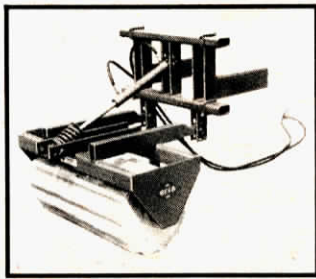


Concrete Roller Reduces Compaction

The Danish firm of Friss Maskinfabrik has developed a new way to reduce tractor wheel soil compaction during seedbed preparation and planting.

It features a rolling concrete drum, 20 in. in dia., which mounts on the front of the tractor and is wide enough to cover the space between the rear duals. A hydraulic cylinder transfers up to 4,410 lbs. of weight from the tractor's front wheels to the roller. You adjust the cylinder to keep only enough weight on the front tractor wheels so you can steer the tractor.

"With this weight distribution, the field is pressed uniformly within entire working widths, thus guaranteeing far better seedbed preparation and hence more rapid and uniform germination," the manufacturer points out. "On turns, the press roller is lifted completely free of the ground and thus acts as a counterbalance to



the implement mounted behind the tractor. The roller stays clean and doesn't clog up, even under very difficult conditions."

The roller, made in sections about 1 ft. wide, is available in working widths of 40, 50 or 60 in. Weight of the 60-in. wide roller (20 in. dia.), is right at 1,800 lbs.

Contact: Friss Maskinfabrik, Oster Logum, 6230 Rodekro, Denmark (ph 04 68 45 45).



New-Style Big Baler Ties "On The Go"

One of the "hottest" new attractions at European farm shows is Welger's new-style big baler for hay, straw or silage.

Individual flat and rectangular bales are 16 in. high, 4 ft. wide and 5 to 8 ft. long. They come out of machine stacked three to a pile, making a stack which resembles a Hesston square bale. Each of the three bales is tied separately (lengthwise) with 5 twine ties. All three bales making up a stack are picked up together with a tractor front-end loader to load for transport or to stack. However, they can be handled individually when needed, such as to top off a load with a single tier of bales 18 in. high, or if the bales are unusually heavy, such as with grass silage. A 3-section Welger bale stack is tighter packed than a similar-shaped Hesston square bale, making it especially well suited for making big bale silage out of high moisture hay, the manufacturer points out.

Another key feature of the new-

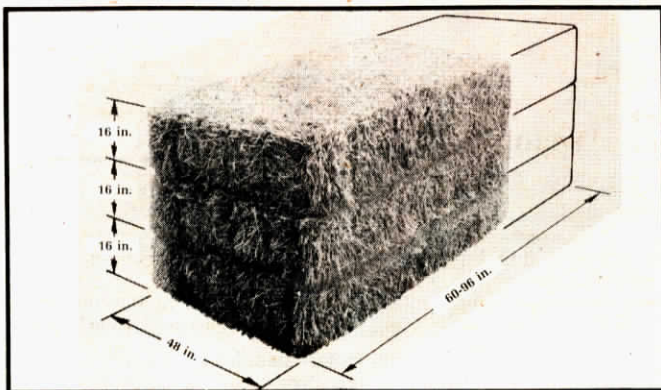
style baler is its ability to tie and dispense bales on the go, giving it greater capacity than conventional big balers which have to stop for each bale to tie and kick out.

If desired, the Welger baler can be set to kick bales out one at a time, or in piles of two rather than the conventional three. When making baled silage, for example, two-bale piles may be all the weight the tractor loader can handle.

Another key feature is the baler's price tag. In Europe, it reportedly sells for 15 to 20% less than Hesston's big square baler.

Approximate weight of individual bale sections (16 in. high, 4 ft. wide and 5 to 8 ft. long), depending on length and density, ranges from approximately 180 to 450 lbs. for straw bales, 270 to 670 lbs. for hay, and 1,120 to 2,250 lbs. for silage bales.

Contact: Welger Mfg., Gebruder-Welger Strasse, P.O. Box 1560, Wolfenbutter, West Germany D-3340.



New Products From Europe

FARM SHOW covers all major farm shows in the U.S., Canada and foreign countries to keep you posted on latest new products and ideas. Featured here are "Best of the Show" ideas which caught my eye in covering two of Europe's biggest and best winter farm shows — Agromek '86 at Herning, Denmark, and RAI '86 at Amsterdam, Holland.

The Agrofarm show is unique in that it focuses on "domestic products with export potential," a policy which excludes tractors from the show since none are manufactured in Denmark. The RAI show, on the other hand, does display tractors. Leading the parade of "attention getters" at this year's show was Deere's 3640 and 3140 models, now available in Europe with front pto and 3 pt. hitch.

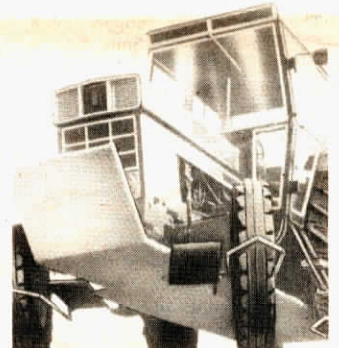
Harold M. Johnson, Editorial Director

Tractor Shield Prevents Crop Damage

Small grains and other standing crops can be sprayed with minimum "drive over" damage when the tractor is equipped with a new shield package from Agro-Land in Denmark.

A shield made of tough sheet plastic and an interior metal pipe framework is mounted under the tractor. You lay the shield on the ground, drive the tractor over it, then raise and affix it. A similar underslung shield is available to protect pull-type sprayers from damaging the standing crop.

Each tractor wheel is equipped with a metal point guard which parts the standing crop, allowing the wheel to pass with minimum drive-over damage.



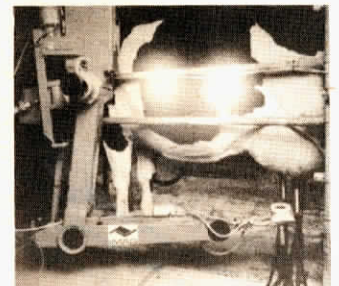
Contact: Agro-Land, Landbrugstekni, Romvigvej 4, Vildbjerg, Denmark DK 7480 (ph 07 13 31 50).

Experimental "Robot" Milker

A mechanical "robot" that automatically attaches teat cups to the cow is just around the corner. The big question is who will be first on the market with a fully automatic milker that reduces the time it takes a man or woman to milk a cow to absolute zero?

Leading candidates appear to be Scientists at the Federal Dairy Research Center, Kiel, West Germany, and researchers in Holland who presented a public progress report on their project at the recent RAI show in Amsterdam. The Institute for Mechanization, Labor and Buildings (IMAG) project is backed by several commercial firms, including Philips and Vicon.

In its present stage of development, the "robot" is able to recognize and find the teats, then accurately and



gently attach the cups without human help. "When perfected, the device will allow the cow to literally milk itself when it wants to — a development which is expected to raise milk yields and reduce labor costs substantially," say Dutch researchers at IMAG, headquartered at Wageningen, Holland.