



Integrated pneumatic seed drill
VENTA 320





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VENTA 320

Integrated pneumatic seed drill

SEED WITH EASE, SEED WITH CONFIDENCE, SEED WITH SUCCESS

THE VENTA 320 PNEUMATIC SEED DRILL IS A LIGHTER AND MORE COMPACT TOOL IN THE VENTA 1000 RANGE. IT IS SUITED TO SMALLER TRACTORS AND FEATURES ALL OF THE ASSETS OF THE LARGER MODEL!



A LIGHT AND COMPACT DESIGN

The light and compact VENTA 320 seed drill has its centre of gravity close to the tractor. This provides numerous benefits: manoeuvrability, lower power requirement for lifting and improved visibility of the seeding units.

AN EASY, INTUITIVE AND PRACTICAL SEEDING EXPERIENCE

The VENTA 320 seed drill is designed to make all essential machine adjustments quick and easy. The hopper, distribution head and metering unit are easier to access. Monitor distribution and adjust seed application rate with the QUANTRON S-2 terminal.

TOP QUALITY SEEDING IN ANY CONDITIONS

This seed drill is equipped with an electrically driven volumetric metering unit which delivers from 1 to 430kg/ha with precision. It is equipped with single disc coulters which place the seed accurately in all conditions.

VENTA 320

A VERSATILE SEEDING COMBINATION

The **VENTA 320** pneumatic seeding combination is ideal for mixed-crop and livestock operations or medium-sized cereal farms. It seeds perfectly on deeply tilled plots. Seedbed preparation and seeding are combined in one operation which reduces the number of passes.



VENTA 320 - Simple, economical and efficient

The VENTA 320 pneumatic integrated seed drill, available in 20 and 24-row versions, is light and compact with a working width of 3 metres. It is equipped with single disc coulters.

Quick and easy coupling/uncoupling

If you want to work solo with the power harrow or change tool, the VENTA 320 seed drill is very quick and easy to couple or uncouple with its specially designed attachment parts.



Compatible with HRB 302, HRB 303, HR 304 and HR 3004 power harrows

The VENTA 320 is compatible with a wide range of power harrows that feature various types of tine and roller to adapt to working conditions and different types of soil. On these harrows, the housing, bearing and blade holders form a compact and heavy-duty unit.

HRB 302: up to 140 hp



HRB 303: up to 160 hp



HR 304: up to 190 hp



HR 3004: up to 250 hp



LIGHT AND COMPACT

This light and compact seed drill has a working width of 3 metres and a hopper capacity of 850 litres. With its centre of gravity close to the tractor, it can easily be coupled to tractors of 120 hp and more.



A lighter coulters bar

The VENTA 320's coulters bar is designed to be lighter at the back of the seed drill while retaining all of its strength.



Centre of gravity close to the tractor

The seed drill is attached to the frame of the power harrow directly, so its centre of gravity is closer to the tractor. This not only makes the machine easier to manoeuvre in plots and on the road but also provides excellent visibility of the seeding units. The power required to lift the seeding combination has also been reduced.

HIGHER PERFORMANCE, LOWER COSTS

The purchase of a seed drill is a significant investment for any farm. The VENTA 320 is the ideal solution for high quality seeding and reduced costs.

WORK EFFICIENTLY AND SAVE TIME



Prepare the seedbed and sow the seeds in a single pass!
Using a harrow, crumbling, levelling and tamping is essential for the uniform germination and development of your crops. KUH N power harrows are renowned for their strength, long service life and lower maintenance costs.

OPTIMISED PNEUMATIC CIRCUIT

Hydraulically driven turbine

The VENTA 320 is equipped with a hydraulically driven turbine that is independent from the tractor's PTO. Therefore, the speed of the turbine is not affected by variations in engine speed. There are several benefits to this:

- easier adjustment of turbine speed;
- a constant flow of seeds to the seeding units;
- fuel savings.

Reduced oil consumption

The pneumatic circuit is optimised to allow reducing the turbine speed. Oil consumption is reduced with only 15 l/min for small seeds and 26.5 l/min for large seeds. A sensor, located on the turbine drive system, monitors its speed and activates an alarm in case of excessive speed.



