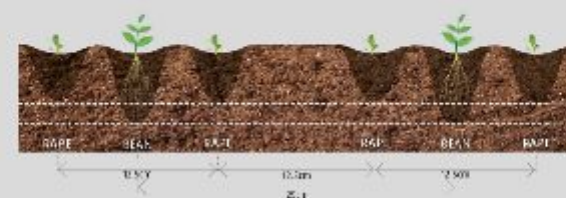
- ③ CHOICE OF PLACEMENT EITHER WITH CD DOUBLE-ENTRY COULTER OR DISC HARROW & COULTER (3 DISTRIBUTION HEADS)

1<sup>st</sup> POSSIBILITY: 2<sup>ND</sup> PRODUCT PLACED IN THE SEEDING ROW



With the CD double-entry coulters fertiliser and seed is placed in the seeding row on different sowing depths

2<sup>nd</sup> POSSIBILITY: 2<sup>ND</sup> PRODUCT PLACED BETWEEN THE ROWS



The disc harrow outlets place e.g. the beans in-between the rape seeds every 75cm. The depth is determined by the disc harrow



# u-drill & u-drill plus

## Hydraulic driven Clod board

- Placed between disc harrow unit and rear packer
- Level the soil before final consolidation
- Flexible tines are equipped with a plate to level the soil
- Requires one additional double acting hydraulic valve
- Can be adjusted during the work
- Automatic lifting and lowering on headland due to connection with disc harrow unit via headland management system





## u-drill & u-drill plus

### Following harrow

- S-tine harrow 10 mm (standard)
  - Straight finger harrow 12 mm
  - Spring auto reset system
  - Manually adjustable in height and angle
  - Protection against accidental drill reversal
- **Optimum covering even in wheel marks**



# u-drill & u-drill plus

## Track marker

- Notched disc
- Driven by headland management
- Overload protection
- Notched disc with support ring



# u-drill & u-drill plus

## Pre-emergence marker

- For symmetrical rhythms
- Foldable for transport
- Activated during tramline rhythms



# Easy to Pull with High Capacity



# u-drill & u-drill plus

Packer and transport



# u-drill & u-drill plus

## Front wheel packer

- 31x15.50-15 tyres
- Ø800 mm
- 130 mm distance between the tyres
- Larger footprint for reduced pressure onto the soil
- Easy to pull
- 3 wheels per packer unit
- Max. 3 packer units on a 6 m machine
- Mid-mounted or complete front packer
- Hydraulic lifting



# u-drill & u-drill plus

## Front wheel packer

- Soil consolidation between tractor and wheels
- Wheels keep the level of the u-drill
- Coulter depth stays the same and is not influenced by uneven terrain or varying hopper content
- When the pressure is not needed, the front wheel packer can be hydraulically lifted off
- Wheel valves are protected
- Inflation pressure is shown



# u-drill & u-drill plus

## Track eradicator tines

- Mounted between each wheel section
- 40 mm width
- 7 depth settings
- Auto-reset leaf spring protection system
- Recommended on ploughed land
- 50 kg pressure
- Can be hydraulically lifted out of work
- Loosens the tractor tracks





# u-drill & u-drill plus

Offset wheel packer



# u-drill & u-drill plus

## Offset wheel packer

- 12 x 420/55-17
- Ø900 mm
- Safe road transport
- Up to 40km/h transport speed
- Easy turning on headlands



# u-drill & u-drill plus

## Offset wheel packer

- Staggered wheel arrangement to support soil and trash flow
- No bulldozing or blockage effect
- Easy pulling
- Smooth running
- Depth control
- Re-compaction for good seed-to-soil contact and capillary effect
- Large footprint reduces the tractive power requirement
- Low wheel pattern for uniform re-compaction



## u-drill & u-drill plus

### Brakes for offset wheel packer

- Pneumatic brake system
- Hydraulic brake system
- Complying with national traffic regulations



# u-drill & u-drill plus

## Ridge Harrow

- After the wheel packer
- Flexible Rubber Harrow
- Recommended on light and sandy soil to avoid resp.to destroy ridges
- The rubber pins distribute the soil to the neighbour area





**Profit is Made in the Field -  
not on the Road**

# u-drill & u-drill plus

Hopper



# u-drill

## Large hopper capacity

- Large hopper capacity:
  - u-drill rigid 3.0/4.0 m: 3000 litres
  - u-drill fold 4.0 m: 3000 litres
  - u-drill 6.0 m: 4350 litres
  - u-drill 6.0 m plus: 4200 litres
- Good access
  - Loading steps
  - Loader filling, Big Bags
- LED lighting in- and outside
- Tarpaulin cover for u-drill 3m, 4m rigid and fold, and 6 m grain only  
Steel cover for fertilizer/grain model, u-drill 6001plus
- Optional:
  - Weight cell system
  - Filling auger





