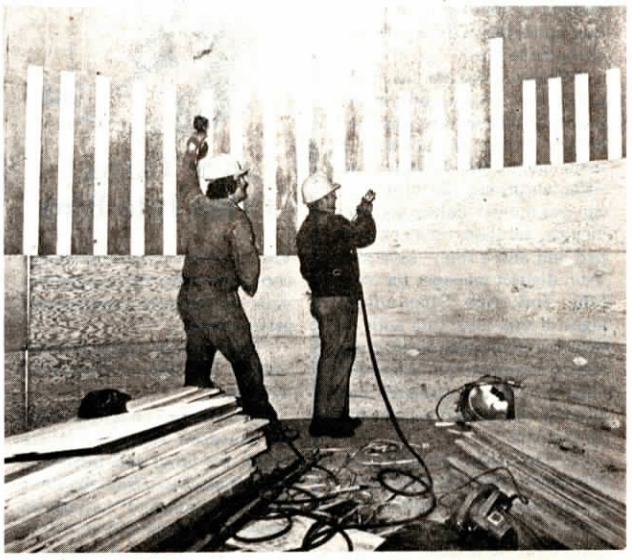
Grain Storage Ideas
(Continued from preceding page)



Convert Silo To Dry Corn Storage

"We tried plastic, epoxy and cement before hitting on the idea," says Roy Bilyeu, owner of Mason City Silo Repair, Mason City, Iowa, who has developed a process for converting concrete stave silos to dry corn storage. "We've converted more than 100 silos so far and all our customers are satisfied," he told FARM SHOW.

Bilyeu builds a wooden liner completely covering the inside of the silo. The liner insulates dry corn from the moist wall of the silo, creating an air space to evaporate condensation and frost.

"We create a 1-in. air space by nailing 1 x 4's directly to the silo walls, spaced 6-in. apart and running vertically. We then staple ¼ in. plywood to the 1 by 4's covering the entire inside. In effect, we're building a barrel inside the silo," says Bilyeu.

"We also seal the top of the silo and pour a concrete floor," he points out. And, if the silo wasn't originally built strong enough to hold corn, we strengthen it with extra hoops."

According to Bilyeu, the key to successful conversion of silos into grain bins is proper aeration of the grain. "We use a 1½ hp. fan blowing through a 6-ft. length of vented 12-in. pipe across the silo floor, blowing or pulling air through the grain."

Base conversion price for a 20-ft. dia. silo is 40 cents per bu. of grain the converted silo holds, plus whatever extra work is needed, depending on condition of the structure and what's needed to ready it for storing shelled corn or other dry grain.

Contact: FARM SHOW Followup, Mason City Silo Repair, 20 9th Street N.E., Box 363, Mason City, Iowa 50401 (ph 515 425-4611).

Build Yourself A Plywood Grain Bin

Curtis Hemstad, grain farmer near Stanley, N. Dak., has been using plywood bins with plastic covers on his own farm for several years. He willingly passes on what he's learned to FARM SHOW readers who may need extra temporary grain storage.

Basic parts of the bin are 4 by 8-ft. sheets of ⅜-in. plywood which are overlapped 6-in. and bolted together with 1¼ by ¼-in. bolts at each joint. A circle of 12 sheets makes a 3,000-bu. bin; 14 sheets make a 4,000-bu. size.

When the last sheets are bolted together into a full circle, Hemstad loops a 5/16-in. cable around the bin and tightens it with a turnbuckle.

The bin must be set up on well-drained soil, he says, and sod makes a good base that won't give problems with stones and gravel. Hemstad starts the pile of grain before he sets up the bin, which makes it easier to form the plywood sheets into a perfect circle. When the paneling is in place, he fills the bin with a standard grain auger, letting it cone up naturally until the base of the pile is almost to the top of the plywood.

After the grain is safe from heating, Hemstad puts a 6-mil plastic cover over the top of the pile. He lets it lap over the plywood 6-in., then fastens it in place with wood laths.

Hemstad cautions that the grain must be dry before it is covered because the plastic forms an airtight seal and damp grain will heat. He recommends 14% moisture or lower. He has stored wheat for up to 8 months in one of these bins.

Final touch is to lay a ring of about 30 tires on the plastic, lash them together with rope, and anchor the rope in about three places. A 4,000-bu. bin should have two rows of tires.

To open a bin, Hemstad takes out a few bolts at a seam and it usually bulges open enough to insert his auger. Or, he cuts a hole with a keyhole saw.

Contact: FARM SHOW Followup, Curtis Hemstad, Stanley, N. Dak. 58784 (ph 701 628-2714).

Grain Bagger Provides Instant Storage Solution

With the Ag-Bag Grain Bagger from the Ag Bag Corp., you can store excess grain in plastic bags.

The manufacturer says the machine is a "low-cost, high-capacity grain bagger for storing wheat, barley, corn and other grains in oxygen-free storage bags." The bags give you the flexibility of storing grain anywhere from the field to the farmyard and provide for unlimited grain storage.

"With the bagger you can bag high moisture grain (25% moisture or higher) as well as dry grain (12% moisture or better) for up to one year before feeding or shipping," says a company spokesman.

The 7 ft. 10 in. high, 12 ft. 9 in. wide machine features a 3 ft. 10 in. dia. hydraulically powered auger which feeds grain from the hopper into the 9 ft. dia. bag which holds up to 6,000 bu. of grain.

A hopper on top of the bagger enables you to load in directly from your combine or side unloading box.

Grain can be removed from the bags with a pneumatic systems, augers, or tractor and loader. Grain Bagger sells for $5,635.

Contact: FARM SHOW Followup, Ag Bag, P.O. Box 418, Astoria, Ore. 97103 (ph 503 325-2488).