PRACTICAL & EASY TO OPERATE

Weather windows to sow in the best conditions are often short. That's why all the main settings of the VENTA 320 are designed to be quick and easy to adjust. In just one pass, the precision of the settings will ensure that your seedbed preparation is of top quality, that your seeds are placed accurately in the furrow and that seed-soil contact is optimum.



Calibrating seeding application rate

It is essential to carry out a calibration test before seeding to make sure that you get the application rate you require. To facilitate calibration testing all the tools you need are within arm's reach. The instructions can be found next to the ladder, the calibration bag is under the hopper, and there's an extendable and retractable pole for you to hang the weighing equipment (optional) and the bag on.



Adjusting seeding depth

Adjust seeding depth on both sides of the seed drill with the crank and spanner. Turning direction is clearly marked. The spanner can be stored on the seed drill so that you always have it at hand.



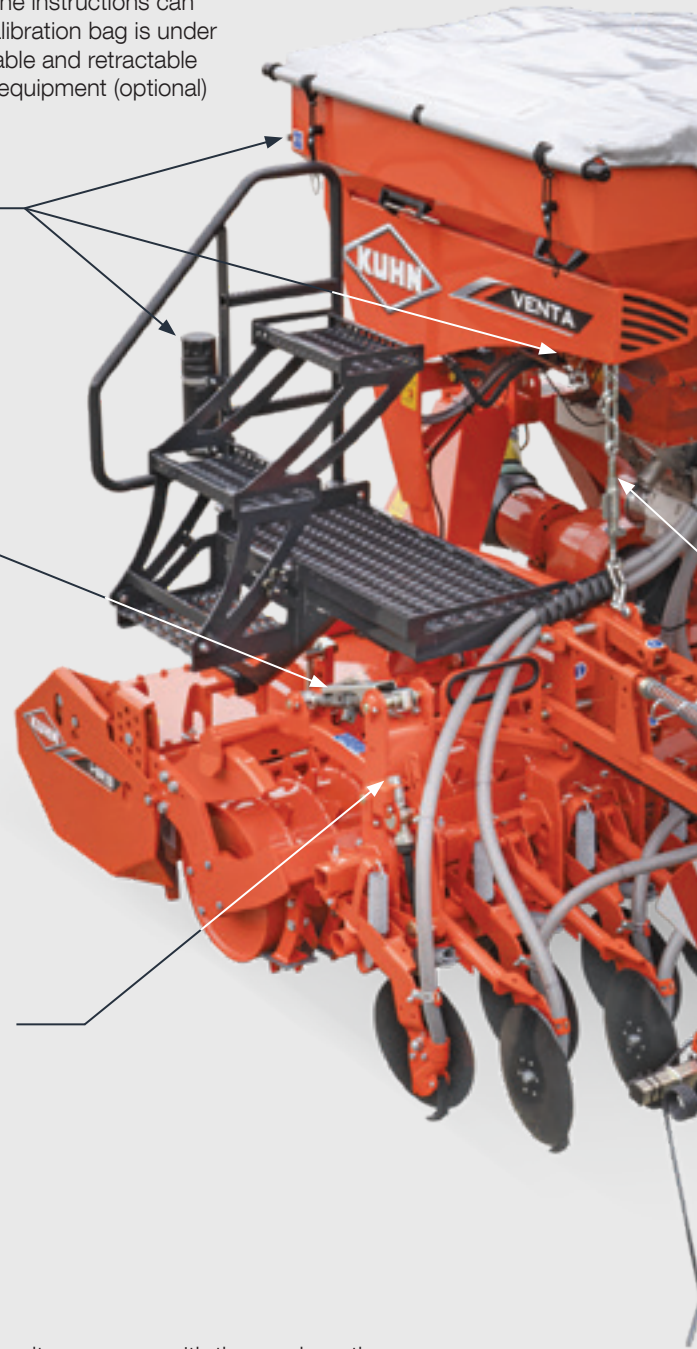
Setting the coulters pressure

1. Manual adjustment

Coulter pressure for each seeding unit can be set up to 32kg. Adjust the coulters pressure with the crank on the coulters bar.

