

Micro Plow's 2-In. Tile "Better Than 4-In.," Says Contractor

A new tile plow designed specifically for 2-in. tile was introduced at the recent Power Show Ohio in Columbus, Ohio.

The 3-pt. mounted Richland Micro Plow is designed to lay small 2-in. dia. poly tile only 2 ft. deep. The unit was designed by Mark Martin of Shiloh, Ohio, who uses it to do custom tiling in his area. His nephew Elton Zimmerman, who has 15 years of experience working in a machine shop, builds the plows.

"We use the machine to install 2-in. tile spaced 20 ft. apart on fields that have never been tiled," says Martin. "We're excited with the results we've seen. We built a special shoe on the tile plow in order to accommodate the narrow tile."

Although 2-in. tile is smaller than conventional 4-in. tile, Martin says it drains just as well. "Even though 4-in. tile is normally spaced 40 ft. apart, we find that it's more cost effective to use 2-in. tile on 20-ft. spacings. That's because the tile itself is less expensive, and because installation costs are lower as the plow costs less and can be pulled by a smaller tractor. A tractor with 150 hp will usually do the job. Also, you get much quicker drainage with 2-in. tile on 20-ft.

spacing than with 4-in. tile on 40-ft. spacing."

Martin says that in Europe, 2-in. tile has been widely used for years because it works. "We think that using 4-in. tile is overkill, especially in rolling ground where you hardly ever find more than a 1/4-in. of water in the tile unless it's a main. Also, 2-in. tile has a sharper profile, which gives the water more velocity. As a result, the tile is more likely to stay clean than 4-in. tile, which has a wider bottom and therefore tends to collect more sediment."

He says farmers have asked him to install 2-in. tile as laterals between their existing 4-in. tile lines. However, he hasn't done that yet. "One problem is that it's often difficult to find the old tile so we don't know where to go between," he notes.

The basic plow sells for \$6,500; an interchangeable 4-in. boot is also available and sells for \$800. The plow comes with a pvc frame that serves as a water level. However, it can also be used directly with GPS to keep grade. An Intellislope control system is available and sells for \$9,995, and a GPS Hemisphere A320/321 base station sells for \$13,500.



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Contact: FARM SHOW Followup, 895-1585; sales@richlandmicrodrainage.com; www.richlandmicrodrainage.com. Richland Micro Drainage, 8105 Malone Rd., Shiloh, Ohio 44878 (ph 419 896-3623 or 419

Timer-Controlled Grazing Gate

This new timer-controlled gate, specifically designed for intensive pasture grazing, opens and closes by itself and uses your own voice to let your cows know when the gate is open.

The Smart Gate is a timer/remote activated gate system with an electrified aluminum rod, which opens and closes up to 8 times a day without having to reset the timer.

"Since the gate closes by itself, you don't have to run back just to shut your cows in," says John Borkholder, Bremen, Ind.

The aluminum rod clips to your existing electric fence wire and telescopes out up to 15 ft. A built-in timer automatically opens and closes the gate on your schedule, and a built-in loudspeaker calls cows with your own recorded call when the gate opens. The timer is activated by a rechargeable battery that lasts about 3 weeks.

An attached shoulder strap allows you to carry the kit like a backpack so you can easily move the unit from one pasture to another.

The kit also includes a wireless remote that can be used to open and close the gate from up to 300 ft. away.

"The timer can save you up to an hour a day moving cows," says Borkholder, who notes that his brother David designed the unit. "You can stay in bed at 4 a.m. without having to get up and walk out to open the gate, and your cows will still come in to get their feed. Getting cows to the barn early before milking can increase their dry matter intake by allowing them to eat their bunk ration early. When they're done milking they'll hit the grass immediately, before the heat of the day.

"We got the first units out in the field two years ago and now have 20 in the field. A lot of people who buy one want a second one before very long."

The kit sells for \$695 plus S&H.

Also available is a remote-activated unit



Timer-controlled grazing gate opens and closes by itself and uses your own voice to let your cows know when the gate is open.

that's designed as a high-traffic barnyard gate. It doesn't include a timer, speaker or voice recorder and sells for \$595 plus S&H. "It works great when hauling manure," says John.

Contact: FARM SHOW Followup, John Borkholder, Shepherd Innovations, 11667 Tyler Rd., Bremen, Ind. 46506 (ph 574 633-4054).



Alfred Grice can pull his home-built round bale unroller behind an ATV, lawn mower or even a pickup.

Simple Bale Unroller Works Behind Any Vehicle

"I made a round bale unroller that I can pull behind an ATV, a lawn mower or even a pickup to unroll a round bale in less than 5 min.," says Alfred Grice of Oxford, Ark. His special hay tool is made out of pipe, chain and flat metal that he had around his farm.

Grice built the unroller using two pieces of 1 1/4-in. pipe cut to 7 1/2 ft. long. He drilled a 1/2-in. hole in each pipe 18 in. from one end, then bolted the pipes together with a 3-in. bolt and a locking nut so the pipes would rotate in a scissors-like action. He welded a piece of chain 2 ft. long to the pipe ends that were bolted together, then placed a 3 1/2-in. muffler clamp in the middle that would hook over a hitch ball. He bent the pipes at a slight angle in the middle and supported that bend with a brace.

On the straight end of each pipe he welded a 20-in. long spike at a 90-degree angle. He reinforced the welded ends with flat iron and sharpened the other ends to a point. Grice put a 6-in. utility wheel on each spike to act as a shim against the pipe arms. The sharpened ends of each spike go into the center of a bale when the unroller is mounted onto a bale. After a bale is unrolled, the wheels carry the unroller so it doesn't drag on the ground.

The spikes on his unroller arms go into the center of the bale and the chain hooks to the pulling vehicle. As the chain is tightened the pipes squeeze the bale in a scissors-like action and move it forward. Grice says his



Unit weighs less than 50 lbs., allowing him to easily haul it in back of a pickup.

device will also move a bale from a yard to a pasture without unrolling the hay as long as the twine is tight. When the bale is in position to unroll, just cut the twine and it's ready to go.

Grice says his unroller is so simple that people can't believe it works. "I show them how easy it is to connect and move or unroll a bale and they can't believe it. It weighs less than 50 pounds and is easy to move from one place to another in the back of a pickup. Around a yard it rides on two 6-in. wheels."

Grice is willing to sell plans to anyone who wants to build an unroller themselves.

Contact: FARM SHOW Followup, Alfred Grice, P.O. Box 125, Oxford, Ark. 72565 (ph 870 371-3378).

"Best Bargain In Farming"

Our "Encyclopedia of Made It Myself Ideas - Volume II" features the best farmer-built ideas from the years 2005 to 2010 of FARM SHOW. Even if you've saved all your past issues, all stories in this book are indexed and cross-referenced to make them easy to find. This 482-page book features more than 1,200 best ideas from our readers. One enthusiastic reader told us it's the "best bargain in farming". Sells for just \$14.95 (\$18.95 Can.) plus \$4.95 S&H (just one shipping charge no matter how many books you order). Makes a great gift!

