Maintenance-Free Wireless Flow Blockage Sensor

By Bill Gergen, Senior Editor

"This new wireless flow blockage sensor works great to monitor the placement of dry fertilizer. It's battery-operated and virtually maintenance-free, which makes it much more reliable than wire-type monitor systems," says William Montag, Montag Mfg., Emmetsburg, Iowa.

Developed in Brazil, the Visum J.Assy wireless flow blockage sensor was on display at the recent Iowa Power Farming Show in Des Moines, where it was installed in-line on a Montag "air delivery" granular fertilizer applicator hooked up to a strip till applicator. Montag is a distributor of the monitor and sells it through their dealer network as well as through other OEM's like Kuhn-Krause, which makes the Gladiator strip-till machine.

The donut-shaped monitor is designed to install in-line on each row and contains a sensor that sends out radio signals, powered by a built-in medical grade lithium battery. A rubber housing on either side of the monitor clamps onto the machine's hose to create an air-tight seal. A magnetic lanyard is used to program each sensor to its specific row.

"The sensor is on only when it senses motion. When no fertilizer is flowing past it, a monitor in the tractor cab beeps and shows which row isn't performing," says Montag. "The battery is designed to last for up to 2,000 hours."

He says the monitor has been used primarily to apply dry fertilizer in strip-till and no-till applications. The company tested the system for 2 years with help from Dale Simpson, the Visum J.Assy North America sales representative.

"We worked with farmers who tested the monitor during 2016 and 2017, and they had beautiful results. It eliminates the hassles of using wire harnesses and the potential problems caused by fertilizer corrosion," says Simpson.

You can learn more about the Visum J.Assy wireless blockage sensor by going online at https://www.youtube.com/watch?v=kV-1uRUQKGE.

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Wireless blockage sensor sends out radio signals, powered by a built-in medical grade lithium battery.

Firewood Cutting Deck Saves His Back

It saves my back, says Brett Hundertmark, who came up with a simple way to cut up firewood. This is the eighth idea he has shared with FARM SHOW readers (example: Low-Cost Skid Loader Quick-Hitch, Vol. 40, No. 1).

"I burn wood for heat in the house and two shops, and it's hard on my back to cut wood on the ground," explains the Bode, Iowa, resident.

Instead, he cuts logs into firewood size pieces using his mobile log deck. He built the deck out of an old running gear and power line material that he got for free when the poles were replaced. He bolted two 18-ft. long, 6 by 9-in. beams to the running gear frame and lag bolted the 8-ft. cross arms on top.

"I can stand while I saw, cutting between the beams to get the length I want. I let them drop on the ground, then pull the wagon out of the way so I can split them," Hundertmark explains.

He has 8 1/2 acres of timber where he cuts dead and fallen trees. He loads them on the wagon with his skidloader and pulls the wagon to a location where he can cut and split.

"You never hit your chain in the dirt or rock, and it doesn't hurt if you hit the cedar beams. If I have a big log, I can saw it halfway, roll it over and cut it the rest of the ways so the blade never gets stuck," Hundertmark says.

He adds that the cross arms are located close enough together, that he can also use it for stacking hay bales if he needs an extra wagon.

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Brett Hundertmark cuts logs into firewood-size pieces using this mobile log deck. "I can stand while I saw, cutting logs between cross beams and letting them drop to the ground. Then I pull the wagon out of the way and split them," he says.

Easy-To-Use Big Bale Unrollers

When he switched from small square bales to big round ones to feed his animals, Mike Esh needed an easy way to handle them. His solution was a unique device he calls Mr. Bale Spinner.

Unrolling big round bales in pens or pastures also can be difficult, especially on flat ground. His bale spinner solved both problems.

Whether mounted to a skid steer loader or on its own 7 by 7-ft. tag-along cart, the device grabs the bales and lifts them off the ground. In addition to standard clamping arms, it employs plates on the arms that let the bale spin free.

The quick-tach mounted spinner uses a hydraulic motor with a chain drive to spin the bale. The tag-along spinner uses a hand crank. Either way, Esh can control how much hay he unrolls.

"The crank mechanism is geared down, making it easy to spin the bale forward or backward when using it," says Esh. "With the motor on the skid steer unit, I can unroll a bale in about 30 secs."

While the skid steer model uses on-board hydraulics, the tag-along unit uses a 2-stage manual pump. It opens and closes the arms. Redirecting the flow through a different valve provides pinch and lift.

"The tag-along is designed to be used with an ATV or anything larger, or it can be left in place and hay spun off as needed," says Esh. "It is a way for a person with a few animals to make use of big round bales."

Esh has also used his skid steer-mounted, bale spinner to unroll big round bales into a small square baler for repackaging. He can adjust the unrolling speed to match baler intake.

Esh builds the units himself and has started selling them. The skid loader unit is priced at $2,400. The tag-along Mr. Bale Spinner is priced at $3,600. Prices may vary with the cost of materials. Options include adding a battery-powered hydraulic pump to the tag-along.

"The arms and hydraulic systems were designed by Beiler Hydraulics," notes Esh. "They offer multiple systems that could be adapted to Mr. Bale Spinner."

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Tag-along cart (left) grabs round bales and lifts them off the ground. A hand crank is used to spin bale. Skid loader-mounted spinner uses a hydraulic motor with a chain drive.