



Grant Rollins built this mounted 16-row side dress rig from a used Deere 12-row, 3-pt. mounted cultivator.

Side Dress Rig Made From Old Cultivator

"I looked at new and used side dress machines that were at least double what I wanted to spend but they weren't what I was looking for," says Grant Rollins, a farmer near Pemberton, Minn. "In the meantime I did some research on the internet and saw how people had built their own. I decided to go that route."

Rollins built his mounted 16-row side dress bar from new and used parts. The main bar is made from a used Deere 12-row, 3-point mounted cultivator with a 7 by 7-in. bar. "It was just right for what I wanted," Rollins says. "The cultivator had folding wings that bring the traveling width down to 15 ft., which is perfect for road travel and storage."

He removed all the shanks and gangs from the old bar and was able to re-use some of the brackets for his new configuration. Then he added 5-ft. hinged extensions to each end of the bar so the expanded width covers 16 rows. "I found some good used hinges for \$50 and made brackets for the tilt cylinders from scrap metal," Rollins says. "The extensions have extra support in the hinges so they're plenty strong."

To apply the fertilizer, Rollins bought Yetter 20-in. ripple coulters that he bolted to the bar on spring-mounted arms. He says the ripple design lets him travel 6 to 8 mph and place nitrogen between the rows at 3 to 5 in. deep, with minimal soil disturbance.

Rollins pumps the fertilizer with a Hypro hydraulic pump mounted on the saddle tank frame. He regulates application rates from a Raven SCS450 controller with distribution through three Redball flow manifolds. The 4 outside wing rows can be turned off. "With this configuration I can use the machine for 12 rows, or fold out the extension wings for 16 rows. The machine has 17 shanks, with the outside shank supplying a half rate of fertilizer each time the machine goes across the field so he can follow his 16-row



To apply fertilizer, he removed the shanks and gangs from the cultivator toolbar and bolted on Yetter 20-in. ripple coulters.

planter tramline. Gauge wheels on front of the bar keep it stable and maintain uniform placement. Each coulters has 1,100 lbs. of spring tension to maintain working depth.

Fertilizer is carried in 250-gal. saddle tanks mounted on the sides of his Deere 8100 MFWD tractor. "I like this approach because the whole rig is contained on the tractor," says Rollins. "If I was pulling a wheeled tank behind the bar, that's another set of wheels to knock down corn. The saddle tanks add about 6,000 lbs. to the tractor frame when full of fertilizer, which easily offsets the weight of the bar."

Rollins says he probably has \$14,000 to \$15,000 in his custom rig, which is less than half what he would have paid if he bought a new one. In 2012 he'll be testing several application rates to determine which N levels work best. "I'll be putting on 10, 15 and 20 gal. in different strips to see the response," Rollins says. "With the combine monitor we'll know exactly how each application level affects yields."

Contact: FARM SHOW Followup, Grant Rollins, 1459 310th Ave., Pemberton, Minn. 56078 (ph 507 317-4193; grantrollins@yahoo.com).



5-ft. hinged extensions added to each end of toolbar allow the rig to cover 16 rows. He uses his Deere 8100 MFWD tractor to pull it.



Carson Mixon didn't want the wet, moldy hay and mud that builds up around ring-type bale feeders. So he built a hay feeder into the corner of his barn.

Dry-As-A-Bone Hay Feeder Built Into Barn

Carson Mixon's two white mules love his "inside" big round bale feeder that he built into the corner of his barn.

Like most people feeding just a few head of livestock, he was tired of the wet, moldy hay and mud that builds up around conventional ring-type bale feeders.

To eliminate that problem, he built a baled-sized compartment into the corner of his barn with two large feed openings to the outside. The bale, which is loaded into the feeder from inside the barn with tractor forks, rests on a wood floor. To keep the mules dry while feeding, Mixon built a small roof over the openings.

"Hay never gets wet or touches the ground. No waste at all any more," says Mixon.

Contact: FARM SHOW Followup, Carson Mixon, 7909 Highway 110 W., Hortense, Ga. 31543 (ph 912 778-5442).



Bale is loaded into feeder from inside the barn. There are 2 large feed openings to the outside.



Hoogstraat cut holes into his planter's gauge wheels so they don't plug up with mud. He also converted disc openers into notched closing wheels for better traction in mud.

"Holey" Gauge Wheels, Notched Closers Geared To Handle Mud

Brian Hoogstraat made a couple of quick planter modifications to help plant in wet soils. A few holes cut into gauge wheels changed them from mud collectors to what he calls "mud hogs". He also converted disc openers into closers with traction.

"I've been using my mud hogs for about 4 years and covered 3,000 to 4,000 acres with them," says Hoogstraat. "They don't plug up like they used to, and they've held up well."

When he got the idea of modifying his gauge wheels by cutting holes in them, Hoogstraat wasn't sure if the stamped steel would hold up when hitting rocks. He tested just a few at first.

"I use a plasma cutter to cut 4 holes out of each rim," says Hoogstraat.

The holes are about 2 in. wide with sides that taper from 4 1/2 in. long on the outside to 3 1/2 in. on the inside. Hoogstraat found

it took longer to pull wheels off the planter than it did to cut the holes.

"It only took about half a day to do them all. I just eyeballed them and kept going. After you do a couple, you just get in the rhythm," he says.

When closing wheel bearings started going out, Hoogstraat substituted modified disc openers. He had to machine down the mounting bolts to match the smaller bearings on the opener discs.

"I welded 1 by 2-in. pieces of steel to the rim of disc, alternating them with spaces," says Hoogstraat. "The notches give the wheels added traction in mud."

Contact: FARM SHOW Followup, Brian Hoogstraat, 27515 464th Ave., Chancellor, S. Dak. 57015 (ph 605 310-0123; bhoogy@hotmail.com).