## **u-drill plus** (rigid models 3.0/4.0m and folding models 4.0m)

### **Large hopper capacity**

- 3000 litres
- Lengthwise divided 60 : 40; changeable to 50 : 50
- Tarpaulin cover
- Max. 45 kg/min/ELDOS
- Maximum output: 3m/4m working width with 15 kph at 45kg/min = 600/450 kg/ha



## u-drill plus (6 metre)

### Large hopper capacity

- 4200 litres
- Lengthwise divided 60 : 40;
- Pressurised hopper system for higher output quantities per ha
- Sealed steel lids
- Air pressure max. 100 mbar =0,1 bar (working air pressure 65 mbar)
- Max. 65 kg/min/ELDOS
- Maximum output: 6 m working width with 15 kph at 65 kg/min = 430kg/ha



# u-drill & u-drill plus

## Lighting equipment

### Hopper

- LED inside the hopper
- LED outside the hopper to control the coulter bar and metering device

### Road transport

- Signage for safe road transport



# u-drill & u-drill plus

## Filling auger



- Hydraulic folding
- Hydraulic steering
- Pre-selection from cab
- Perfect trailer loading
- For 6001 model

# u-drill & u-drill plus

## Disc harrow

- 2 rows
- 1 disc per arm – bearing is protected
- Ø460 mm
- 90 cm distance first and second disc row
- 235 mm disc spacing
- Conical shape
- Infinite depth setting from 0-13 cm
- Master-slave hydraulic
- Independent depth setting of each disc section
- Four-block rubber mounts



# u-drill & u-drill plus

## Disc harrow

- 3D auto reset system – the arm is able to move sideways like a safety system if stones hit a disc
- The discs always maintain the same cutting angle and can not move sideways
- Strong torque of safety system for large diameter
- No interruption of the soil flow
- Relatively small diameter of the discs ensure quicker rotation speeds for good cutting (and not pressing)



## u-drill plus

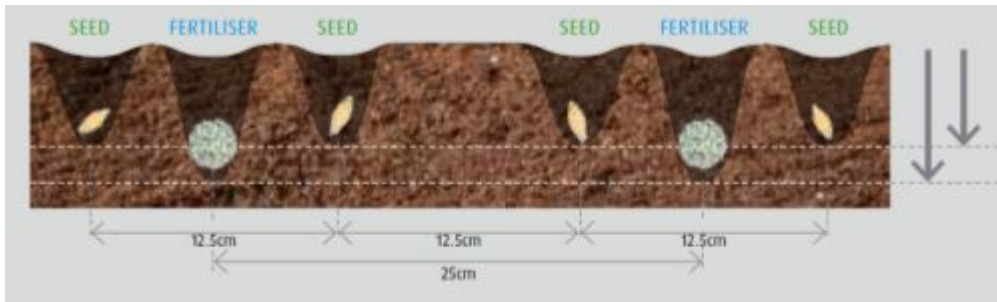
### Fertiliser/seeds application in the disc harrow

- Fertiliser outlets in the second disc row
- Application of fertiliser exactly in between two sowing rows
- 6 m: 24 rows of fertiliser for 48 rows of seed
- All plants have the same distance to the fertiliser
- The depth adjustment of the disc harrow determines the depth of the fertiliser placement



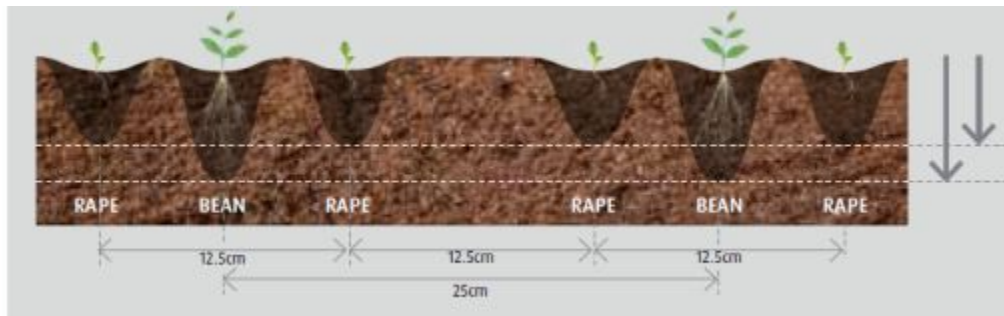
# u-drill plus

## 2 options of fertiliser/seeds application in the disc harrow



### FERTILISER PLACED BETWEEN THE ROWS

The fertiliser is placed in-between the seed rows; The depth of the fertiliser is determined by the disc harrow.