2. Hydraulic adjustment (optional)

In heterogeneous soil conditions, the coulters pressure can be adjusted from the tractor cab. A dial at the front of the seed drill, which can be seen from the cab, shows the setting. A double acting valve is necessary for this hydraulic setting.





An easy-access hopper

The VENTA 320 seed drill has an 850-litre hopper (1150 litres with optional extension). It has a large opening for easy filling with a big-bag and is easily accessible with its wide loading platform and mobile steps.

It features a filter to prevent foreign bodies from getting into the metering unit and a sensor with alarm to monitor the seed level.



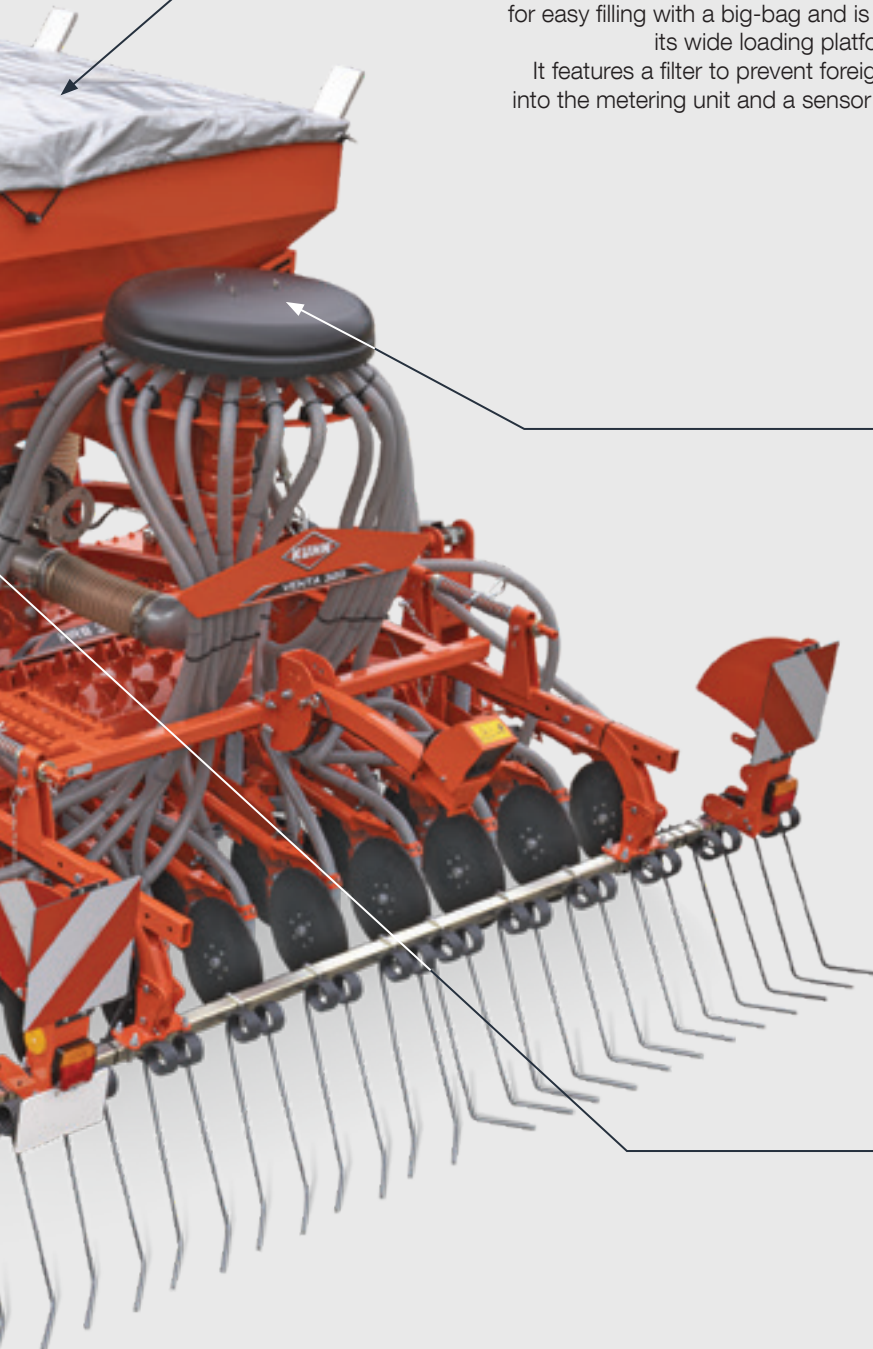
External distribution head

The distribution head is located at the rear of the hopper. Steps make it easier to access to clean the hoses and change seeds. The hoses are positioned precisely to ensure constant seed flow to the seeding units.



Safe on the road

Stroke limiting chains prevent the coulter bar from going too low during road transport or when manoeuvring. Chain length is easy to adjust on either side of the machine.



