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FOR YOU

# Not hydraulic, electric

The Vento electrically operated pneumatic spreader from Lehner should enable a working width of up to 12 metres. We used two versions of the spreader for sowing catch crops.

**Y**ou often find small pneumatic spreaders on soil cultivators, so that catch crops can be sown in a single pass. The advantage is clear: two steps can be combined at little expense. But these machines are also frequently the first choice for reseeding grassland or under-sowing. However, with an electric fan, only narrow working widths or small spreading volumes can be achieved in most cases. Therefore, if you need a higher airflow, you have to turn to a hydraulic – and therefore more expensive – drive.

That's not the case with Lehner. The manufacturer advertises its Vento pneumatic spreader as having a working width of up to 12 m and an electric fan. This is unique on the market. With the Vento, it should be no problem to spread up to 120 kg of seed per hectare over this working width. We wanted to find out the Vento's limits, and so we subjected it to a stress test with green rye. Lehner provided us with a Vento with 12 m wide folding boom for this task. The manufacturer also brought us a Väderstad Cultus grubber with a working width of 3 m and Vento spreader.

## RAPID REFERENCE

**With the Vento**, the Lehner company has added a 12-V pneumatic spreader to its range, with electric fans that should allow working widths of up to 12 m.

**We put the spreader to the test** – two different versions of it. To do this, we sowed mixed catch crops and green rye.

**The seeding shafts** can be replaced without tools. Operation with the turn-and-push button is straightforward.

▷ Various rotary feeders are available for dispensing different seeds. A quick fastener enables the seeding shaft to be removed rapidly.

Photos: Huesmann



## LARGE AND SMALL TANKS

The spreader on the grubber holds 230 l of seed. However, the second test spreader holds up to 500 l in its tank. As well as these two tank sizes, the Vento is also available with tanks of 120 and 360 l. For installation on implements, Lehner offers various assembly kits, such as a bolt-on plate with clamping brackets for square tubes. The manufacturer sets the weight of the 230 l spreader at 67 or 78 kg, and up to 177 kg for the model with the 500 l tank. So, when the tank is full, this can quickly bring the weight up to 550 kg. This needs to be borne in mind when considering the lifting force of the tractor.

For dispensing the seed, Lehner uses either 8 or 16 hose outlets. The version with 8 outlets is equipped with one electric fan and one seeding shaft. The Vento then requires a maximum power consumption of 33 A, enabling a working width of up to 6 m. If you order the Vento with 16 hose outlets, this comes with a second fan and second seeding shaft. In this case, the power consumption can be up to 45 A.

The seeding shafts, driven by an electric motor, dispense the seed to the hose outlets via divided cells. Different cell sizes are needed, depending on the type of seed. As standard, Lehner always equips the Vento with one seeding shaft with blue rotary feeders (5 ml/cell). Green (2.5 ml/cell) and red (10 ml/cell) cells are also available for different seeds. For each hose outlet, either one or two cells can be mounted on the shaft. Changing the entire shaft on the machine is easy and requires no tools. Simply release the bayonet catch under the tank, and you can pull out the shaft by hand using a supplied special tool.





Photo: Tlastowe



△ We used the Lehner Vento to sow catch crops after cereal, among other things. In the test, lateral distribution was good.

◁ For calibration, the seed hoses must be removed. There needs to be sufficient space under the spreader to do this.

The supplied spreading table explains which cells are recommended for which seed. To replace the rotary feeders, you need to dismantle the shaft and replace the individual cells. So, if you want to switch between green rye and small seeds, for example, you should order an additional seeding shaft.

### THE RIGHT AMOUNT

As the Vento's power consumption of max. 33 or 45 A is really high, the three-pin socket on the tractor was not sufficient for supplying the spreader with electricity. Therefore, Lehner delivers a size 6 mm<sup>2</sup> battery cable as standard. The spreader and terminal are then supplied with electricity via a quick fastener. An optional adapter cable for the ISOBUS socket is also available, which ensures fast and easy connection – good.

Above all, make sure your tractor's alternator has enough power. In older models, in particular, power may not be adequate if several electrical loads are active.

The spreader is operated using the Vento II control panel. All settings can be entered on the 3.3" black and white display. A turn-and-push button is turned to access the different menu items, then pressed to select them. What's more, Lehner's website contains short videos that explain such things as the calibration process, rotary feeder replacement and further settings very clearly.

The calibration test is also preselected via the control panel. First, the product you wish to dispense is entered in the "Calibration test" submenu. Here, we weren't so keen on the turn-and-push button, because it takes a really long time

to navigate through the rows of letters.