### 2 SORTS OF SEEDS AT 2 DIFFERENT SEEDING DEPTHS

The disc harrow outlets place e.g. the beans in-between the rape seeds



# MD disc section

From March 2022 series production



## u-drill & u-drill plus

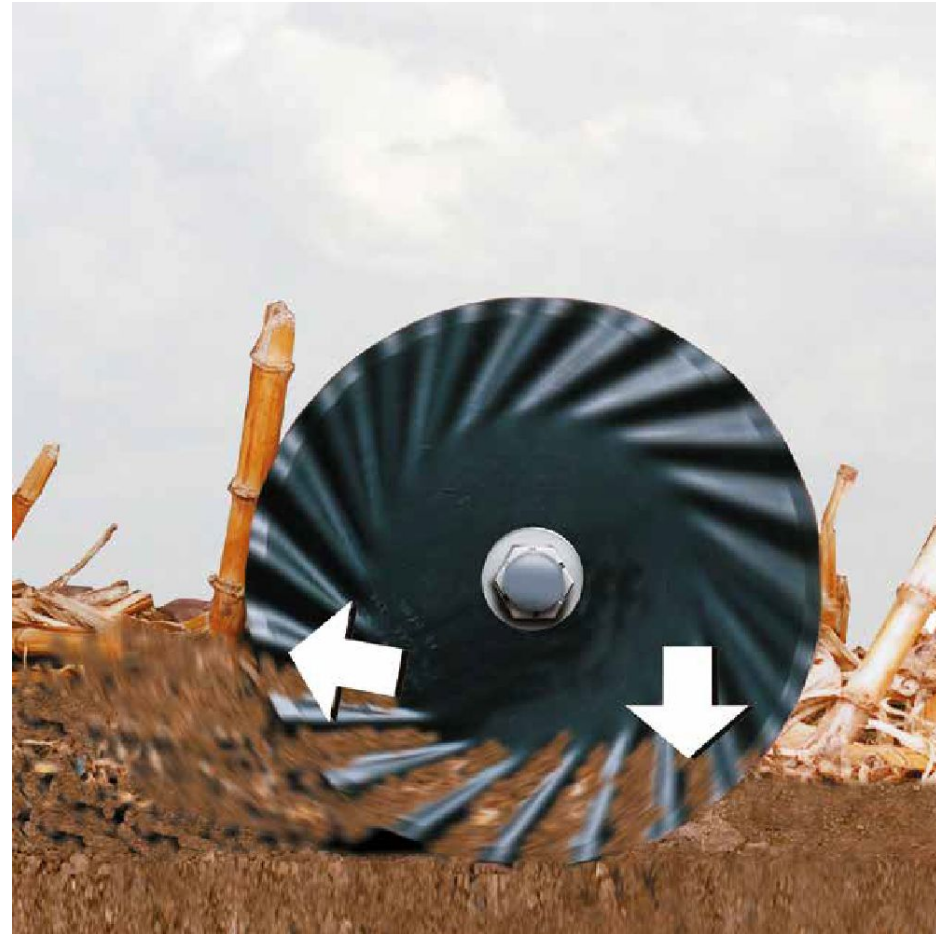
### **NEW** MD disc (Minimum Disturbance disc)

- Zonal cultivation for minimum disturbance and cutting through high amounts of residue.
- Alternative option to the short disc harrow on u-drill.
- Same design as Great Plains "Turbo Coulter" (Ø 430mm) fluted blade to clear residue vertically.
- Each MD disc is **in line with CD coulters**, creating a mini seedbed of 30-50mm strip of soil.
- Доступно только при междурядьях **16.7cm**.

