

Pto-Powered Moldboard Plow

British researchers who want to get an extra tillage boost from moldboard plows have come up with a new pto-powered plow equipped with 2-ft. dia. horizontallymounted spinning discs designed to break up slabs of heavy soil.

Richard Cope, ag engineer at the National Institute of Agricultural Engineering, says the new plow was designed to get a better mix of surface residue with topsoil and to break up heavy, clay-type soils. "The pto-powered discs spin at about 150 rpm's, breaking up slabs of soil as they're lifted off the ground. It breaks up the soil so the field looks like it's been harrowed," he says.

At first the researchers tried to fit the new powered plow with finger wheels rather than flat discs but they worked the soil over more than necessary and required too much power. The powered flat discs slice through soil and residue so dirt falls back to the ground in chunks. Cope says breaking up the plow slabs helps mix up heavy straw and stalk residue which is important since British farmers are facing ever stricter regulations on burning straw off fields.

The powered moldboard requires about 25% more power than conventional plows. Cope hopes to license the technology to a commercial manufacturer and speculates that the innovation may cost as much as \$500 more per row.

For more information, contact: FARM SHOW Followup, Richard Cope, AFRC Institute of Engineering Research, Wrest Park, Silsoe, Bedford, MK454HS England (ph 0525 60000).

Best New Ideas From Europe

FARM SHOW editors cover all major shows in the United States, Canada and foreign countries to keep you and other readers posted on latest new products. Featured here are just a few "best of the show" ideas which caught Editor Mark Newhall's eye at the recent Royal International Agricultural Show in Stoneleigh, England. The first Royal International Show was held in 1839. It's now one of the world's largest farm shows, attracting more than 1,300 exhibitors and more than 200,000 visitors, including almost 12,000 visitors from some 110 countries.



"Wheel-less" Tractor Powers New Harvester

A "wheel-less" Case/IH tractor provides the power for a new sugar beet harvester, eliminating the need for an expensive power unit on the big machine.

"It's an idea that could be used on other types of self-propelled equipment because it lets you make use of power you already own. Once harvesting is completed, you put the wheels back on and use it as a tractor the rest of the year," says K.J. Lincoln, sales manager of Standen Engineering Ltd., the manufacturer.

The new harvester is a 2-row unit that'll harvest 1 1/2 acres per hour. The frontmounted topper unit removes the green tops and discharges them to the left side of the harvester where they can be spread evenly across the field or left in windrows. The beets are "crowned" by shaft-driven feeler wheels and then lifted out of the ground by conventional lifter wheels. Large hydraulically-driven cyclone wheels clean the beets, as does the heavy-duty double-webbed conveyor chain that transports the beets to the rear-mounted 3-ton capacity hopper.

A tractor with at least 75 to 100 hp. and power steering is required to drive the harvester. Two men can easily mount it in one morning, says Lincoln, with the help of a heavy overhead hoist. The entire tractor, except for wheels, is transferred to the tractor without modification.

For more information, contact: FARM SHOW Followup, Standen Engineering Ltd., Hereward Works, Station Road, Ely, Cambridgeshire CB7 4BP England (ph 0353 61111).

"Push-Off" Splitter Cuts Log With "Crosswise" Blade

"We think it's the best log splitter in the world and the easiest to use," says Wayne Davis about the new 3-pt. mounted Stanley Logger that uses a powerful guillotine blade to cut logs crosswise and has a push-off splitting wedge that pushes split wood up an unloading ramp as it splits.

One man can operate the new splitter. The entire log is laid on the cutting table and it's cut into chunks up to 42 in. long for splitting. Davis says using a wedge-type blade to cut through logs rather than a chain or buzz saw eliminates sawdust and increases the amount of split wood by about 2.5%. The crosswise cutting wedge, which is powered by a big 4-in. cylinder, can slice through logs up to 10 in. in dia. Once cut, the log chunk is rolled onto the splitting table. A ram pushes it up against the splitting wedge, and on up the unloading ramp that can be positioned to dump into a trailer or pickup box.

The 3-pt. model sells for about \$4,000. Stationary self-contained models are also available.

For more information, contact: FARM SHOW Followup, Stanley Logger, Astley Abbotts, NR Bridgnorth, Shropshire WV16 4SP (ph 07462 3988).