

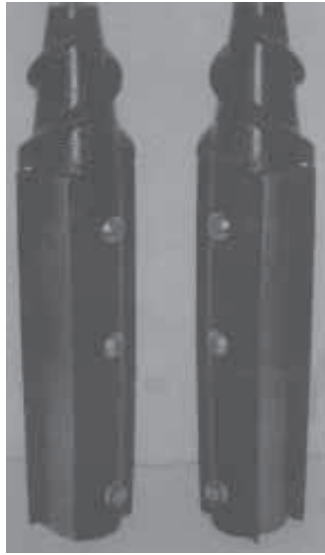
Knife Stalk Rollers For Deere Corn Heads

"Our new knife stalk rollers for Deere corn heads work better than the originals, and they cost less," says James Huls, Clarke Machine, Inc., Howard, S. Dak.

The new knife stalk rollers are designed to replace the existing knife stalk rollers on Deere 90 series corn heads, simply bolting on in their place. The knife blades on the rollers are the same ones used on Case IH and New Holland corn heads. Clarke Machine casts its own spiral roll to accept the blades.

"Our knife stalk rollers offer a number of advantages over Deere's," says Huls. "The knife blades do an excellent job of cutting through corn stalks and will last for several years before they'll have to be replaced. The knife blades on Deere stalk rollers usually work okay the first year, but after that they get dull and it's expensive to resharpen or replace them. Also, our knife blades are designed so they can be turned upside down for twice the wear. The Deere knife blades can't be reversed."

The knife stalk rollers sell for \$525 per row. Contact: FARM SHOW Followup, Clarke Machine, Inc., 23303 435th Ave., Howard, S. Dak. 57349 (ph 800 658-4568 or 605 772-4164; fax 605 772-4132; dave@clarkemachine.com; www.clarkemachine.com).



Clarke Machine's knife stalk rollers are designed to replace the existing rollers on Deere's 90 series corn heads, simply bolting on in their place.



Using parts from several old machines, Chris Ross built his own pull-type round bale wrapper entirely from scratch. The controls mount on the machine's tongue.

He Built His Own Round Bale Wrapper

"I built it because I couldn't justify the cost of a new machine and I didn't have a bale wrapper," says Chris Ross, Pawlet, Vt., who used parts from several old machines to build his own pull-type round bale wrapper.

The 2-wheeled, hydraulic-operated machine was built entirely from scratch. A front-end loader is used to load a bale onto a pair of rubber rollers. The bale spins in a circle and also rotates on the rolls as it's spinning. After the bale is wrapped, the operator dumps it off the back of the machine. The controls mount on the machine's tongue.

Ross used parts from a mixer wagon, a New Holland haybine, a lawn tractor, and a truck. The wrapper's frame, sprockets, shafts, bearings, and hydraulic motor - which operates a conveyor feed chain that rotates the bale - all came off the mixer wagon. The rolls that the bale sits on are off the haybine, and the tires that guide the bale as it rotates are off the lawn tractor. The conveyor is driven by the rear end off a truck.

Each rubber roll consists of a length of steel pipe with a washer and rod welded to each end. Ross turned a length of fire hose inside out and pulled it down over each pipe to provide a rubber gripping surface on the outside,

which the wrapping material rides on.

"I built it in my garage last winter and used it this summer to wrap more than 200 bales. It worked great," says Ross. "Everyone told me it wouldn't work. I had never seen a bale wrapper work before I built this. But I built stuff all the time, and I decided that it couldn't be that hard to do. It took quite a bit of altering to get it to work right but it cost almost nothing to build. I found the haybine rolls in a dump years ago, and I got the mixer wagon free for parts.

"Most commercial round bale wrappers are 3-pt. mounted, but I wanted a pull-type model because it's easier to hook onto. There's no fighting with any 3-pt. hitch arms."

A pair of hydraulic cylinders allow the rolls to be raised or lowered in order to adjust to different bale sizes. "Both rolls are driven, but one roll is put into freespool mode when the bale is dumped off in order to avoid ripping the plastic," says Ross.

"I use it to wrap grass silage bales, which my beef cows eat like you wouldn't believe," notes Ross.

Contact: FARM SHOW Followup, Chris Ross, 780 Vermont Route 133, Pawlet, Vt. 05761 (ph 802 325-3231).

Modified Quonset Stores 100,000 Bu.

When filled to the brim, the Peterson brothers' grain storage quonset holds 100,000 bu. With that much product in one spot, the family took extra care to make sure it was set up right.

Brothers, Wayne, Len, Ervin and Don engineered the construction of the building, modifying the original building design to include unique aeration and wall reinforcement systems.

Before the cement was poured for the 160 by 60 by 25-ft. high ZipperLock Quonset, Petersons incorporated "reversed aeration," (also known as "under-floor negative air flow") into their plans. The under-floor system consists of 6-in. pvc pipe. The cement floor has recessed screened openings. The pipes run outside to manifolds connected to two 1 1/2 hp electric fans on the outside of the building.

"These small fans pull the air in the quonset downward and out of the building through the floor," Don says. "Otherwise, the warm grain's convection current would create condensation at the top of the building."

At the time they put up the strange building the Peterson brothers compared its price to that of equivalent aerated hopper bottoms. They discovered that the aerated quonset

would cost about 1/3 as much including the building, aeration system and bin sweep.

"As soon as we fill it, we turn the fans on at night or on cool days, and continue this until the air coming out of the fans is at 0° Celsius," Don says. "Filling the quonset to the top with grain puts a lot of stress on the building walls. To reduce this stress, we put reinforcement bars in."

On every rib along the inside walls, the Petersons bolted 1-ft. long sections of 1/4-in. chain (at a height of 10 ft). The other ends of the chains are welded to a building-length 4 by 4 by 1/8-in. square tube (since this is done along both side walls, there's one tube on each side of the building, running the length of the building.)

Then, every 10 ft., a section of 3/8-in. cable is attached to the tubes with an adjustable bolt. The cable completes the system that effectively joins these opposite walls.

"The tubes even out the weight on the wall, and the cables transfer it from one wall to the other," Don explains. "It gives the whole building a lot more strength."

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Gerald Devloo used some old piping and 8-in. dia. auger flighting to make this 6-ft. long mini auger. It easily fits into smaller openings and delivers grain to a hopper he sets up under a bigger 10-in. dia. auger.



Mini Auger Makes Grain Handling Easier

When Gerard Devloo, Somerset, Manitoba, bought a new 10-in. dia. grain auger, he discovered it wouldn't fit into smaller grain bin hoppers openings because of its large safety screen. He didn't want to take it off so he made a mini auger to move grain from the bin to his big auger.

He used some old piping and 8-in. dia. auger flighting to make the 6-ft. long "mini auger". It easily fits into smaller openings and delivers grain to a hopper Devloo set up under the bigger auger.

He painted the mini auger red and added pieces of reflective tape to make it visible at night.

Devloo takes the motor off the bin sweep on his new auger and attaches it while in the bin opening.

"I use it until the grain is down to the point where I can open the door and put the big auger in. Then I move the motor back to the sweep auger," he says, noting that the mini-auger is light enough that he can lift it into his pickup for transport.

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A front-end loader is used to load bales onto a pair of rubber rollers that came off a New Holland haybine.