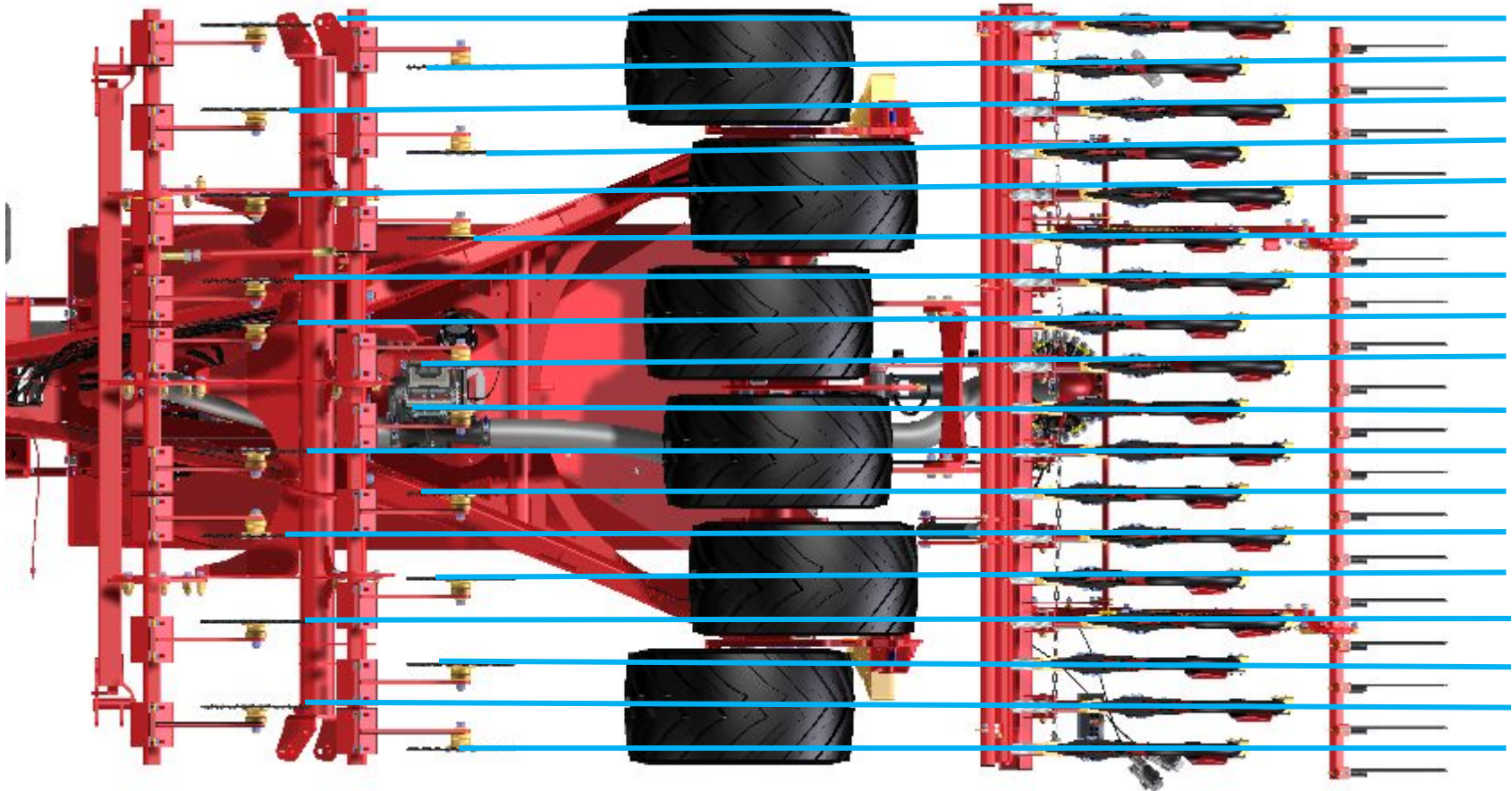


## MD disc Advantages

- Reduces the emergence of grass seeds that are yet to germinate.
- Reduces the risk of 'hair-pinning' where the residue is pushed into the seed slot preventing the seed from having good soil contact, resulting in poor germination and establishment.
- improved weed germination control as the soil between each disc is not disturbed.
- Seed bed strip provides each row with equal growing conditions.
- Clearing and cutting of residue provides the ideal environment for it to decompose.



## Each MD disc one CD coultter



**Sowing distance: 16.7cm**

# MD disc – Sowing system in 8 Steps

1



Ability to seed with minimal disturbance in pre-cultivated or ploughed land and with high amounts of residues such as cover crops and no-till systems where soil structure allows.

2



The **MD discs** precisely cultivate zonally creating the ideal environment for the double disc CD couler to place the seeds at the bottom of the furrow.

3



The ground is worked vertically with straight blades and only in a 30-50mm strip of soil.

4



On u-drill models a full-width **wheel packer** runs ahead of the CD couler to firm the soil before the seeds are placed.

