



Loyns modified a conventional 2,000-bu. bin to make recirculating batch dryer.

2,000-BU. CAPACITY UNIT EASILY KEEPS UP WITH COMBINE

Hopper-Bottom Grain Dryer Is "Totally New"

If you've been looking for a faster and less complicated way to dry grain, you're going to like this new hopper-bottom grain dryer that'll handle up to 2,000 bu. at a time and can be used for grain storage once harvest is over.

Ron Loyns, a Naicam, Sask., grain farmer and pedigree seed grower, developed the new dryer to get away from his 400-bu. batch dryer which required loading and unloading every hour and a half. It was inconvenient and couldn't keep up with his combine.

He decided to come up with a totally new type of recirculating batch dryer by modifying a 2,000 bu. bin he had on the farm. It worked so well he dried 30,000 bu. with it the first season.

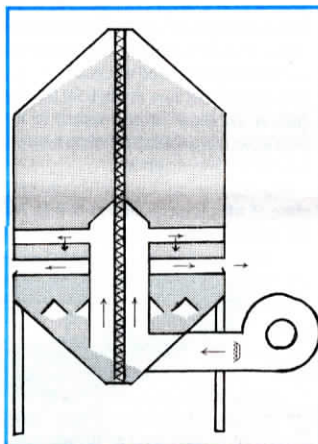
"We start drying at 18 percent moisture and the dryer keeps up to the combine - no problem," he says.

Grain is dried by a large centrifugal fan mounted alongside the hopper, an air plenum that runs vertically up the middle of the hopper, and a propane or natural gas burner. A circulating auger, powered by a 7 1/2 hp. electric motor, runs from the bottom of the bin to the top.

Grain is loaded into the top of the bin and feeds down to the bottom and is continuously recycled back up to the top. As it falls from the top to the bottom, it moves past 30 rectangular hot air ducts which feed out from the central air plenum like spokes on a hub. The ducts are open only on the bottom, forcing hot air down through the grain. A second set of spoke-like ducts, 26 in. below the hot air ducts, are also open only on the bottom but are vented to the outside of the bin, allowing the hot moist air to exit the bin. Dry grain is discharged through a slide gate at the bottom of the dryer.

You can start drying with as little as 300 bu. of grain and add up to 1,700 bu. while the dryer is in operation. Electric motors drive the fan, circulating auger, and loading auger.

"Your initial capital cost is less, especially since there's no need for holding



Grain, loaded into top of bin, is continuously recycled back up to top by center auger. As grain falls from top to bottom, it moves past 30 hot air ducts which feed out from central air plenum like spokes on a hub.

space on either side of dryer or the need for extra augers. Grain is always protected from the elements and because grain is dried in larger volume, there's less chance of over or under drying. It's completely self-cleaning and safe. And, once you're done drying, you can use the drying bin for storage," says Loyns.

Grain level sensors halfway up the wall and at the top of the bin make it easy to monitor grain level from the ground. Drying temperature is controlled by a modulating valve and monitored with an analog thermometer. All dryer functions are controlled manually. A full bin will completely circulate in about an hour and 20 min.

Loyns has contracted with a manufacturer to produce the drying bins. Sells for \$20,000 (Canadian).

For more information, contact: FARM SHOW Followup, Ron Loyns, Naitek Drying Systems Ltd., P.O. 295, Naicam, Saskatchewan S0K 2Z0 Canada (ph 306 874-2950).



Schaffert's 5 1/2-in. dia. poly wheel sets between disc openers and closing wheels and runs 3/4 to 1 in. off to side of furrow.

POLY WHEEL ELIMINATES AIR POCKETS

Add-On "Furrow Closer" For Row Crop Planters

"Farmers who've tried them can't believe how well they work," says Paul Schaffert, Indianola, Neb., about his new "Furrow Closer" attachment for row crop planters that's designed to close the seed furrows better than existing covering wheels.

It consists of a 5 1/2-in. dia. abrasion-resistant poly wheel, mounted on a triple-sealed bearing, that sets between the disc openers and angled closing wheels. The disc runs 3/4 to 1 in. off to the side of the furrow at about 3/4 to 1 in. deep.

"It eliminates air pockets in the furrow and improves seed-to-soil contact. Works great in heavy or light soils and in no-till, ridge-till or conventional tillage," says Schaffert, noting that the problem with existing angled press wheels is that they don't always get the furrow closed in heavy soils and often apply too much down pressure in light soils, forcing the seed up out of the ground.

"The Furrow Closer wheel lets you reduce down pressure on the angular press wheels by half or more," says Schaffert.

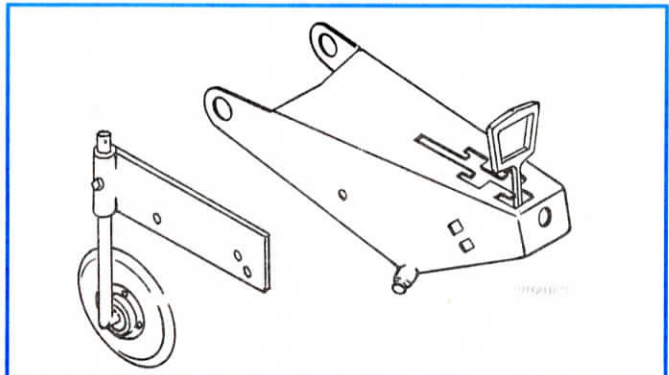
The patent pending poly disc self-cleans

even in wet gumbo soils and is resistant to herbicides and liquid fertilizers. "At first we tried a steel disc but it would plug up in wet soils and didn't do nearly as good a job as this self-scouring poly disc. Nothing sticks to it," notes Schaffert, adding that some farmers with prototypes have put over 1,000 acres on the discs with "very little wear".

Schaffert says the discs result in higher plant populations due to increased germination and reduction of compaction over the seed due to the lessening of down pressure on the press wheels.

The Furrow Closer mounts on a bracket - takes less than 10 min. per row to install - that makes it easy to adjust pitch, depth and distance from the row. Sells for \$70 per row. Fits Deere 7000 Series planters, Kinze planters and White 5000 and 6000 Series planters. Brackets for other planters are being developed.

For more information, contact: FARM SHOW Followup, Schaffert Manufacturing, Co., Rt. 1, Box 157, Indianola, Neb. 69034 (ph 800 382-2607 or 308 364-2607).



Wheel mounts on bracket making it easy to adjust pitch, depth and distance from row.