

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.

On-The-Go Pellet-Making Machine

German machinery giant Krone introduced a mobile pellet-making machine at Agritechnica that makes pellets out of all kinds of crop residue to be used as fuel, bedding or feed.

The Premos 5000 prototype makes pellets that are about 1/2 in. dia., using two interlocking die rollers. It picks up crop material directly from swaths in the field. A conveyor belt carries straw to the rollers. The high compression rollers subject pellets to temperatures up to 212 degrees, which helps

sterilize the crop. Then pellets drop into a cooling chamber before being transferred to a rear hopper.

The company notes that compared to baling, pelleted straw has a density 3 to 5 times higher, reducing storage needs and making automation of handling easier. The company hopes to have the machine on the market by 2017.

Contact: Krone GmbH (www.krone.de); ph 011 49 5977 935-0



"Gull Wing" System For Dual Tires

Narrow roads can be a big problem throughout Europe so if a farmer needs duals, getting to remote fields is an issue. That prompted Peecon to come up with a "gull wing" system that detaches both rear duals and lifts them up over the tractor for transport.

When the machine arrives at a field, the operator can fold down the wheels without leaving the cab. Duals quickly attach to rear wheels with a special coupling system.

Contact: Peecon Agricultural Machines (www.peecon.com); ph 011 31 76504 6666

Electric Combine Header

One trend in Europe that's headed our way is the replacement of hydraulic motors and cylinders with electric motors and actuators, powered by generators built into tractors. Electric-powered wheel rakes, feed wagons, and implements were all on display at Agritechnica this year, along with the first-ever electric combine head from German manufacturer, Zurn.

All mechanical and hydraulic drives were swapped out for a total of 12 electric motors – one for the reel, one for the cutterbar and one at each end of the feed auger. Eight smaller electric motors power each belt on the table. Electricity comes from a generator mounted on the header, which is powered by the combine.

The advantage of the design is the ease of adjusting reel, knife, and auger speeds to match conditions, as well as reduced maintenance.



Contact: Zurn Harvesting (www.zuern.de); ph 011 49 7943 9105-0



New Way To "Chop" Cornstalks

Corn farmers in Germany fight a constant battle against the European corn borer. That battle prompted Knoche Maschinenbau to come up with a new machine to cut up stalks after harvest in such a way as to destroy the corn borer's habitat.

Their new machine cuts off stalks at ground level, virtually eliminating stubble and allowing air to pass into the interior of the cornstalk. That causes the stalks to rot, destroying corn borers in the process.

The low-to-the-ground rugged cutterbar can be mounted ahead of a tractor or mounted on front of a disc harrow at the rear of the tractor.



Contact: Knoche Maschinenbau GmbH (www.knoche-maschinenbau.de); ph 011 49 5723 9476 70

"Tire In A Tire" Inflates Fast For Road Travel

A number of automated on-the-go tractor tire inflation systems have been developed over the past few years. The big drawback? They're slow, especially when inflating tires for road travel.

Fendt has an innovative new tire with a high pressure interior "tire tank" inside the tractor tire that serves as an accumulator. It can fill the outer tire very quickly when activated. Pressure builds up gradually in the interior tire while working in the field – rather than sitting stationary and revving

the engine to power a compressor – and is quickly released when needed so that tires can be inflated to road pressures in less than 30 sec.

Contact: Fendt AGCO GmbH (www.fendt.com); info.fendt@agcocorp.com; ph 011 49 8342 77-0



500-Tire/Hr. Baling Machine

You can haul 40 percent more tires once they're crushed into tire bales with a new machine from LSM Engineering in Ireland.

The new baler will crush 80 to 110 car and light truck tires into a single 5 by 5-ft. brick that's 3 ft. deep and bound with 5 high-tensile wires. Bales can be stacked for storage and, in some areas, used for construction, retaining walls or other projects.

Contact: LSM Engineering Ltd. (www.lsm ltd.com); info@lsm ltd.com; ph 011 353 57 8660379



Ballast Mounts Under Tractor

Attaching or removing rear wheel weights is no longer necessary with this new-style rear axle ballasting idea from Deere in Germany, which makes it easy to mount or dismount weight as needed so you're never weighted down when you don't need to be.

Hydraulic-controlled brackets mount under the tractor to grab onto the heavy ballast plate and pull it up under the belly of the tractor.

Contact: John Deere GmbH, Mannheim, Germany (www.deere.de); ph 011 49 7251 924-0

Rubber-Tracked Trailer Carrier

"We can reduce the soil pressure exerted by a twin axle trailer to less than one-third of normal," says Andre Luderitz at Annaburger, manufacturer of the UniCrawler. It's a rubber-tracked carrier that reduces field compaction.

It allows farmers and contractors to use road tires on big spreaders and grain wagons but ride on rubber tracks in the field. The trailer never has to be disengaged from the towing tractor or truck.

Contact: Annaburger Nutzfahrzeug GmbH (www.annaburger.de); export@annaburger.de; ph 011 49 35385 709 56