# MD disc – Sowing system in 8 Steps

5



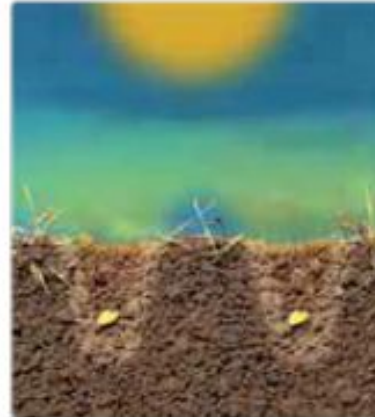
Precise placement of the seed by the **CD Coulter** is assured due to the fluted design of the MD Disc which clears crop residue away from the seeding zone.

6



The **Press Wheel** firms the soil around the seed optimising seed to soil contact, creating the ideal situation for germination leading to consistent emergence.

7



The cultivated area is darker and warms faster than the uncultivated area when seeding and allowing the seeds to germinate and emerge.

8



Rooting into the prepared soil, this creates the ideal conditions for healthy growth and high yields.

# MD disc Technical Data

| MD disc (u-drill)  |             |
|--|-------------|
| Size of the disc (mm)  | 430         |
| Disc material  | 46-52 HRC   |
| No. of waves per disc  | 20          |
| Angle of waves   | 36°         |
| Max. penetration depth (mm)                                    | 100         |
| Disc per meter working width                                   | 6           |
| Disc row spacing (cm)  | 16.7        |
| Weight reduction compared to short disc harrow section*        | 270 – 370kg |
| hp reduction compared to short disc harrow section (estimated) | 10-20%      |

\*no side deflector needed

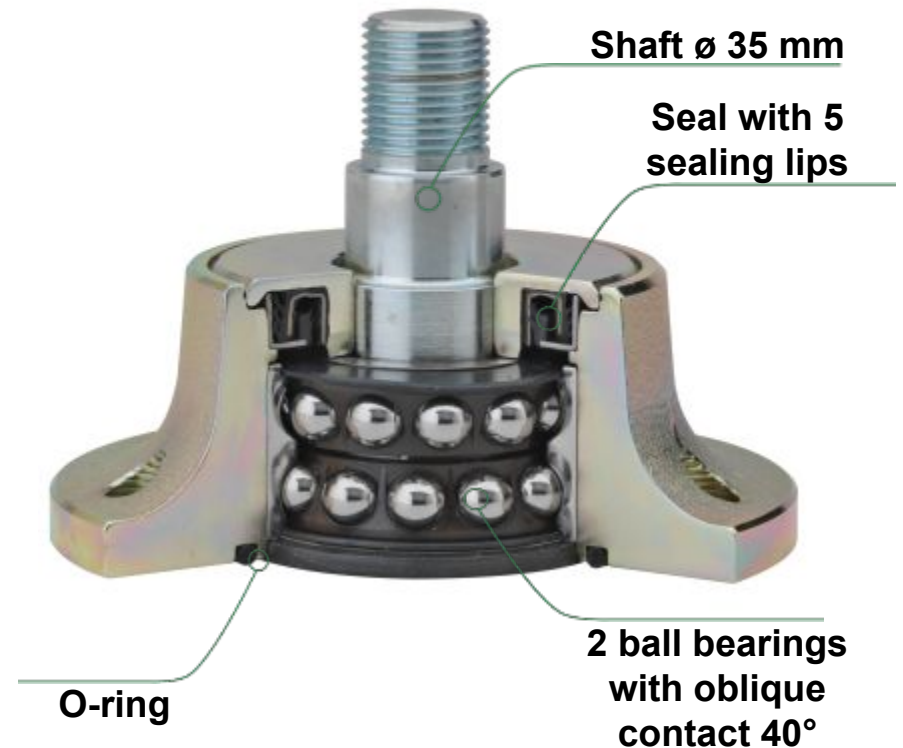


- Each MD disc is protected by a 3D auto-reset system.
- Arm profile prevents sideways movement.
- Cutting angle remains the same.
- Each disc is mounted individually.
- Maintenance-free double ball bearings developed for extreme soil conditions.
- 35mm axle can carry heavy radial and axial loads.
- Cannot be combined with clod board or soil flow harrow option

# u-drill & u-drill plus

## Disc harrow & MD disc

- Long lifetime -12 time longer than with standard bushes
  - Dustproof by 5 sealing lips
- **For less maintenance and high performance**





# u-drill & u-drill plus

## Disc harrow & MD disc

- Each disc system is protected by a rubber shock system.
- If the disc hits an obstacle, the arm is able to move and the safety system works as a 3D auto-reset system.
- The profiles of the arms prevents sideways movement in cutting position and ensures optimal penetration, even in stony, heavy soils or residue condition.
- The cutting angle of the disc always stays in the same position.



