By mounting a pair of 2,000-bu. grain bins on top of a steel-framed "drive-through", Davies is able to load trucks fast.

A crane operator was hired to lift bins on top of drive-through frame, which measures 16 ft. wide, 14 ft. high, and 36 ft. long.

"WORKS BETTER THAN A GRAIN LEG"

Double Overhead Bins Make Grain Load-Out Easy

"It lets us load semi trucks fast, saving time and money," says Donald Davies, Dawn, Mo., about the pair of 2,000-bu. grain bins he mounted on top of a heavy-built, steel-framed "drive-through" that has a home-built dump pit and weigh scale built into it.

Davies bought the bins from a nearby farmer for $400. Each 18-ft. dia. bin has four rings. He unbolted the bins from their floors, then jacked them up and used a Donahue trailer to move them 15 miles to his farm. There, he hired a crane operator to lift the bins on top of the drive-through frame, which measures 16 ft. wide, 14 ft. high, and 36 ft. long. He tach welded the first bin onto the frame in two or three spots to keep it from blowing off, then lifted the second bin onto the frame. Once both bins were in place he welded a hoppered steel floor onto the frame under each bin.

The bins are split into four compartments which each have a 20-in. sq. opening at the bottom. One bin is used as a holding bin for corn gluten feed and soybean hulls, which is blended together to make cattle feed. The other bin is used to load out grain. Davies keeps soybeans in one half of this bin and corn in the other half.

During the fall, trucks coming in from the field unload grain into the dump pit and from there it's augered into any of five nearby bins. A low-boy auger delivers grain from the pit to a 2-wheeled transport auger that can be rotated 360 degrees to load grain into any of the bins. During the spring, the same auger is used to load grain or feed out of the five bins and into the overhead bins.

Davies built the entire drive-through set-up including the frame, floor, dump pit, 30-in. sq. drive-over grate, and dump pit auger.

"It's crude looking but it works, and we've got less than $3,000 tied up in the entire system," says Davies. "I think it works a lot better than a grain leg because we can dump grain out of our hopper bottom trailers fast and easy, without having to back up to an auger all the time. We can load and weigh grain fast. We had been using a conventional overhead grain loadout spout, but it often took an hour or more for the semi truck to load up. With the 20-in. sq. openings in these overhead bins, it takes only about five minutes to load 900 bu. into a semi truck. If we buy a semi load of corn gluten or soybean hulls, often when they deliver the load we'll load the truck right back up with grain so we can sell a load and save on trucking charges.

"I built the drive-through with used steel which I bought for $1 per foot at a junk yard. I used 8 and 10–in. steel I-beams for the frame and 1 1/4-in. galvanized steel roofing for the sides.

"I paid $45 per hour for the crane. It took the operator only about 45 minutes to set both bins on top of the frame. To raise each bin we hooked chains onto a truck tire and then attached the crane's cable to the chains."

To make the dump pit auger, Davies first used a 4 by 8-ft. sheet of steel to make a four-sided hopper which he then mounted at the end of a length of 8-in. dia. steel pipe. He then set the auger into a hole that he dug into the ground and poured a concrete slab even with the top of the hopper.

He used a series of 30-in. long, 2-in. dia. pipes to build the drive-over grate. The ends of each pipe lay in pockets that are built into lengths of angle iron.

"If we want to clean out the pit all we do is lift the pipes up out of their pockets. Several other people in our area have built similar dump pits with our help," notes Davies.

Contact: FARM SHOW Followup, Donald Davies, Rt. 1, Box 194, Dawn, Mo. 84638 (ph 660 745-3350; fax 3360).

Grain Bin Mounts On Home-Built Hopper Bottom

"It saved me a lot of money," says Gary Stelpflug, Lancaster, Wis., who mounted a 3,000-bu. grain bin on top of a home-built, 10-ft. tall steel hopper to make his own 4,000-bu. wet holding bin.

Stelpflug uses the wet holding bin to dump wet corn from the field during harvest. The bin stands next to his continuous flow grain dryer.

He made the hopper bottom out of 1/4-in. thick steel plate and mounted it on 16 steel legs (made out of 3 by 3-in., 3/8-in. thick angle iron) that are anchored on 5-ft. deep footings. He unbolted the grain bin from its concrete pad and used a truck-mounted crane to set it on top of the hopper bottom, where he bolted it on.

An auger automatically delivers corn from the hopper into the dryer. From there the corn is augered to storage bins for cooling.

"It lets us keep our combine working in the field all the time and is a real time saver," says Stelpflug, who built the unit with the help of a local machine shop. "We can keep the dryer going all night long and by the next morning the bin is empty so we can go back to the field. We can run about 7,000 bu. a day through the bin and dryer. We had been using a big gravity box as a wet holding bin but it could hold only about 600 bu. We didn't have any place else to dump our corn so our combine had a lot of downtime.

"I think my wet holding bin actually works better than commercial models because it's sloped at a 45 degree angle so even wet corn will slide down it. Most commercial models slope at only a 23 degree angle. Mine is also built much stronger than most commercial units.

"I already had the bin which was too small for our needs and didn't have a drying floor. We had to make our own hopper because, as far as I know, no one makes a pre-fab hopper bottom for a 16-ft. dia. bin. I spent $2,000 to build the hopper bottom. Commercial wet holding bins sell for $8,000 to 9,000, and you also have to spend another $1,000 to $2,000 more for concrete and to hire a crane to set the bin onto the hopper bottom."

He used eight 4-ft. wide, 10-ft. long sheets of 1/4-in. thick steel to make the hopper bottom. He cut each sheet into a triangle shape and made three bends in it, then welded all eight pieces together to form a circular shape. He bolted 4-in. wide flat steel all the way around the top of the hopper so he could bolt the bin onto it and then welded vertical lengths of 3-in. angle iron, reinforced by 1/2-in. rerod, to the bottom of the rail. He cut a series of 1/2-in. dia. holes in the rail and ran a J-bolt through each one. He then tarred the entire outside part of the rail.

Contact: FARM SHOW Followup, Gary Stelpflug, 7694 Pigeon River Road, Lancaster, Wis. 53813 (ph 608 723-4993).

Stelpflug mounted 3,000-bu. grain bin on top of a home-built, 10-ft. tall steel hopper to make his own 4,000-bu. wet holding bin. Bin stands next to his continuous flow dryer (above). He made the hopper bottom out of 1/4-in. thick steel plate and mounted it on 16 steel legs that are anchored on 5-ft. deep footings (right).