

Integrated Mechanical Seed Drills

# COMBILINER INTEGRA 3003 / 4003



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



be strong, be **KUHN**



INTEGRA

3003

4003

# PRECISE SEEDING AT REDUCED COSTS

Robust, compact and with a high degree of autonomy, the COMBILINER INTEGRA are very competitive and profitable seed drill combinations, which also meet your requirements in terms of seeding precision.

## PUT THE SEED EXACTLY WHERE IT SHOULD GO

Two different coulter systems provide precise drilling and the necessary versatility to provide an optimum solution for your seeding requirements, taking into account different crops, soils and production systems.

## UNIFORM APPLICATION RATES IS WHAT YOU EXPECT

The volumetric fluted metering system HELICA from KUHN accurately doses from 1.5 to 450 kg/ha, independently from vibrations as well as from differing terrain.

## DRILL INDEPENDENT FROM POWER HARROW

The seed drill is fully guided by the roller, resulting in more even drill results and an improved protection of all combination parts (according to the chosen equipment).

## KUHN's INTEGRA mechanical seed drills in brief:



	Working width (m/ft)	Number of rows	Hopper capacity (l)
<b>INTEGRA 3003</b>	3.00 / 9'10"	20 or 24	600 (900 or 1,200 extension)
<b>INTEGRA 4003</b>	4.00 / 13'2"	28 or 32	800 (1,200 with extension)



COULTER SYSTEMS:

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# ACCURATE SEED POSITIONING IS THE KEY

Seed depth is a key factor in obtaining uniform seedling emergence. Rapid emergence ensures crop vigour and homogeneity within the field. According to your conditions and requirements, you can either choose Suffolk or double disc coulters on the INTEGRA mechanical seed drills.



## **SUFFOLK COULTERS: ECONOMICAL IN USE**

Two rows of coulters with a distance of 34 cm ensure a high seeding quality even with high quantities of crop residues and, most importantly, a regular seeding depth. The profiled coulters accurately position the seed in the furrow, even in difficult conditions such as in stony ground. Its coulters pressure can reach 22 kg.

Another strength: An anti-blockage flap automatically closes the coulters when lowering the seed drill.



## **VERSATILE DOUBLE DISC COULTERS**

Cultivation techniques are moving increasingly towards reduced tillage. Disc coulters are the choice for conservation agriculture and they are versatile. No matter whether you are seeding in plant residues or on ploughed land, they will perform in both conditions! With coulters pressures reaching 35 kg, the discs are hardly affected by uneven ground and speed of seed delivery is maintained, even in difficult conditions. A good choice for farmers, who want to leave the plough parttime in the shed, but at the same time don't want to invest in a specialized min-till seed drill.



**EXCLUSIVE**

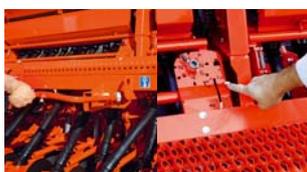


**PRECISE POSITIONING,  
SIMPLE ADJUSTMENT.**

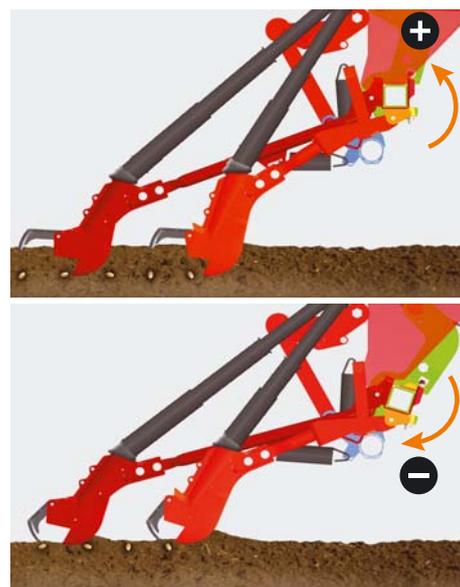
The COMBILINER INTEGRA seed drills have two different seed depth controls:

- a lower stop adjustment sets the maximum seed depth in all rows;
- the coulter pressure adjustment (spring tension).

For you, this means a higher work speed at a good coulter pressure without deviating from the desired seeding depth. A precise seed positioning, also in hard or irregular soils, is ensured.



Centralized at the back of the machine, both adjustments are quick and easy to execute using a crank handle at a single adjustment point. A display indicates the settings and makes it easier to use the machine.



