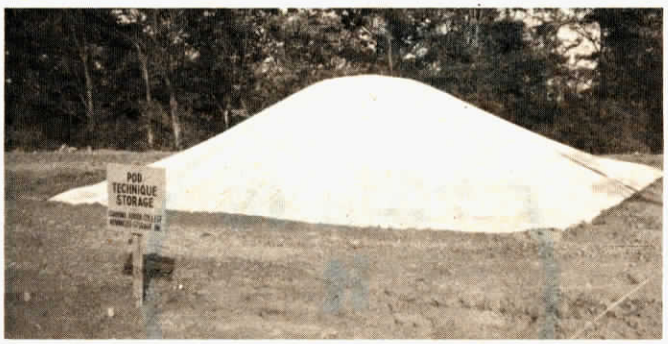


Sealed-up "pod" keeps oxygen out.

HEAVY PVC COVER KEEPS BACTERIA AND MOLD FROM GROWING

Airtight Storage System Eliminates Spoilage

"When they opened up the pyramids in Egypt they found that grain stored for thousands of years was in perfect condition because it had been stored under airtight conditions," says Thurman Boykin, spokesman for a new Clarksdale, Miss., firm that's promoting a new grain storage system that completely seals out air, reportedly storing grain for indefinite lengths of time with zero spoilage.

Dubbed the "Pod" storage system, the idea was developed and perfected in Australia. The idea is to seal grain inside a flexible heavy "cocoon" of a special PVC fabric. Once sealed, all oxygen is used up and the carbon dioxide (CO_2) given off by the grain kills off all bacteria molds and insects. The heavy PVC fabric is so puncture-resistant you can drive over it with a tractor. The company says rodents leave the sealed-up pods alone because no odor can leak through the fabric.

"You can fill it with grain at harvest, seal it up and open it several years later and it'll be in perfect condition. There's no need to spend money on expensive aeration systems," says Boykin, noting that the company puts portholes in the side of the storage pods so farmers can check the quality of the grain while stored.

Here's how grain is sealed up in a Pod. First an area is cleared and leveled. Then earth berms, about 3 ft. high, are erected on 3 sides with a tractor loader or blade. A floor liner is then laid across the storage area and grain loaded onto that. Once grain is piled into place, the PVC cover is put over the top and sealed along the edges with a special chemical solution and a heat-sealing machine. Pods can be erected to any size and can be reused after grain is removed by simply slicing off about a 2-in. edge where the Pod is sealed. The PVC fabric has a 25-year life expectancy.

"Farmers can set it up themselves and either buy or rent the sealing apparatus. Storage cost is approximately 10 cents per bushel for amounts as large as 200,000 bu. up to 20 cents per bushel for amounts as low as 3,000 bu.," says Boykin, noting that the company's first grain storage pod is set up at Coahoma College in Clarksdale.

For more information, contact: FARM SHOW Followup, Advanced Storage Inc., Rt. 2, Box 144X, New Africa Road, Clarksdale, Miss. 38614 (ph 601 624-9843).

Up-front coulter which slices through trash, followed by subsoil shanks. Disk-hillers form small ridges behind.

COMBINE BEST OF NO-TILL AND CONVENTIONAL TILLAGE

Row Zone Tillage "Better Than No-Till"

"It's a step beyond no-till," says Randal Cox, Van Wert, Iowa, inventor of a new one-pass tillage tool called the Cox Row Zone. "It gives you the best of both no-till and conventional till since you just till a 6-in. wide strip for each corn row and leave the rest of the ground intact with the trash untouched to reduce erosion. You can also use it on ridge ground without any problems."

The Row Zone consists of three main components. Up-front 18-in. dia. coulters cut through trash. They're followed by subsoiler shanks which can work as deep as 15-in. The shanks are followed by disk hillers that create 4 to 5-in. tall, 8 to 10-in. wide ridges that reseal the trench and create the seedbed. Cox says this raised seedbed warms up faster and keeps the seed out of water after heavy rains.

The new implement becomes a one-pass tillage tool by pulling a planter directly behind it and applying fertilizer and herbicide at the same time. In working the field, you line up the Row Zone so it tills directly over the old row. Cox says you continue working over the old row until the year before planting a solid-seeded crop, in which case you'll want to work between the old rows to reduce the possibility of field streaking the next year.

Row Zone can also be used in the fall to incorporate fertilizer and to break up hard pan to draw down winter moisture. In the spring you can then run the Row Zone directly over the same rows again as the shanks will automatically realign themselves.

Models are available in 4, 6, and 8 rows (30-in. wide). Cox says the implement requires about 15 hp per row. Sells for $2,000 per row.

For more information, contact: FARM SHOW Followup, Randal Cox, Van Wert, Iowa 50262 (ph 515 445-5165).

TAKES MEASURED SAMPLES AT EVENLY-SPACED INTERVALS

Automatic Sampler Tests Grain Dryer Performance

A new automatic grain sampler monitors grain dryer performance even when you're not around by taking measured samples at fixed intervals from grain as it exits your dryer.

"Every farmer who's used one says he wouldn't be without it," reports Lowell Lenz, inventor. "It lets you measure overall performance of a dryer with much greater success than spot checks which can vary by as much as 6 to 8 pts."

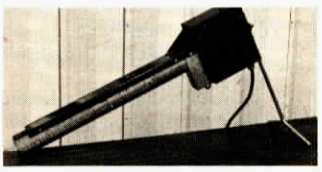
The sampler consists of a short length of auger powered by a small ½-hp. electric motor. An electrical gate at one end of the auger tubing opens every few minutes, depending on the sampling interval desired, and stays open for anywhere from ½ sec. to 2 or 3 sec., depending on how large a sample you want to take each time.

Lenz recommends positioning the portable sampler so that it opens into the stream of grain between the outlet auger on the grain dryer and the take-away auger. Samples taken by the sampler are collected in a pail that hangs just below the electric motor.

In operation Lenz says that he sets the sampler to open for about 2 sec. every 2 min. In 15 min. of operation, the sampler collects a gallon bucket full of grain. He then tests the average moisture content of the collection of samples.

"I got the idea for the sampler while working on new dryer designs," says Lenz, who is also inventor of the popular Dry-Mor dryer. "I got tired of running out to check samples all the time. Farmers who dry grain overnight can put this sampler to work and find out in the morning what moisture grain went into their bins. It can also be used on elevator legs, or anywhere else samples must be taken on a regular basis."

Sells for $329.



End of grain sampler auger, left, is placed in stream of grain. Samples drop into pail placed below motor, right.

For more information, contact: FARM SHOW Followup, Lowell Lenz, Geneva Mfg., Inc., 420 Geneva Road, P.O. Box 1087, Alexandria, Minn. 56308 (ph 612 762-8178).