# u-drill & u-drill plus

## Side deflector with disc harrow section

- Depth adjustable
- Hydraulic adjustment on fold models and manually adjustable on rigid machines
- Avoids dams
- Keeps the soil in the worked area



## u-drill & u-drill plus

### Cross-shaft 90°turning

- 90°turning possible
- Easy headland management
- No fixed linkage - no reverse leverage. Avoids frame breaks
- Fixed-length drawbar; also available as extended version
- Suitable for tractors with large or twin wheels



# Easy Adjustment during Work

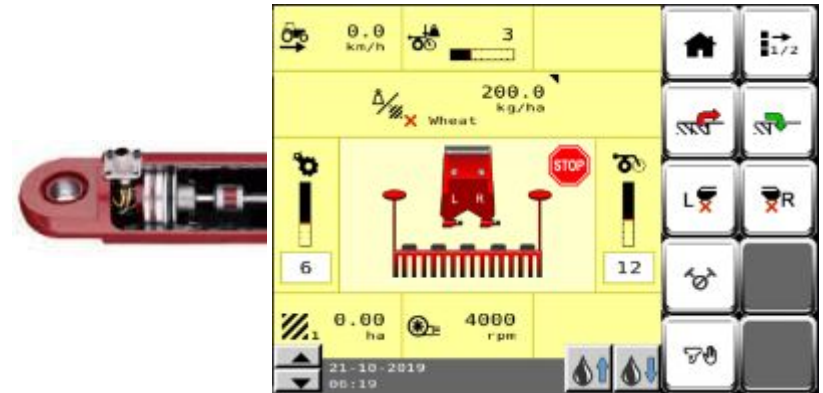


# u-drill & u-drill plus

## Electronics & ISOBUS

- Metering device ELDOS
  - e-com - ISOBUS
  - ELDOS standard
  - Speed signal via radar
  - 1 double-acting valve (except fan)
- Machine control
  - Electronic transducer system allows depth control of disc harrow or MD disc and coulter bar via tractor terminal (optional for seeding depth)
  - Headland management: fully automated hydraulic function whilst turning process

## □ User-friendliness



**Tractor requirement: 12 V >70 A**



# u-drill & u-drill plus

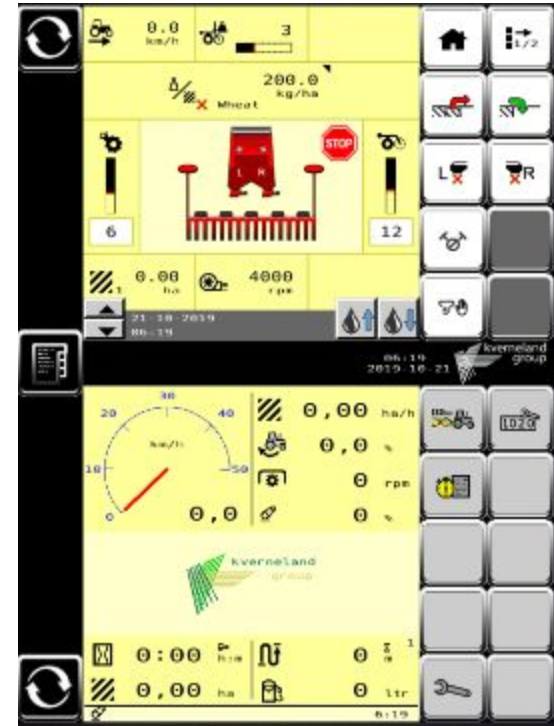
## Hydraulics

- Headland Management
  - Front-wheel-packer
  - Disc harrow or MD disc section
  - Track marker arms
  - Track eradicators
  - Pre-emergence marker
  - Coulter bar depth control
  - Filling auger

**All functions require only one double acting valve**

- Hydraulic fan drive
  - 1 x single acting valve
  - 1 x pressure less return <10 bar

**Tractor requirement: >90 l/min**



# u-drill & u-drill plus

## IsoMatch Tellus PRO

- 2 ISOBUS interfaces in one terminal
- 2 screens in one terminal
- Professional way of precision farming