Lower stop positioned for seed depth of 8 cm and 1 cm respectively.



**PRESS WHEEL: AN ASSET FOR UNIFORM EMERGENCE**

Seed drills with disc coulters and press wheels produce better germination. They allow constant seed depth in very uneven ground. In damp and sticky conditions, however, the wheels can be lifted up or removed entirely without the need of tools.



**COVERING HARROW: DESIGNED TO ADAPT**

The covering harrow is fitted on a parallelogram with universal trailing tines adjustable in pressure and angle. In this way, it can adapt to each soil type and any amount of crop residues to ensure a perfect seedbed finish.



**HYDRAULICALLY CONTROLLED GROUND PRESSURE**

This equipment is an asset in very heterogeneous fields. The ground pressure alters with the ground encountered. A display tells you updated about the pressure level.



# DISTRIBUTION UNDER CONTROL

KUHN's fluted seed metering system HELICA is the answer to your question on how to ensure a precise and regular application rate. With this proven volumetric system, you will be satisfied also when working on slopes or on uneven terrain.

## VOLUMETRIC FLUTING FOR VERSATILE SEEDS

This distribution system is accurate and reliable throughout the seeding campaign. The volumetric fluting doses from 1.5 to 450 kg (the latter applies for peas and beans with 12.5 cm row spacing), no matter the relief, the charging level of the hopper or the working speed. Insensitive to vibrations, it respects all sizes and shapes of seeds. For small seeds, an extra roller for fine seeds is integrated.



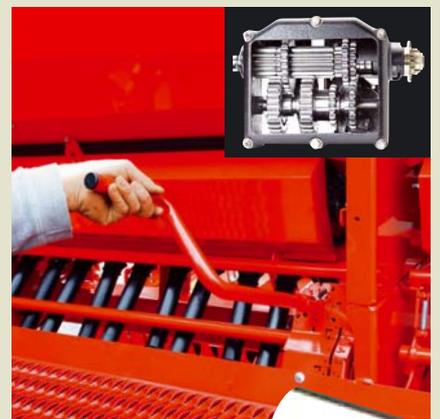
Rape



Wheat



Fava beans



## DISTRIBUTION SPEED QUICKLY ADJUSTED

The INTEGRA oil-filled gearbox has proven itself as exceptionally robust and reliable and at the same time maintenance-free. It has six indexed gears and is easily adjusted with a simple lever.





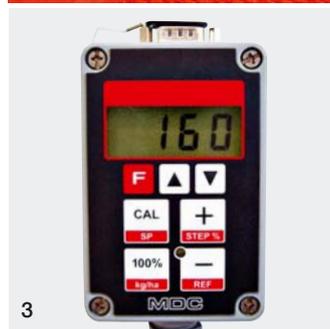
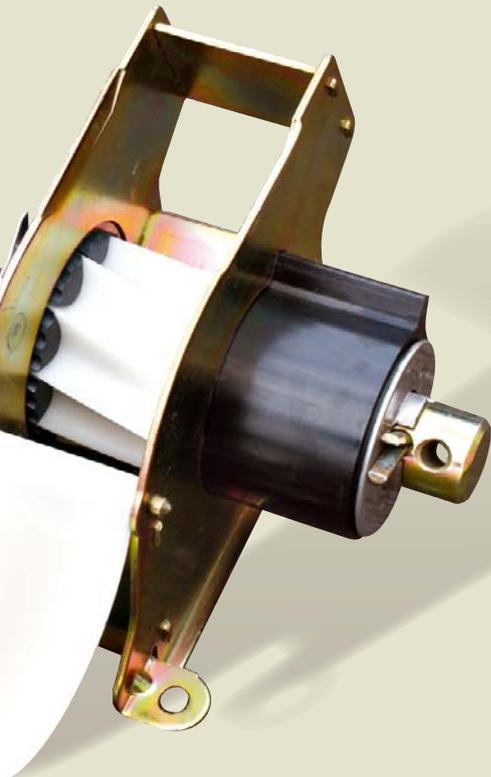
## AN ACCURATE APPLICATION RATE

A micrometer screw controls the size of the flute opening, adjusting the seed application rate. Result: extremely accurate control gives a constant application rate the whole day long.

**“Small seed” fluted wheel:** Sowing of tiny seeds with a low flow rate, such as oilseed rape, is done with a specifically designed and built-in fluted wheel.