AN INTUITIVE SEEDING EXPERIENCE

The VENTA 320 seed drill is equipped with the QUANTRON S-2 control terminal with a user-friendly screen and practical features.

QUANTRON S-2: EASY TO USE, EVEN WITHOUT ISOBUS

The QUANTRON S-2 terminal has proven effective on KUHN seed drills for many years. It is ideal for non-ISOBUS tractors. It comes with a colour screen and easy-to-use keys. The menus on the QUANTRON S-2 terminal are clear and simple. They are divided into different sections: seeding settings, machine settings, plot files, services and information.



Essentials made simple

The QUANTRON S-2 terminal has many features:

- monitoring of distribution, turbine speed, minimum seed level;
- job counter: area and quantity seeded;
- tramlining control;
- pre-metering and automatic headland turn management;
- flow control assistance.

Application rate modulation from the tractor cab

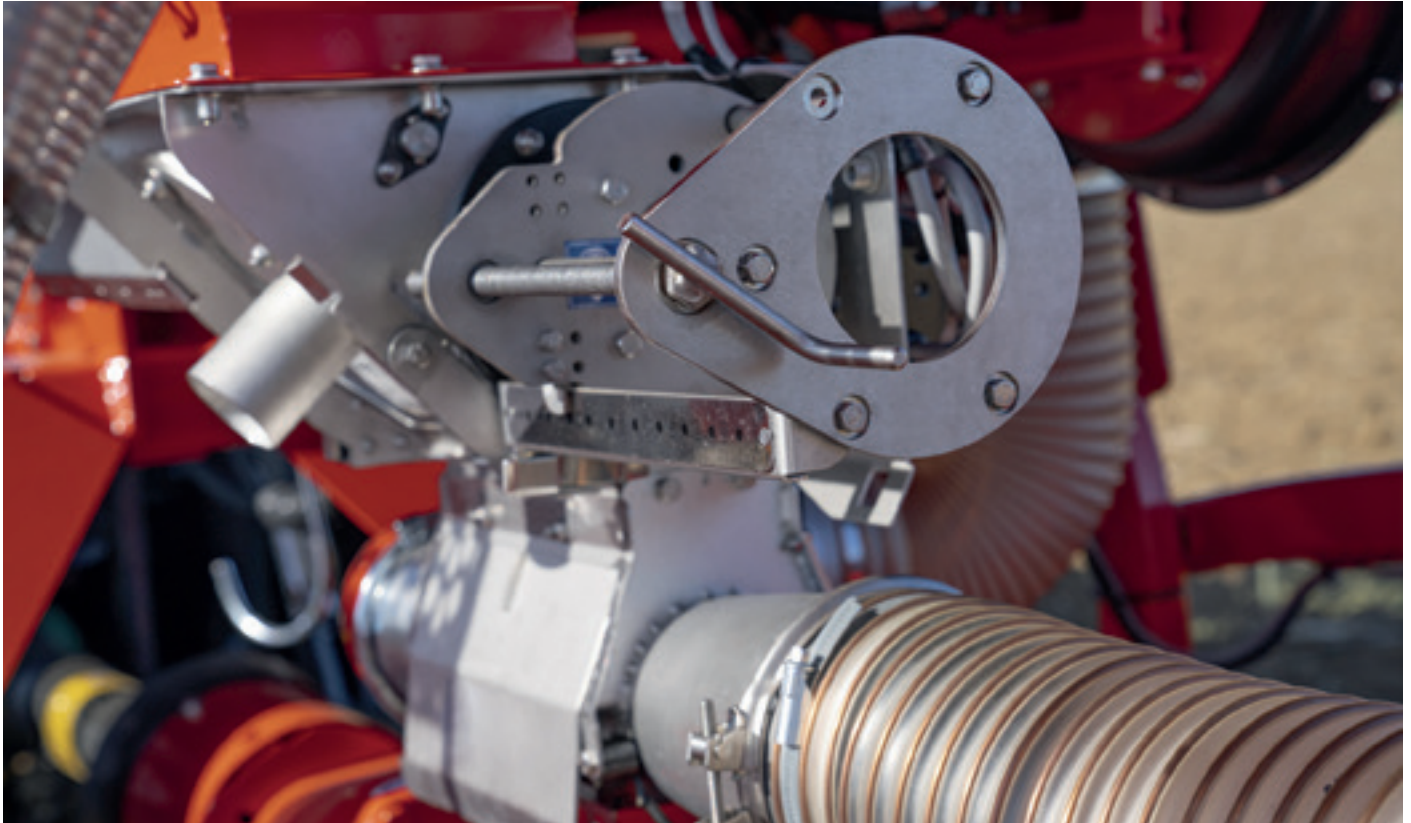
It is often necessary to adapt the application rate to changes in the soil and weather conditions. The QUANTRON S-2 terminal allows increasing and reducing the rate as a percentage.

