

What's New In Europe?

We recently sent FARM SHOW contributor Andrew Sewell to Agritechnica in Hanover, Germany, one of the biggest farm shows in the world. Here are a few of the inventions that caught his eye at the show.

Planter Robots

AGCO's Fendt division caught a lot of eyes at the show with their robot seeder. It's designed to work in sync with a "swarm" of planters all working at the same time.

The company says 12 to 15 of the robots do the work of an 8-row planter. Ten of the units can plant 2 1/2 acres per hour. They automatically refill themselves and charge their batteries at a base unit. Recharge time is about 1/2 hr.

The robotic planters operate without lights or noise so they can run 24 hrs. a day, so they can be used near town or suburban developments. The lightweight units reduce



compaction to almost zero and communicate with each other wirelessly as well as with the "cloud" for farmer control.

AGCO is testing prototypes this year and plans to go into commercial production in 2020.

3-Bladed Hedge Trimming Shears

Andy Sewell tested out these new 3-bladed shears and was impressed. "They have double the cutting power. You can go faster and do more work with the same effort," he says.

Developed by German company Garten Primus, the shears feature a "sliding force" system that brings both outside blades in against the stationary center blade, which is sharpened on both sides. They're made of lightweight glass-carbon fiber. Price in Germany is about \$55. (www.garten-primus.de; ph 011 49 2461 69 59 981)



Dutch Diesel Electric "Tool Carrier" Tractor

Field tests with this prototype Dutch diesel electric tractor are still being conducted at a secret location in the Netherlands. But the tractor itself was on display at Agritechnica.

The "tool carrier" tractor has an elongated frame with hitches up front and between the engine and cab. It's designed to work a 27-ft. strip in a controlled-traffic situation to reduce compaction. The Claas cab slides back and forth 7 ft. across the main frame to always give the operator good vision.

An electric generator is driven by a 6-cyl. 210 hp. diesel engine, powering electric drive motors on each wheel. Wheels move in and out electro-hydraulically from 7 to 10



ft. in width. The innovative tractor is slated to reach the market in 2019. (www.boessenkool.com; ph 011 31 546-48 88 00)

"Topper" Takes Out Tall-Growing Weeds

The W-Cutter was developed in Finland to take out tall-growing weeds above the crop, preventing the seed from maturing and interfering with harvest.

The W-Cutter has other uses, such as crushing potato vines before harvest. It attaches to a front-end loader and is 36 ft. wide. It folds to a 9-ft. width for road transport. The 16 chains are driven by electric motors off a tractor-mounted generator. A smaller 27-ft. wide model is also available.

Flail chains are made from thin resilient steel. Each section of the boom can be controlled separately. (www.w-cult.fi; ph 011 358 400 715 728)



Easy-Attach Wheel Weights

This cleverly designed wheel weight system from the Netherlands makes it easy to add weight or remove it as needed.

A mounting plate permanently mounts to the wheel studs. When weight is needed, it slips over the mounting plate and is held in place by a hand-turned bracket that extends across both sides. A removable handle is used to turn the lock-down bracket.



Saves fuel and compaction by only using weights when needed. (www.pateer.com; ph 011 31 114 315453)

System Alerts Traffic To Road Risks

There are far more narrow roads in Europe. That's why Claas came up with its new "Large Vehicle Alert System" that tells approaching cars that there's large farm equipment ahead.

The system sends info to navigation systems that are built into many newer cars or trucks. Drivers will know there's big equipment ahead on the road before they see it. Because the system sends out a GPS link, the driver can see the exact location of equipment on the road, even if it's over a hill or around a corner. Claas says the new



system can interact with a broad range of navigation systems. (www.claasofamerica.com or www.claas.de)

Claas Rear Track Tractor

Claas received a Silver Medal at Agritechnica for the new rubber track system on its Axion 900 series tractors. It uses the same hardware found on Claas combines.

Equipped with individually suspended rollers, the track system is rated for travel speeds of more than 25 mph and provides better traction with less compaction. The tractor is still steered by the front rubber-tired wheels. (www.claasofamerica.com or www.claas.de)



Liquid Liner Does The Job Of A Tanker

Instead of buying or renting a tanker truck to haul liquids, the German company Liquid X Liner came up with a system that lets you haul liquids in a straight-sided, over-the-road trailer.

It consists of a heavy flexible liner that's rolled up at one end of the truck and comes with its own pumping system. As the bag fills, it unwinds off the roller. How much it unrolls and expands depends on the size of your load. Complete filling and emptying of a 65-ft. bag takes less than 10 min.

When not in use, the bag is simply rewound hydraulically and stored at the front of the trailer behind a grain-tight wall. The rest of the trailer can be used to haul grain - or other cargo - as usual. (www.xliner.de; ph 011 49 5971 981367 2)



Entire Cab Lifts And Rotates

German manufacturer Paul Nutzfahrzeuge showed off the world's first "lift and rotate" tractor cab. Designed to mount on large farm or industrial tractors, the cab is infinitely adjustable in a turning range of up to 200 degrees for outstanding views in any direction, no matter what job you're doing.

The entire cab raises and turns hydraulically, controlled by a joystick which makes it easy to continually adjust the cab position on-the-go.

Depending on the tractor, electric and hydraulic brackets are modified to maintain tractor control in any position. The chassis of



the tractor itself is not altered. (www.paul-nutzfahrzeuge.de; ph 011 49 8541 9030-0)

Mover Retrieves Big Bales Fast

Irish dairy farmer Tom Carrigan can load 16 bales in 12 min. and unload them into a stack in less than 7 min.

The trailer consists of 3 sections. The first is the loader. It holds 4 bales. The second section also holds 4 bales, but between sides. The rear half of the trailer is the tipping section. It holds 8 bales.

When 4 bales are in place, the horizontal forklift moves them to the rear between the sides. The process repeats until 12 bales are loaded between the sides of the trailer with 4 more at the front (video at farmshow.com).

Carrigan is working with Cross Agricultural Engineering Ltd. to build Bale Chaser in 2018. (www.crossagrieng.ie; ph 011 353 45 524 134)

