Flail Chopper Shreds Stalks Behind Picker

“I’ve tinkered with mounting stalk shredders behind corn pickers for 30 years, but this is the best one I’ve come up with yet,” says Carl Schultheis, Caro, Mich., who turned an old 5-ft. wide International flail chopper into a 6-ft. stalk shredder that he pulls behind his New Idea 2-row corn picker and wagon. It shreds two rows at a time.

What makes the set-up unique is that the pull-behind chopper is electric-powered by a generator mounted up front on the corn picker.

Schultheis paid $50 for the flail chopper. He removed the blower and cross auger, widened the shredder out to 6 ft., and added a couple of hammers. He bolted a 30 hp electric 2-phase motor on top of the chopper to belt-drive a gearbox that powers the shredder. He mounted a splitter gearbox (a heavy duty transfer case off a 1971 Dodge 4-WD pickup) on the corn picker’s pick and hooked it up to the picker’s pto shaft. He clamped a 3-phase generator onto the picker frame behind the splitter gearbox. Two-shafts extend back from the gearbox, one to drive the picker and one to power the generator. An electric cord runs from the generator back to the motor on the chopper.

Schultheis uses a Deere 4240 to pull the picker, wagon, and chopper.

It saves a pass and does a better job than any commercial shredder because the tractor doesn’t run over the stalks first,” says Schultheis. “The hammers cut the stalks twice as they swing around against an angle iron bar. There are no unchopped stalks. Chopped stalks are forced back down onto the ground so nothing flies out the back of the chopper. I used it last fall for the first time on about 20 acres and it worked great. However, it got very windy after I picked the corn and I was afraid the chopped stalks might blow around too much so I plowed them under. The corn stalks were chopped so well that I could hardly tell I was plowing corn ground.

I spent less than $500 to build it. I paid $200 for the motor and $50 apiece for the flail chopper and transfer case. I already had the generator.

“I use two wagons to pick corn and mounted a telescoping hitch on both of them. I leave a power cord permanently on each wagon and unplug it from both the picker and shredder whenever I switch wagons. I can pull on a rope from the tractor in order to unplug the cord from the generator.

The 30 hp motor is under full load most of the time. I ran an electrical lead from the generator up to the tractor so I could mount a clamp-on amp meter, and I plugged a voltage meter into the extension cord. The amp meter tells me the load that’s on the motor, and the voltage meter lets me know if I’m running the generator at the right speed. I mounted a 2-wheel dolly under the chopper’s tongue to carry the weight of the flail chopper and make it easier to hook up to an empty wagon. The dolly wheels are off an old hand leveler. I use them to swing the chopper over to the wagon. By pulling a pin I can adjust the tongue and set the chopper as close as I want to unpicked corn.

If the field gets too wet for the flail chopper, or for some other reason I can’t pull the chopper behind the wagon, I simply pull a pin from a clevis to remove the dolly. I can also put the pto shaft back on the chopper and use any 50 hp or larger tractor to pull it.”

Contact: FARM SHOW Followup, Carl Schultheis, 2999 Van Giesen Rd., Caro, Mich. 48723 (ph 517 673-3409).

RUNS ON SINGLE PHASE ELECTRICITY

“Mini Pivot” Irrigator Made For Small Fields

“Our new low-cost ‘mini pivot’ irrigation system is designed for small fields ranging from 2 to 40 acres and operates on single phase electricity. Maintenance costs are much less than for a conventional system,” says Doug Dobbs, Irrigation Sales, Idaho Falls, Idaho.

Components on the Titan 2000 Mini-Pivot are much smaller than on a full-size center pivot, allowing use of 1/5 hp gear motors to drive each wheel. The 12 gauge, galvanized steel pipe is only 2 7/8 in. in diameter. Compared to 6 5/8 in. dia. for conventional center pivot. Small ATV tires keep wheel tracks to a minimum. Electromechanical controls are used throughout the system.

It’s a cost-efficient way to irrigate small acreages,” says Dobbs. “We didn’t take a big machine and scale it down - we designed the drive train and controls from scratch. The problem with other small center pivot systems is their power requirement and cost. They use 1 1/4 hp motors and gearboxes that require 480-volt, 3-phase electricity. However, a lot of areas don’t have 3-phase power and are so remote that the cost of bringing it in is prohibitive.

Our system is inexpensive to maintain because it uses sealed gear motors that are direct-coupled to the wheels. There are no universal joints or drivelines. Operating costs are very low. Because of the low power requirement we’re testing a solar-powered system that we think has a lot of promise.

“One limitation is that ground clearance is only 6 ft.; so it may not be the best system for field corn.”

The master control panel includes speed control, forward/reverse, wet/dry, on/off, and percent timer. Controls are standard at the center. Controls located at the edge of the field are optional.

“A 40-acre system sells for about $11,500 not including cost of installation or the well. That’s about 35% less than the price of a new comparable conventional system and about the same as a good used center pivot system,” says Dobbs. “A 10-acre system sells for about $7,000. That cost won’t compete with wheel lines but our maintenance costs are much less because cattle won’t bother it.”

Contact: FARM SHOW Followup, Irrigation Sales, 890 11th St., Idaho Falls, Idaho 83404 (ph 800 523-9458 or 208 523-3673).

EASY FOR ONE MAN TO OPERATE

Wire Unroller Works Several Different Ways

One person can string barbed or smooth wire fast and easy with this new wire unroller which can be used several different ways.

The “Reel E-Z” consists of a wire reel mounted on a 1-in. dia. steel handlebar. You can use it to handle a roll of wire by hand, or use adapters to mount it on pickups, ATV’s, tractors, etc. A spring drag keeps tension on the reel so wire doesn’t unroll too fast.

“It’s a new way to do an old job. Makes it easy for one person to string fence wire,” says Chet Sunde. “You can unroll 500 to 600 ft. of wire in 5 minutes or less. We even offer a pickup or tractor 3-pt. mounted toolbar that’ll hold several Reel E-Z units at once so you can unroll as many as five strands of wire at a time.”

Contact: FARM SHOW Followup, Quick Support West, Inc., P.O. Box 492255, Redding, Calif. 96099 (ph 800 995-9521).