

Laser-Cut Row Unit Designed For High-Speed Planters

At the recent Ohio Farm Science Review, Harvest International, Inc., Storm Lake, Iowa, introduced its new LaserPro planter row units that are designed specifically for precision and high-speed planting.

"These are laser-cut row units made from high tensile steel. They offer a number of features not available on conventional row units," says regional sales manager Dustin Friesen.

Harvest International works with Precision Agri Services, Inc., in Minster, Ohio, to produce custom-built planters specifically designed for precision agriculture. They also work with Precision Planting Co. and Ag Leader dealers across the U.S. and internationally. The idea is to start with a clean toolbar and then add components onto it, such as electric drives, row cleaners, and different closing systems, until you've got a planter that's set up the way you want it.

The new laser-cut row units are designed to integrate with precision farming platforms, whether Precision Planting or Ag Leader, and offer several other "quick adjustment"

features. For example, a quick release closing wheel mount allows you to quickly remove and replace closing wheels. All it requires is to pull a pin and remove the current mount.

"It takes about 15 min. per row to replace the closing wheels on conventional row units, so farmers with big 60-ft. planters can spend an entire day changing wheels," says Friesen. "But with the LaserPro 1's quick release mount, it takes only about 15 seconds per row. You can get back to the field much more quickly."

Another unique feature is the ease of adjusting the closing wheels and gauge wheels laterally, along with a camber adjustment for the gauge wheels to keep them snug against the disc openers. All you do is loosen and adjust a bolt.

Also new is a tapered, non-metallic bushing adjustment feature on parallel link arm assemblies. It's self-lubricating and can be adjusted in just a few seconds.

Harvest International also unveiled their LaserPro 1N row units, which are designed for narrow row spacings and down to 8-in.



LaserPro planter row units are designed specifically for precision and high-speed planting, offering a number of features not available on conventional row units.

spacings for planting in twin rows. "The engineering and high strength of the LaserPro 1 allows us to manufacture an extra-narrow twin row unit without sacrificing quality, features, or durability," says Friesen.

Contact: FARM SHOW Followup, Harvest

International, Inc., 401 W. 20th St., Storm Lake, Iowa 50588 (ph 888 218-5373 or 712 213-5100) or Dustin Friesen, regional sales manager, 711 S. East Street, Suite 2-D, Indianapolis, Ind. 46203 (cell ph 712 221-1554; dustin@harvest-international.com).

High-Speed German-Built Disc Harrow

"It has big 29-in. coulters that mix soil and residue better in high yielding corn than any other disk harrow on the market, and leaves the ground nice and smooth," says Jim Balstad, sales and marketing manager for the new Lemken Rubin 12 high-speed disc harrow. It was on display at the recent Big Iron Show in West Fargo, N. Dak.

The German-built tillage tool is available in widths up to 23 ft. and is designed to operate at speeds up to 10 mph.

The Rubin 12 features 2 rows of individually attached, 29-in. dia. concave discs with one row of rebound harrows following behind the front row of coulters, and another row of angled leveling harrows behind the back row. The discs have a dual angle built into them, as they're angled 16 degrees from parallel to the direction of travel and 20 degrees from vertical to the ground. This combination guarantees intensive mixing across the full working width at depths as shallow as 3 in., says the company.

"They're the biggest disc blades on the market in the high speed disk category. They penetrate the soil deeper and bring up more soil that mixes with residue to get

more of it buried," says Balstad. "Compared to conventional disk harrows, this machine does a better job of sizing and incorporating residue into the soil and also leaves a far smoother finish, breaking up clods into finer pieces."

The rebound harrow helps break up clods and deflects residue back onto the ground so it can be worked over by the second row of discs. The leveling harrow's angled metal tines are designed with 2 long "fingers." "The fingers skim along the top of the ground, catching some of the loose dirt coming off the second row of discs and feathering it out to make sure the soil is left perfectly level," says Balstad.

An innovative, self-locking handle makes it easy to adjust the working depth of both harrows. The operator attaches the removable handle to each harrow section to raise or lower the sections individually.

Ring rollers at the back of the machine firm up the soil and push any residue down into it.

Balstad says customers have used the Rubin 12 on everything from corn stalks to soybean residue to sugar beets and potato vines. "Some farmers make one pass into corn



Big 29-in. coulters on Lemken's Rubin 12 high-speed disc harrow are designed to mix soil and residue better in high-yielding corn, yet leave the ground nice and smooth.

stalks in the fall and one more in the spring for seedbed preparation before planting soybeans," he says.

The concave discs are attached individually using pre-tensioned spring elements. "When hitting obstacles such as rocks, the unit's individually attached concave discs can move upward independently of each other, whereas on ordinary disc harrows half the machine

will lift up."

Retail prices for the Rubin 12 range from \$23,000 for a 3-pt. mounted, 10-ft. unit to \$88,000 for a 23-ft. pull-type unit.

Contact: FARM SHOW Followup, Lemken USA, Inc., 1920 Queensbury St., West Fargo, N. Dak. 58078 (ph 701 630-9154; balstad@lemken.com; www.lemken.com).

Hail Simulator Brings Back Memories Of "The Soybean Zapper"

When we saw photos recently of a "hail simulator" that consists of chains and golf balls mounted on a rotating drum, it brought back memories of a front-page FARM SHOW story about a "Soybean Zapper" that appeared back in 1983 (Vol. 7, No. 1)

The newly developed hail simulator was built by Farming Smarter, a Lethbridge, Alberta research company, to inflict damage on crops in order to evaluate recovery times for different plant varieties. Drum speed is variable and it can be raised or lowered to inflict from 0 to 100 percent damage to crops.

The Soybean Zapper, on the other hand, was built by farmer Victor Zoellick of Rockford, Ill., to intentionally inflict up to 30 percent damage to standing soybean crops in order to stimulate growth and produce higher yields. Zoellick had noticed that after hail storms "zapped" his bean fields, they often came back stronger than ever. He experimented for several years in a greenhouse before taking

his machine to the field. It used spinning rubber straps to inflict up to 30 percent crop damage, stripping leaves from all around the canopy but without damaging the stem. He found that the best time to zap beans was when the first blossoms appeared and plants were at 10 to 14 in. tall. Generally, he found it took about 2 weeks for crops to recover but he said they'd come back stronger than ever, with a stronger stem, a larger canopy, more nodules on the roots, and more pods.

At the time of our story, Zoellick and other farmers who had tested the machine claimed it boosted yields 10 to 15 percent.

Agronomists we talked to at the time of our original story said the theory behind Zoellick's machine was sound if you could open the canopy at the top of the crop without damaging the stem. But they said it would be difficult to build such a machine.

The Soybean Zapper never really found a market. Nor did another similar machine



Recently developed "Hail Simulator," left, works like the "Zapper", right, built by a farmer to boost yields back in 1983.



developed separately at the time by an Illinois agri services company. (You can read the original article at our website www.farmshow.com).

For more information on the hail simulating machine developed by Farming Smarter,

contact: FARM SHOW Followup, Ken Coles, Farming Smarter, no. 100, 5401-1st Ave. South, Lethbridge, Alberta Canada T1J 4V6 (ph 403 317-0022; www.farmingsmarter.com).