Flash this code with your Smartphone to watch the HELICA metering system at work.



## FLOW CONTROL AND EMPTYING: THE SIMPLEST ON THE MARKET!

### 1. DIRECT ACCESS TO DISTRIBUTION SYSTEM

You can control the flow rate straightforwardly. A lever tilts the coulter bar down to leave a large space for the collection tray.

### 2. EASY FLOW RATE CONTROL AND EMPTYING

The seeds fall directly on the tray during flow rate calibration or removal of the residual seed. Afterwards it can be removed just as easily. You can do both tasks either on half or all of the drill.

### 3. MDC: APPLICATION RATE MONITORING

Using the MDC control box, the operator can adjust the application rate during work in steps of 5, 10 or 15 % as required and over a range of +/- 60 %. It is perfectly compatible with the HECTOR 3000 control box.



# SEED DRILL GUIDED BY THE ROLLER

An articulated trapezium and support arms resting on the roller connect the COMBILINER INTEGRA to a KUHN power harrow or tine tool, while being integrated.

This means that the seed drill is fully guided by the roller while remaining independent from the harrow.



## ADVANTAGEOUS STRUCTURE

**More even drilling:** *coulter bar guided by the roller for more even ground contour following;* **Increased protection** *for the power harrow: it can move freely out of the way of obstacles (stony areas);* **Less wear on the drill:** *jolts of the harrow do not interfere with the drill;* **Independent settings:** *Adjustment changes on the tillage tool don't affect the coulter bar setting;* **Quick disengagement:** *Tool and seed drill can be uncoupled in just a few minutes.*



### COMPACT FOR TRANSPORT, PRACTICAL FOR WORK

A hydraulic top link for raising the seed drill is available as optional equipment, providing additional advantages:

- In transport position, it moves the weight towards the tractor, thus increasing the combination's stability on the road.
- The seed drill rests on four support points which effectively support the chassis during transport. You will greatly appreciate it when working on distant fields and when driving with a full hopper.
- It lets you work temporarily with the harrow with the drill lifted and stopped.



# A HOPPER TO GAIN WORK AUTONOMY

In the COMBILINER INTEGRA hopper you find your ideal ally in the search for high work output. With capacities of up to 1,200 litres, it reduces time losses during seeding operations considerably, as you don't have to stop frequently for reloading.



## EASY TO LOAD

The hopper has a 70 cm wide opening because of the hopper dimensions and the cover, which forms a deflector. Thus loading it is easy, especially with big bags and by bucket.

The hopper capacity of 600 and 800 litres respectively, for machines of 3.00 and 4.00 m working width, can be extended to 1,200 litres.



## EASY TO EMPTY

The V-shaped hopper improves seed flow, reduces the residual seed quantity and ensures even feed to the metering wheels.



# INTEGRA: MORE PRACTICAL EQUIPMENT FOR YOUR BENEFIT



## TAILOR-MADE MARKING

For accurate locating in the field, the side markers are fitted with 41 cm diameter discs. They can be fixed to either the seed drill or the power harrow. Due to their vertical folding they are not in the way during headland turns.



## HECTOR 3000: SMALL AND BENEFICIAL COMPANION

Small and simple to use, this control box manages various functions and helps you during the work.

- Daily and total hectare counters.
- Distribution shaft rotation failure, seed level (one or two sensors), dropping of markers are monitored with an alarm.
- Symmetrical or asymmetrical tramlining with pre- and postemergence markers.

To adapt tramlines according to the track widths of subsequent machines: The drill is equipped with ten fluted wheels (five each side) which can be disengaged to cut feed to the rows where the wheels pass.

## OPTIONAL PRE-EMERGENCE MARKERS

HECTOR 3000 automatically controls the pre-emergence markers, available as optional equipment. They are folded if not needed.

## KUHN SERVICES\*

### MAXIMIZE THE USE AND PRODUCTIVITY OF YOUR KUHN EQUIPMENT

\*Not all services and equipment are available in every country.

## KUHN sos order

### Express spare parts service 24/7

You urgently need spare parts? With KUHN sos order benefit from express delivery seven days a week, 365 days a year. Thus, you can minimize machine downtime considerably and increase your work output.

## KUHN protect +

### The choice of professionals!

Benefit from 36 months in complete serenity because of KUHN's protect + warranty. You can concentrate exclusively on your work and the performance of your machine. Because this is what you expect, when investing in high-tech machinery.