# u-drill & u-drill plus

## IsoMatch Tellus GO+

- ISOBUS terminal
- 1 screen
- First step into Precision Farming
- GEOCONTROL

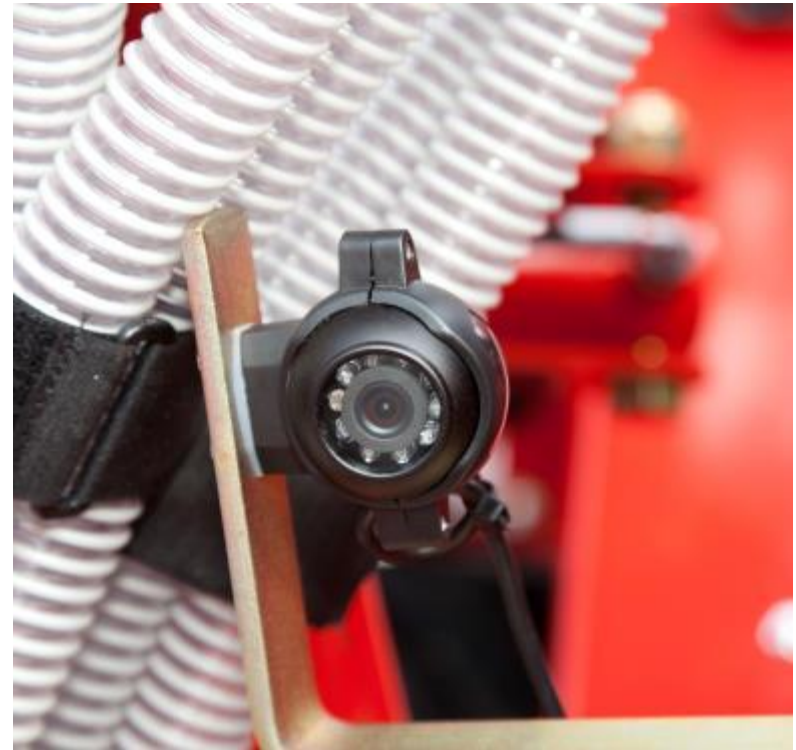




## u-drill & u-drill plus

### IsoMatch Eye camera

- Full control and overview of the entire machine operation from every side
- With the IsoMatch MultiEye multiple cameras are connected to the IsoMatch Tellus universal terminal
- Possible to switch between the cameras without the need for additional screens in cab



## u-drill & u-drill plus

### Electrical Half width shut off (only on u-drill plus 6.0m)

- For grain distribution head and fertilizer distribution head
- The half width shut off closes always the left half machine width
- Automatic work, when starting to seed in a 0 tramline rhythm, the half with shut off closes automatically and the ELDOS reduces the seed amount by 50%
- At the next turn on the headland, when tramline switches to rhythm 1, the half with shut off opens again and the ELDOS output is at 100%



# u-drill & u-drill plus

## Weigh cells

- Weigh cells for precise and controlled application
- Weighs hopper content constantly
- Shows weight deviation to calculated output kg/ha
- Not compatible with Isobus system



# u-drill & u-drill plus

## Technical data

| Model  | rigid           |                 |                      |                      | fold            |                      |                 |                      |
|--|-----------------|-----------------|----------------------|----------------------|-----------------|----------------------|-----------------|----------------------|
|  | u-drill<br>3001 | u-drill<br>4001 | u-drill plus<br>3001 | u-drill plus<br>4001 | u-drill<br>4001 | u-drill plus<br>4001 | u-drill<br>6001 | u-drill plus<br>6001 |
| Working width (m)  | 3.0             | 4.0             | 3.0                  | 4.0                  | 4.0             | 4.0                  | 6.0             | 6.0                  |
| Transport width (m)  | 3.0             | 4.0             | 3.0                  | 4.0                  | 4.0             | 4.0                  | 3.0             | 3.0                  |
| No. of CD coulters   | 24              | 32              | 24                   | 32                   | 32              | 32                   | 48              | 48                   |
| No. of metering devices  | 1               | 1               | 2                    | 2                    | 2               | 2                    | 2               | 2                    |
| Hopper capacity (l)  | 3000            | 3000            | 3000                 | 3000                 | 3000            | 3000                 | 4,350           | 4,200                |
| Required oil volume  | > 90l/min       |                 |                      |                      |                 |                      |                 |                      |
| Single-acting hydr. valve + zero-pressure return for fan drive                     | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| 1 x double-acting hydraulic valve for machine control                              | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Power requirement 12 V > 70 A  | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| CD double disc coulters  | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Coulter pressure up to 100kg   | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Electro-hydraulic adjustment of the placement depth via ISOBUS terminal            | •               | •               | •                    | •                    | •               | •                    | □               | •                    |
| Press wheels (Ø 380 x 50mm)  | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Row spacing (12.5cm)   | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Coulter staggering 17.5cm  | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Electronic adjustment of the seed quantity with radar                              | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Filling level sensors in the seed hopper   | •(1)            | •(1)            | •(2)                 | •(2)                 | •(2)            | •(2)                 | •(2)            | •(2)                 |
| Fan speed sensor   | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Metering device monitoring   | •               | •               | •                    | •                    | •               | •                    | •               | •                    |
| Electronic half-width shut-off   | -               | -               | •                    | •                    | •               | •                    | •               | •                    |
| Mid-mounted front packer (Ø 800mm)   | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Complete front packer (Ø 800mm)  | -               | □               | -                    | □                    | □               | □                    | □               | □                    |
| Electro-hydraulic adjustment of the disc section working depth via ISOBUS terminal | •               | •               | •                    | •                    | •               | •                    | •               | •                    |

