

New Trench-Digging Wheels For ATV's

Steel "trench wheels" for ATV's are a great new way to drain excess water from fields without damaging much of the crop.

So says Steve Raguse, Wheaton, Minn., who's started producing 24-in. dia. wheels that bolt on in place of the original wheels. The patented wheels measure 1 in. wide at the outer edge and flare out to 3 in. wide at the center. Self-cleaning lugs, spaced 6 in. apart, weld onto the face of the wheels at an angle for traction.

The wheels make a 2 to 3-in. deep trench in muddy ground. Deeper trenches can be made by making repeated passes in the same tracks.

"It's amazing how much water you can drain out in only a few hours with these wheels," says Raguse. "By making four or five passes over the same tracks you can make a trench that's 5 to 6 in. deep to drain excess water. And the wheels work great for making trenches in the bottom of field ditches so they drain water better. By fall, you can drive a combine equipped with a flex head over the trenches and not notice they're there."

According to Raguse, it took him many tries to get the wheel hubs just the right size and to get the lugs at the right angle. "The lugs are very aggressive and angled so mud won't build up on them. As a result, these wheels have awesome traction. In fact, I've never been stuck," he says. "The steel wheels actually pull easier than the original rubber wheels. The slower you drive, the deeper the trench. If you're in soil where the wheels sink faster, or if you're worried that you might get stuck, you can just drive faster. As you drive faster centrifugal force lifts the wheels and pulls you out."

A set of four wheels sells for \$595 plus S&H. "I tried to keep the price down low enough so farmers can justify keeping a set of wheels on hand so they're ready when you need them."

If you need to make deeper tracks and want a heavier wheel, Raguse offers a kit that allows you to fill the hollow wheel discs with silica sand to add additional weight. You drill into the bead face and fill the cavity of the wheel with the sand. "The sand adds 40 to 50 lbs. per wheel so I don't recommend using them until you've already tried using the wheels empty," he says. The kit sells for \$10 per wheel.

According to Raguse, the narrow wheels work best on 4-wheelers but can also be used on 2-WD models. "The only difference is that you may have to drive a little faster with 2-WD models." He says the wheels can be driven on hard surfaces like a gravel road. "You'll get a little vibration, but if you get off to the side of the road where the lugs can sink in the ride will be OK."

He also custom builds 64-in. dia. steel wheels for tractors and sprayers. "Newer self-propelled sprayers are equipped with 12-in. wide rubber tires. My wheels are only 4 in. wide so you're trampling only about one third of the crop. Works great with late season applications of Roundup on Roundup Ready soybeans."

Raguse sells the wheels direct but is also looking for dealers.

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Steel "trench wheels" for ATV's are a great new way to drain excess water from fields without damaging much of the crop, says inventor Steve Raguse.



Wheels make a 2 to 3-in. deep trench in muddy ground (above). Deeper trenches can be made by making repeated passes in the same tracks. Works great for draining water away from flooded fields (above right). Wheels measure 1 in. wide at outer edge and flare out to 3 in. wide at center. Self-cleaning lugs, spaced 6 in. apart, weld onto face of wheels at an angle for traction. "The lugs are very aggressive and angled so mud won't build up on them," notes Raguse.



Silage Blower Converted To Low-Cost Ditcher

"We built it because we couldn't justify the cost of a commercial ditcher," says Kenny Schnack about the 3-pt. mounted rotary ditcher he made out of an old silage blower.

The Gretna, Neb., farmer built the unit after reading in FARM SHOW about a Kansas farmer who made a similar machine (Vol. 24, No. 4).

"It was pretty simple. I started with a Kools silage blower that I bought for \$65 at a sale. My total cost ended up being about \$500. A new 42-in. ditcher would have cost about \$5,500."

Schnack stripped the blower down to the star wheel, pto shaft and bearings, removing all the sheet metal from around the blower. He replaced the original paddles with heavy duty ones that he made out of 3/8-in. thick, 4-in. wide angle iron. He used 1/4-in. thick steel to build a new 18-in. wide housing, leaving the bottom part open to serve as a sort of a shovel edge to cut and guide soil into the blower. He made a discharge spout out of 1/8-in. thick metal and used 2 by 3-in. tubing to make a 3-pt. quick hitch. A homemade, hydraulic-controlled skid plate on back doubles as a depth gauge.

"It took about two weeks of shop work but was well worth the time and money," says Schnack, who used the ditcher for the first

time this spring. "We have about 600 acres of bottom ground that always seems to need drainage in some place or another. We only use it a day or two a year, which is another reason we couldn't justify a commercial unit."

"We use either a Deere 8630 or 4520 tractor to pull it and go 4 to 6 in. deep per pass in low gear. The blower is 52 in. in diameter, so in three or four passes we can dig a ditch about 18 in. deep by 36 to 48 in. wide. It leaves a ditch with nice tapered sidewalls that we can plant right through. A lot of factory ditchers are only 24 to 30 in. wide and leave a more sharply angled ditch. We also like that this blower discharges soil out about 150 ft."

Schnack says he ground the front part of each paddle down to a point to make a shovel-type cutting edge. "We had some problems with mud tending to ball up instead of pushing through to the paddles, so after the photos were taken we cut open more of the blower at the bottom."

A hydraulic-controlled skid plate on back rides in the bottom of the trough. "The skid plate allows us to more finely control cutting depth," notes Schnack.

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