## KUHN i tech

### For ever quicker repairs!

An unexpected technical problem always occurs at the wrong time. Your KUHN dealer can support you quickly and efficiently thanks to KUHN i tech. With this 24/7 online service, a quick and exact diagnosis is possible.

## KUHN finance

### Invest rationally!

New machine necessary, financing unsure? Modernize your equipment and develop your farm with KUHN finance, in total safety and according to your needs and demands. We offer custom-made finance solutions, adapted to your requirements.



Technical specifications	INTEGRA 3003	INTEGRA 4003
Working width (m/ft)	3.00 / 9'10"	4.00 / 13'2"
No. of rows	20 or 24	28 or 32
Row spacing (cm/in)	15 or 12.5 / 5.9" or 4.9"	14.3 or 12.5 / 5.6 or 4.9"
Hopper capacity (l)	600 (900 or 1,200 with extension)	800 (1,200 with extension)
Application rate by fluted wheels (kg/ha)	1.50 to 450	
Gearbox	with 6 disengageable gears, continuous selection by lever	
No. of disengageable fluted wheels	10	
Seeding units	Suffolk coulters or double discs (over two rows)	
Press wheels for disc coulters	◇	
Offset between front and rear row (cm/in)	34 / 13.4"	
Centralized coulters pressure and depth control by lower stop	◆ (by lever)	
Left side half-width shut off	◆	
Covering harrow	◆ (universal tines adjustable in pressure and angle)	
Control box	HECTOR 3000: daily and total hectare counter; seed level and metering unit speed monitoring; tramlining control;	
MDC application rate control	◇ (GPS compatible)	
Lighting and signalling	◆	
Parking stand	◆	
Loading platform and steps	◆	
Vertical side markers	◆	
Pre-emergence markers	◇	
KUHN adaptation on PACKER2, STEELLINER, MAXIPACKER and PACKLINER rollers	◆	
Hydraulic top link	◇	
Weight (kg/lbs) with Suffolk coulters and 24 rows	905	1,115

◆ standard    ◇ option    - not available

**More optional equipment:** hopper extensions - extra hopper sensor - special rye grass agitator - depth limiting skids - kit to double seed rate for spelt.  
 Equipments depending on the country configuration.

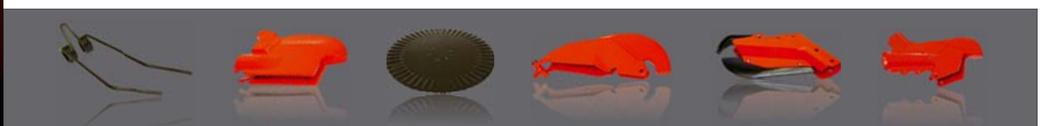


## KUHN PARTS

DESIGNED AND MANUFACTURED  
TO RIVAL TIME



KUHN foundries and forge as well as a high-level manufacturing process allow the production of spare parts to defy time. You can truly rely on our know-how and our genuine parts. Farmers benefit from our client support and logistics services via any KUHN PARTS warehouse, which provide quick and reliable repair solutions in cooperation with your nearest authorized KUHN dealer.



KUHN

APPS

# SMALL PROGRAMS WITH GREAT IMPACT

## OPTIMIZE THE SETTINGS OF YOUR INTEGRA SEED DRILL!

KUHN has developed a calibration assistant to help you determine the appropriate settings for your seed drill and seeding conditions (seed type, quantity, etc). This smartphone app also provides you with a seeds/m<sup>2</sup> to kg/ha convertor. Available on the Apple Store and Google Play.



Flash this code for direct access to the KUHN seeding assistant.

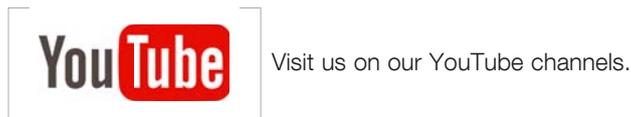


## Check out the most complete range of seed drills on the market



1. mounted mechanical 2. integrated mechanical 3. with front hopper 4. integrated pneumatic 5. trailed pneumatic 6. mounted min-till 7. trailed min-till 8. precision seed drills.

For more information about your nearest KUHN dealer, visit our website [www.kuhn.com](http://www.kuhn.com)



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