Crop-variety data saved for future seeding jobs

Common varieties are pre-recorded in the QUANTRON S-2 terminal. You can also save the settings from the calibration tests of 30 additional varieties for subsequent use.

THE VENTA METERING SYSTEM: A BENCHMARK FOR RELIABILITY AND PRECISION

The VENTA metering system is recognised for its simple design and precise, regular metering. It is a central metering unit with volumetric splines that can distribute all seed types, from the smallest to the largest, with the same precision and evenness. The seeds are transferred pneumatically to the distribution head by the air flow and are then sent to the seeding units.



A versatile metering system

The VENTA metering system is capable of distributing different types of seed such as rapeseed, wheat and horse bean at an application rate of 1 to 430 kg/ha. It is not necessary to disassemble or change any parts on the metering unit, even for small seeds. The agitator can be disengaged, no tools required, in order to protect delicate seeds.

Simple metering calibration

To proceed with a calibration test, simply move the sliding door and the seeds flow directly into the bag provided. Spline opening is easy to adjust with a crank. There is a calibration-test start/stop button on the hopper near the metering unit.

High precision and reliability

The metering system and the injector are made of stainless steel. The metering unit has an electric drive system so the driver can change the application rate with the QUANTRON S-2 terminal from the driver's seat. The electric drive system is highly reliable and requires no maintenance.

HIGH QUALITY SEEDING IN ALL CONDITIONS

The key to a great harvest resides in seeding regularity and precision. The VENTA 320 comes in 20 and 24-row models and can adapt to different types of land and crop management methods. The coulters are equipped with single disc coulters and is guided by the roller on the power harrow. Coulter pressure can be adjusted up to 32kg. For a perfect finish, the seed drill is also equipped with a covering harrow with L-tines.



Coulter bar guided by the power harrow's roller

The coulters are guided by the roller on the power harrow so seeding depth remains constant regardless of the power harrow's working depth.



Uniform seeding depth

Coulter pressure for each seeding unit can be adjusted up to 32 kg to maintain sufficient seeding depth in heavy soils as well as for deep seeding at higher speeds. The lower stop can be adjusted to control seeding depth with precision, including on uneven plots and for shallow seeding with high ground pressure. These settings are independent from each other.



The trusted single disc coulters by KUHN

This seeding unit with its large-diameter disc ($\varnothing 327\text{mm}$) opens the furrow perfectly. The disc is at a slight angle to prevent soil being sprayed into the row as much as possible. This is especially useful when seeding at high speeds. A cast-iron Suffolk coulters on the side of the disc consolidates the furrow and delivers the seeds precisely in the soil. This single disc seeding unit enables carrying out regular, high-quality seeding.



