

Moisture Meter Finds Wet Hay Inside Bale

The baler-mounted moisture meter from Gazeeka detects slugs of wet hay inside big square bales. The meter's microwave technology "looks" inside each bale as it exits the baler. If a wet spot is found, it paints the side of the bale.

"One customer told me the system more than pays for itself if it prevents a bad load of hay from being sold to a buyer," says Tony Kellen, The Fine Twine Co., distributor of the moisture meter. "You can set aside bad or marginal bales. If they do caramelize or heat up, they haven't been shipped or stored with other bales."

The meter includes 2 antennae mounted to either side of the baler. Bales are checked without stopping. An LCD display unit mounted in the cab provides a constant stream of updates of maximum (peak) and average moisture readings.

"If the meter detects a moisture level above the preset point, it puts a red mark on the bale where the moisture was detected," explains Kellen. "If you want, it can give an audible alert if the moisture is above or below set points."

The units are calibrated for cereal hay, alfalfa and grass hay. They have been tested against Dairyland Labs' oven dry samples

and found to be accurate to within 0.5 percent.

Kellen says the technology was developed for the mining industry. A transmitting antenna generates and transmits a beam of microwave energy into the bale. A passive receiving antenna on the opposite side collects microwave energy not absorbed by the bale. A cable carries that data back to the first antenna where it is compared with how much energy was originally transmitted. The speed of transmission and the amount absorbed indicates the moisture level in the bale. Water slows the speed of the microwaves.

"The Gazeeka meter only requires 4 bolt holes on the back of the baler for mounting," says Kellen. "AGCO Hesston 2014 balers have the holes pre-drilled. Extensive and clear directions are provided in the manual."

To date, most of Kellen's sales have been in southern and southwestern states, but he sees the greatest need in more humid areas. He says the Gazeeka meter is superior to other moisture testing systems that use probes or test the surface.

"The Gazeeka shoots about 50 waves per second, reading about 1/3 of the hay inside the bale. With a Rheostat tester, if there is a



Baler-mounted moisture meter uses microwave technology to detect slugs of wet hay inside big square bales.



If a wet spot is found, a red mark is spray-painted on the bale where the moisture was detected.

slug in the middle of the bale, you'll never know it. The Gazeeka will catch it."

The Gazeeka baler-mounted moisture tester has a suggested retail price of \$7,299. Contact: FARM SHOW Followup, The

Fine Twine Co., 4833 Kingbird Ave, Alton, Iowa 51003 (ph 712 898-7713; 866 999-1006; info@thefinetwineco.com; www.thefinetwineco.com).

Flip Empty Seed Boxes Fast

Seed boxes make bulk seed handling easy, but once they're empty they're a pain to handle. Boxes are designed to be flipped over on top of each other to reduce storage and shipping size. The trouble is, it takes 2 people to flip one.

"In addition to farming, the inventor works for a local co-op," explains Eldo Schoer, Bulk Seed Systems, distributor of the Seed Box Flipper. "He got tired of flipping boxes, but he couldn't find anyone with an easier way to do it, so he built a prototype to do the job."

The BF-1000 slides onto standard forklift forks. The heavy-duty framework and arms are fabricated from tubular steel. Arms powered by an electric actuator open and close to grip the seed box. A high torque electric motor rotates the arms, flipping the

gripped box over left to right or right to left as needed. The entire system runs off a 12-volt battery mounted on the BF-1000 base. When in use, a corded control module with toggle switches for open/close and left/right is temporarily clamped to a ROPS post on the forklift.

"The gripping arms and the arm frame are designed to fit into slots on the sides of the box for a solid grip," says Schoer.

Schoer says Plaetz worked out a system when flipping large numbers of boxes. "He would line them up, flip one over another, and as the box came down and into place, slide the stacked boxes to one side and move ahead to the next."

"Most buyers are seed dealers, but we've sold some to seed companies and also to



Seed box flipper slides onto standard forklift forks. Arms powered by an electric actuator open and close to grip seed box.

farmers," says Schoer. "One farmer only flips about 25 seed boxes a year, but he felt it was worth it to have a Seed Box Flipper."

The BF-1000 is priced at \$3,995 plus shipping. Check out a video of it in action at www.farmshow.com.

Contact: FARM SHOW Followup, Bulk Seed Systems, 20561 Justice Ave., Wabasso, Minn. 56293 (ph 507 342-2222; sales@bulkseedssystems.com; www.bulkseedssystems.com).



Garden tractor turf cutter uses a shank off an old cultivator.

Front-Mounted "Turf Cutter"

Tony Haney has a slick way to remove unwanted turf. His garden tractor-mounted turf cutter slices and dices turf before he takes a blade to it.

"I run back and forth over the section in a grid pattern and then at a diagonal," says Haney. "It tears up the sod so I can blade it away easily."

The turf cutter is simply a shank and housing off an old cultivator given to him by a farmer friend. Haney did a little welding to fabricate a mount that matched the existing

mount for the hydraulic front blade on his X728 Deere.

"All it took was a little welding and a couple of hitch pins to match the bottom holes," says Haney.

"I can go down about 6 in. with it if I want," he says. "It also works great to dig out weeds and grass alongside concrete pads. It pulls up everything."

Contact: FARM SHOW Followup, Tony Haney, 2138 Redwood Rd., Irwin, Iowa 51446 (ph 712 782-3378).

"Mini Combine" You Can Hold In Your Hand

Need just a little bit of shelled corn? A simple sheller from Decker Manufacturing sits in the palm of your hand. To shell out an ear, simply twist it through the collar and let the 6 ridges rub the kernels off.

"It's ideal for the backyard chicken coop owner, whether in the country or the city," says Waverly Barnes, Agri Supply. "Sit and shell a bucketful in minutes, or shell out ears as you walk around the chicken yard."

The Decker Hand Corn Sheller has been around for about 40 years. Agri Supply lists it at \$6.49.

The 2 1/4-in. high sheller is angled, with the mouth having a 2 3/4-in. outside diameter. It narrows to 2 1/2 in. at the exit. Rubbing the kernels against the ridges releases them gently from the ear. That's important to seed savers, says Rodney Barbour, Agri Supply.

"It doesn't break the germ end off the kernel, and that's important to anyone wanting seed to replant," he says.

Barbour says the hand sheller is popular with more than just seed savers and chicken owners. "We have a wide variety of hobby farmers, gardeners and small scale poultry



To use the mini sheller, you twist the ear through the collar and let sheller's 6 ridges rub the kernels off.

producers purchasing it," he says.

Agri Supply has 8 stores in the southeast U.S. and has catalog and online sales.

Contact: FARM SHOW Followup, Agri Supply (ph 919 772-9722; 800 345-0169; info@agrisupply.com; www.agrisupply.com).