Once a product has been set up, it remains in the machine's memory. Next, you set the calibration time, with a choice of 30, 60 or 90 seconds. We think it would be easier if the test ran based on area. This is the case with many seed drills, and you get a better idea of the calibration volume. After you have filled up with seed, you detach the seed hoses and attach the supplied plastic bag below them. A proper calibration flap, which guides the flow of seed out of the dispensing cells into the bag via a chute, would have been the better option. Furthermore, when mounting the spreader you have to make sure that there is enough space under the dispensing unit for hanging the bag. Since the test grubber was equipped with a platform for easy access to the spreader, there was no room here for the collection bag, and it was not ideal for detaching the hoses, either. The bag and baggage scale are standard and are located in a document role on the front of the spreader.



The process is then started on the machine, which we liked. The weighed quantity is then entered on the terminal. After this, the dosage can be adjusted as necessary. If you order the Vento with two dispensing shafts, the calibration process runs simultaneously. All you need to do is attach a second bag and then add the two weights together. For speed-dependent dosage, the spreader requires a speed signal. A 7-pin cable is provided as standard for the tractor's signal socket. We used the optional AccoSat GPS receiver (€ 495, prices do not include VAT). In the test, the dispensed quantity was very good. In addition, there is always an empty indicator, which gives an acoustic and optical signal in good time. When you want to empty the hopper, you can do this either via the emptying menu or a flap on the side.

Photo: Tastowe



Photo: Huesmann



△ With a boom 12 m wide, we spread 120 kg of green rye per hectare. Up to 10 km/h was no problem.

◁ The Vento is controlled by a turn-and-push button.

### AUTOMATIC SWITCHING

The homescreen of the Vento control panel shows the driver all the main parameters. The fan is switched on either separately using a button or when dispensing starts. This prevents any blockage in the seed hoses – very good. The fan takes a long time to get up to speed but, according to Lehner, this is to prevent surges. Dispensing is switched on and off either manually using the large Start/Stop button or – more conveniently – via the EHR signal from the tractor. A snap switch on the top link is another option. However, since the EHR signal doesn't have the same polarity on all tractors, you can change the polarity in the submenu – good. In the field, dispensing switched with good timing, both when going in and pulling out. The fan speed can be adjusted in percentage increments. To ensure the correct airflow and have peace of mind, we always had the fan running at 100% speed.

The submenu also provides a hectare counter for the daily and the total output. The calibration run for the different speed signals (wheel sensor, GPS or speed pulses) can be set on the terminal as well. All in all, operation is simple and straightforward. We would prefer a touchscreen, however, to make operation even more intuitive. Vento does not offer an ISOBUS controller.

Unfortunately, the controller interfered with radio reception in both tractors used in the test. According to Lehner, this should not happen with the EMC-tested controller.

### SIMPLE HOSE ROUTING

Depending on its equipment, the spreader comes with 8 or 16 baffle plates with brackets plus a 25 or 50 m hose. The spreading discs must be positioned so that the seed lands either horizontally or vertically in front of the baffle plates. There are U-brackets for the baffle plates, which can be clamped around a 40x40 mm square tube. This should facilitate installation on numerous machines. The baffle plates can be mounted at a distance of 75 cm from one another. They should be at least 50 cm clear of the ground to ensure uniform seed placement. We used eight outlets on the grubber. The seed is blown horizontally in front of the baffle plates and is therefore deposited in a fan shape in front of the roller. The hoses must be routed straight and always on a downward incline, as this also ensures homogeneous distribution. The maximum hose length of 10 m specified by Lehner should be sufficient for most applications.

### HIGH LOADS

In our test, we also wanted to know how much seed could actually be dispensed with the electric fans over a working width of 12 m. To achieve this, we spread 120 kg/ha of green rye using the large spreader with folding boom. With the large rotary feeders on the dispensing shafts, we were able to reach speeds of up to 10 km/h. Then, at 12 km/h, seed stopped coming out of the outer hoses, which was because the lines were not on a continuous downward incline.

With its Vento, Lehner has demonstrated that an electric drive is also capable of precisely dispensing seed over larger working widths. We were impressed with the tool-free changing of the seeding shafts. However, Lehner could modernise its controller somewhat.

With the equipment used in the test, the small spreader would cost € 4,495. The bigger version with two seeding shafts and two fans costs € 7,095.

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VIDEO

You can find the clip that accompanies this article at [www.topagrar.com/vento2021](http://www.topagrar.com/vento2021)