Excellent plot adaptation from this single disc coulters

The VENTA 320 seed drill comes in 15 or 12.5 cm row-spacing versions. The seeding units are positioned over two rows 27 cm distant. This design prevents clogging, even in wet conditions and in plant residues.

Seed application rate proportional to the ground speed

To ensure that the seed application rate is proportional to the ground speed, the seed drill needs speed data. A radar sensor at the rear of the seed drill generates a precise signal, even when the tractor wheels spin. It is also possible to use the tractor's GPS signal for the speed signal via an optional connection cable.



Row by row tamping boosts soil-seed contact

The single disc coulters can be equipped with optional press and depth control wheels to enhance seed-soil contact. This provides the seeds with more humidity to optimise germination and uniform seed emergence. Tools are not necessary to adjust the press wheel.

A perfect finish with the universal covering harrow

The universal harrow is equipped with L-tines to give the seedbed an impeccable finish. It covers the seeds efficiently in any soil type, even when there is plant residue.

MORE EQUIPMENT, MORE PRACTICAL



Half-width shut off

Left-side half-width shut off is available as an option. It is used to sow with the right side of the seed drill only. It is controlled with the KSL20 electric terminal.



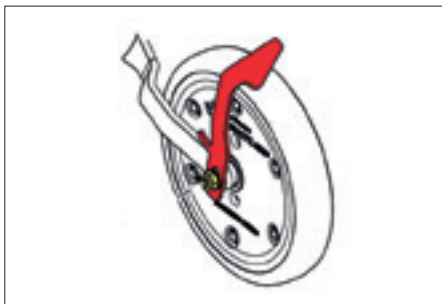
Pre-emergence markers

Pre-emergence markers are available as an option to enable operations before the emergence of seedlings. During road transport, they are raised in vertical position and locked with a pin and lock pin. In this case, side markers must also be fitted to the tillage tool.



Hopper extension

To increase work output, an optional 300-litre hopper extension can be added to obtain a total hopper volume of 1150 litres. In this case, an extra step makes hopper access easier.



Scrapers

Scrapers prevent earth from building up in difficult working conditions. They are available as an option for the press wheels and the single disc coulter.



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.

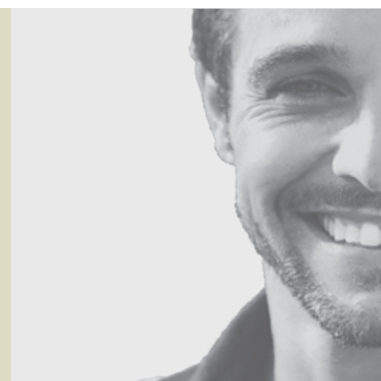
Technical specifications

	VENTA 320 - 20	VENTA 320 - 24
Working width (m)	3,00	
Weight approx. (kg)	890	925
Hopper capacity (l)	850	
Hopper extension (l) (total)	◇ 300 (1 150)	
Metering	Central volumetric metering unit with electric drive	
Application rate (kg/ha)	1 - 430	
Blower drive	Hydraulic	
Number of seeding rows	20	24
Row spacing (cm)	15	12,50
Type of seeding unit	Single disc coulter, 2 rows with 27 cm spacing	
Maximum coulter pressure (kg)	32	
Tramlining	2x2 Tramlining ◇ Half-width shut off with separate terminal	
Terminal	QUANTRON S-2	
Speed signal	Integrated radar sensor or ◇ tractor speed signal	
Tillage tools	Can be used in combination with HRB 302, HRB 303, HR 304, HR 3004	

◇ optional equipment

KUHN SERVICES*

KUHN sos order - Spare parts service, 24/7**
KUHN protect+ - The choice of professionals!
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* Not all services are available in all countries. ** except January 1, May 1 and December 25

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Check out the KUHN range of seeding equipment.



1. Mounted mechanical - 2. Integrated mechanical - 3. With front hopper - 4. Integrated pneumatic - 5. Foldable pneumatic
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