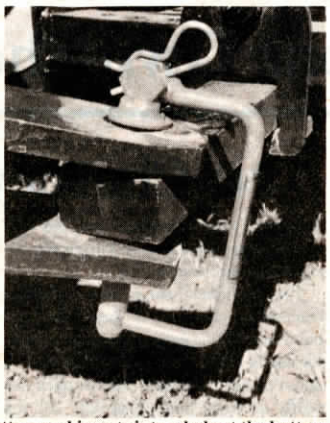


Pivoting handle hinges at the top and its bottom end inserts into a hole at the bottom of the pin. Cotter pin locks hinge so pin can't jump out.

TOP-MOUNTED LOCK KEEPS IT FROM BOUNCING OUT

New-Style Safety Hitch Pin

A positive-lock safety hitch pin, developed and patented by Iowa farmer Gary Goodlove, of Palo, uses a large cotter pin to lock and hold it in place. But unlike conventional safety hitch pins, this one 's different — the locking pin is on top rather than underneath the drawbar.

"Hitching is much safer with this top-side locking pin," explains Goodlove. "Corn stalks and other debris can't strike it and bounce it out."

Goodlove adds that, when tandem axle rigs are pulled over heavy trash, the problem of hitch pins bouncing out is compounded. "Tandem axle equipment increases the vertical thrust on the drawbar, causing the tongue to bounce and thus increase chances that the pin might bounce out. This can't happen when the locking pin is positioned on top the drawbar."

The 6 in. long pin 's pivoting handle hinges at the top and its bottom end inserts through a hole at the bottom of the pin. The configuration is self-locking in itself but "foolproof" locking for all situations is virtually assured by inserting the large cotter pin through the top-side hinge so the locking handle can't pivot, Goodlove points out.

Available with 3/4 in. dia. pin ($9.95) and 7/8 in. dia. pin ($10.95).

For more information, contact: FARM SHOW Followup, Agri- Safety, Box 1870, Covington Road, Palo, Iowa 52324 (ph 319 396-2010).

ONE'S MAGNETIC AND THE OTHER'S SPRING-LOADED

More New Hitch Pins

The hitch pin is one of the smallest and simplest pieces of equipment on the farm but it can also be one of the most aggravating. Two new hitch pins promise trouble-free use.

Magnetic Pin

Magnet is built into top of pin.

"I spent a year and a half developing this pin so it works right," says Paul Morris, manufacturer of the new pin. "One farmer who saw my prototype said he bought a magnetic pin 25 years ago but it was built too light for big equipment and didn't last."

The 70-lb. pull magnet is encased in a chrome cup on the 7/8-in. dia. pin. It takes a strong jerk on the plastic-coated handle to pull the pin out. Sells for $9.95.

Spring-Loaded Pin

Pin installs upside down.

Paul Morris also sells a new spring-loaded hitch pin that's designed to eliminate the problem of snagging trash when making hay or wherever a dangling pin might get in the way.

The pin installs upside down with the head of the pin laying flat against the underside of the hitch. It tightens down with a spring-loaded wing nut on top. A "nut stopper" flips down over the wing nut to keep it in place. Sells for $9.95.

For more information, contact: FARM SHOW Followup, Paul Morris, Bosch Lights, Rt. 1, Versailles, Ind. 47402 (ph 812 689-5620).

MINIMIZES "NORTH COUNTRY" FREEZEUP, MAKING UNLOADERS LAST LONGER

Outside Insulation For Upright Silos

By Mart Kirik, Agricultural Engineer

A new tower silo unloader costs $10,000 to $12,000 and, in "north country" where freezeup in below zero weather is a problem, lasts seven years if the owner is lucky. When 1.5 to 2 ft. of haylage is frozen solid along the inside walls, you can imagine how slowly the silo unloader chips away at feed as it dances on top of frozen material.

To help solve the problem, some Canadian farmers have invested $4,000 to $7,500 to insulate the outside of their upright conventional silos with a 3 in thick layer of plastic spray-on foam insulation. The objective: To make the silo unloader last twenty years instead of seven.

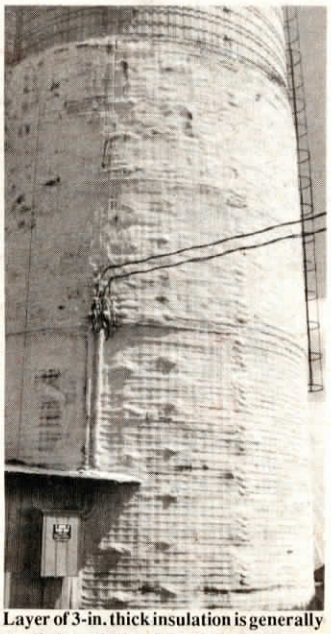
The first insulated tower silo project in Ontario, initiated in 1979, was partly funded by the Northern Ontario Agricultural Development Incentives Program. I recently surveyed the farmer-owners of 25 additional tower silos in the area which have been similarly insulated on the outside in the past eight years.

All of the silos ranged from 20 to 24 ft. in dia. Insulation cost ranged from $3,800 to $7,500, depending on when it was done and how many jobs the contractor had in the same area at any one time. All the insulation jobs, except the first one, were done by the same contractor from Southern Ontario, although many contractors exist who are willing and able to insulate silos.

After treatment, none of the insulated silos surveyed had ever had more than 2 in. of frozen haylage along the inside walls and even this was often described by the owner as being "softy frozen material."

The obvious benefit in spraying plastic foam insulation about 3 in. thick on the outside of a "north country" silo is longer life of the silo unloader, but there are other advantages. Outside insulation forms an airtight seal which improves preservation of haylage. However, all well built silos make good haylage so few farmers notice any difference in feed quality.

Insulation is sprayed on in warm, dry weather and generally is applied part way down from the top of the silo, corresponding to the level of haylage in the silo at the time when freezing weather arrives, and continuing to within about 10 ft. from the bottom of the silo.



Layer of 3-in. thick insulation is generally applied to within 10 ft. of silo bottom.

In some cases, insulation is continued all the way to the base of the silo. If that is done, cattle must be kept away because they'll chew off insulation right down to the concrete as high as they can reach. To protect the insulation from ultraviolet light deterioration, it's coated with a thick, strong paint. The paint must not only resist sunlight and weathering but must also discourage birds from pecking into the insulation. Birds will try it in whatever place they find a perch and the attack is persistent.

One of the limitations of tower silo insulation is that the silo hoops can't be tightened after insulating.

For more information, contact: FARM SHOW Followup; Mart Kirik; Agricultural Engineer; 22 McIntyre St. W.; Suite 508; North Bay, Ont., P1B 2Y8 (ph 705 474-3050).

Canadian farmer Victor Genier, of Cochrane, Ont., sprayed his farm home - roof and all - with a thick layer of insulation to protect against winter winds and sub-zero temperatures.