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|  | u-drill<br>3001 | u-drill<br>4001 | u-drill plus<br>3001 | u-drill plus<br>4001 | u-drill<br>4001 | u-drill plus<br>4001 | u-drill<br>6001 | u-drill plus<br>6001 |
| Disc harrow (Ø 460mm) or MD disc (Ø 430mm)                   | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Offset tyre packer (Ø 900mm)                                 | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Maintenance platform, road transport lights, in-hopper light | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Hydraulic fan drive  | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Lower link suspension Cat. 3N (825mm)                        | ●               | ●               | ●                    | ●                    | ●               | ●                    | □               | □                    |
| Lower link suspension Cat. 3 (965mm)                         | □               | □               | □                    | □                    | □               | □                    | ●               | ●                    |
| Lower link suspension Cat. 4 (965mm)                         | -               | -               | -                    | -                    | -               | -                    | □               | □                    |
| S-shaped seed harrow 10mm                                    | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Finger harrow 12mm   | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Calibration set  | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Filling auger  | -               | -               | -                    | -                    | -               | -                    | □               | -                    |
| Hydraulically folding track marker with notched discs        | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Track eradicators (2 tines per track)                        | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Pneumatic brakes   | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Hydraulic brakes   | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Extended drawbar for tractors with twin tires up to 4.05m    | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Pre-emergence marker (centre marking)                        | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| LED work lights  | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| iM Tellus for non-ISOBUS-capable tractors                    | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| iM Tellus for ISOBUS tractors                                | □               | □               | □                    | □                    | □               | □                    | □               | □                    |
| Hopper volume weighing system with separate monitor          | □               | □               | -                    | -                    | □               | -                    | □               | □                    |
| Headland management  | ●               | ●               | ●                    | ●                    | ●               | ●                    | ●               | ●                    |
| Weight (kg) (with front packer + track eradicators)          | 4,600           | 5,400           | 4,800                | 5,600                | 5,600           | 5,600                | 8,120           | 8,400                |
| Min. power requirement (hp)                                  | 90              |                 | 130                  |                      | 150             |                      | 190             |                      |

● Standard equipment □ Option

# u-drill & u-drill plus

## Technical Features Overview

- Easy access and handling of metering devices, headland management, etc.
- Low pulling force due to large packer + off-set structure.
- Modular frame concept, easy access, less grease points, etc.
- Terminal-guided depth control for disc section and seed depth.
- Well-proven compact disc harrow concept „Qualidisc“ or MD disc section from Great Plains – aggressive, long-life bearing, maintenance-free
- Electric-driven metering device ELDOS.
- Central seed depth adjustment.
- CD double disc coulter
  - Extremely slim design – less pressure required for penetration.
  - Less pulling force needed – due to less soil movement.
  - Integrated depth guidance and press wheel functionality.
  - Maintenance-free, high performance bearings.
  - Only one coulter – no left/right nor short/long coulters.
- ISOBUS conform

# u-drill

## Key TakeAways

- **HIGH SPEED AND CAPACITY - SPEED**
  - Large hopper capacity
  - Disc section (Conical or Straight discs)
- **LOW PULLING FORCE NEEDED - EFFICIENCY**
  - Front wheel packer
  - Offset wheel packer
- **PERFECT SEED PLACEMENT - PLACEMENT**
  - ELDOS
  - CD Coulter
- **EASY ADJUSTMENTS DURING WORK - FLEXIBILITY**
  - GEOCONTROL
  - Headland Management

# WHEN FARMING MEANS BUSINESS