



Bin walls are made of corrugated steel (4 in. wide corrugations) and lined on the inside with glass fused to steel.



Note the vertical "stiffener" braces, made of U-shaped channel iron, located about 50 in. apart around the outer bin wall.

**FEATURES CORRUGATED SIDES, BREATHER BAG AND AN ATTRACTIVE PRICE TAG**

By Harold M. Johnson  
Editor

## Glass Lined Grain Bin For High Moisture Corn

At first glance, a first-of-its-kind corrugated glass lined grain bin, introduced by Long Manufacturing, Tarboro, N.C., looks a lot like a Harvestor.

It's glass lined, colored blue, equipped with a breather bag and designed for sealed storage of high moisture corn.

"We expect to give Harvestore some real competition with this new, lower-cost concept in sealed storage," Z. Vance Long, vice president of engineering, told FARM SHOW.

On a per-bushel basis, the new sealed storage bin will reportedly sell for about 40% less than a Harvestore. One of the first prototypes to roll off Long Manufacturing's new facility for fusing glass to steel, located in Davenport, Iowa, made its public debut at the recent Farm Progress Show in Indiana, and was also on display two weeks later at the Sunbelt Agricultural Exposition in Moultrie, Ga.

From a distance, the new-style bin resembles Harvestor's sealed grain storage structure. But, as you move in closer, you discover that its blue siding is corrugated, just like a conventional grain bin. Individual corrugated steel sections are glass lined on the "inside" side and bolted together with special rubber-headed bolts. These special bolts, combined with caulking of all seams during erection and a breather bag, provide an oxygen-limiting enclosure for sealed storage of high moisture corn and other grain, explains J.Z. McKinley, grain equipment specialist with Long Manufacturing.

"Compared to conventional grain bin storage at about \$1.25 a bushel, our new glass lined bin is expected to retail for about \$1.75 per bushel. That's about 40% less than the going rate for conventional sealed storage structures with straight sides," McKinley told FARM SHOW.

The new structure's lower cost, ac-

ording to McKinley, stems from the savings in using lighter, lower cost steel and then strengthening it with corrugations and vertical "stiffener" braces located about 50 in. wide on the outside bin wall. The galvanized stiffeners — made of 1/4 in., U-shaped channel iron — are about 5 in. wide.

Initially, Long Manufacturing is introducing just one model — a 21 ft. dia. unit. Larger 24, 27 and possibly 30 ft. dia. models are slated for production soon after the first of the year, according to McKinley.

The 21 ft. dia. bin is available with 9 rings (10,130 bu. capacity); 11 rings (12,255 bu.) and 13 rings (14,377 bu.). Individual rings are 44 in. high and have 11 corrugations. Thickness of the steel used in a bin ranges from 14 ga. at the bottom, 16 ga. in the center and 18 ga. at the top.

McKinley notes that estimated per bushel retail cost — including breather bag, floor, concrete platform, roof, wall and roof ladders, an 8 in. dia. Neco bottom unloading auger and on-site erection — will run about \$1.85 for the 9 ring, \$1.75 for the 11 ring, and \$1.65 for the 13 ring bin — all in the 21 ft. dia.

"This price tag for sealed storage looks awfully attractive when stacked against the combined cost of a similar-sized conventional grain bin and a drying facility to go with it, and against the approximate \$3 per bu. cost of conventional sealed storage in glass-lined structures with

straight walls," McKinley points out.

He adds that the new glass-lined bin can be erected with the same jacks used for putting up conventional grain bins.

Long Manufacturing, which entered the sealed storage market about a year ago, also offers conventional straight-sided glass lined oxygen-limiting structures for silage, haylage and high moisture grain, and glass-lined manure slurry tanks.

For more details, contact: FARM SHOW Followup, Long Manufacturing, Box 1139, Tarboro, N.C. 27886 (ph 919 823-4151).



Individual sections are bolted together with rubber-headed bolts.

### Catching Up On What You've Missed!

Many new subscribers have asked if they can obtain back issues of FARM SHOW. The answer is yes. Here's what's available:

- 1977 — Two of the 6 charter-year issues (Vol. 1, No. 3 and Vol. 1, No. 4) are still available.
- 1978 — All 6 issues still available.
- 1979 — All 6 issues still available except one (Vol. 3, No. 5).
- 1980 — All 6 issues still available except one (Vol. 4, No. 6).
- 1981 — All 6 previously published issues still available.
- 1982 — All back issues for the year still available except one (Vol. 6, No. 2).

Send your check for \$2.00 per copy to: Back issues, FARM SHOW Magazine, Box 704, Lakeville, Minn. 55044. Make your check payable to "FARM SHOW".

### ORDER FORM FOR NEW SUBSCRIBERS

#### Order Form For New Subscribers

**Yes!** I want to be first to learn about latest new products. Please send me one full year's subscription [\$9.95 per year in the United States; \$11.95 per year in Canada-payable in Canadian dollars and foreign countries]. I understand I can cancel at any time and receive a full refund if not satisfied.

My check (\$ \_\_\_\_\_) is enclosed.  Bill Me (Your Initials \_\_\_\_\_)

Name \_\_\_\_\_ (PLEASE PRINT)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Make check payable to FARM SHOW. Clip and mail this coupon to: FARM SHOW, 8500 210th St., Johnson Building, P. O. Box 704, Lakeville, Minn. 55044.