



New Soil-Master is equipped with 20 in. disk "slicer" blades.

"SOIL-MASTER" COMBINES DISK, CHISEL PLOW

"Innovation in Soil Management"

One trip in the spring or fall with Landoll's new Soil-Master saves time, money and, most important, valuable topsoil.

Combining the best features of disking and chisel plowing, the primary "one trip" tillage tool — billed as "an innovation in soil management" — protects against erosion by ridging the soil and incorporating approximately 75% of the residue with the soil, explains Jerry Nussbaum, vice president of sales. "By leaving the soil in a ridged condition, 15 to 20% more surface area is exposed to sunlight for more rapid warming in the spring. The exposed surface residue keep soil from blowing while ridges trap moisture throughout the winter and early spring. Plow sole is ripped up, permitting water to be stored where it falls."

Weighing more than 460 lbs. per foot of machine width, the Soil-Master digs deep to break up hard pan. It's 20 in. dia. coulters, spaced every 7½ in., permit virtually "plug free" tillage in the fall or early spring. Curved helical chisel blades, with 4 in. moldboard, incorporate approximately 75% of the crop residue within the top 8 in. of soil.

Here, according to Nussbaum, are answers to "most asked" questions on the new Soil-Master's design features:

Why are the disc coulters blades 20 in. dia., and why plain blades?

"Plain blades provide the best 'mixing action' of residue with the soil. Fluted blades have a tendency to fill up with sticky soil and don't penetrate as well. Notched blades cut well when new but are susceptible to breakage at the edges. Our large 20 in. dia. plain disks provide a distance of 7½ in. from blade edge to spool for adequate penetration in all soil conditions."

Why are the disc blades spaced 7½ in. apart?

"Our experience has proven that 15 in. spacing between ground working tools is best for bringing up the soil and covering the residue. The 7½ in. disc spacing puts one blade immediately ahead of and one between each helical chisel point. This combination does an excellent job of splitting the soil and root crowns, reducing draft and cutting residue prior to its mixing with soil brought up by the special helical points.

Why does Landoll use a 4 in. wide twisted shovel?

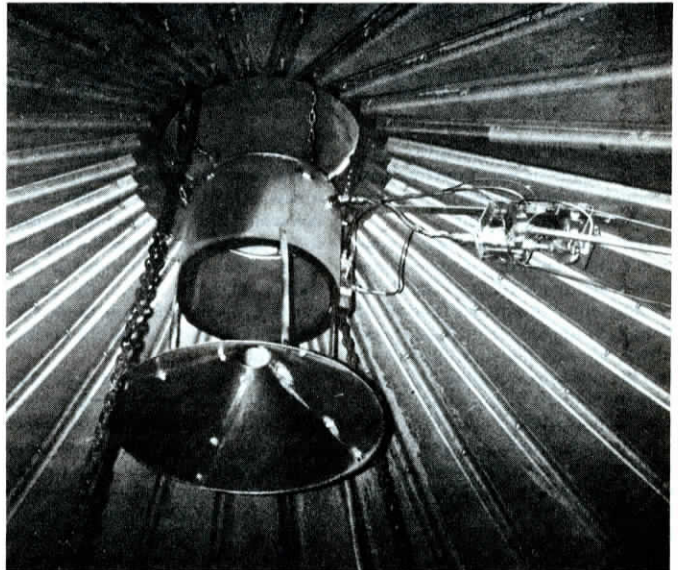
"Actually, it's much more than an ordinary 'twisted shovel'. Some blades are spiralled to the right and some to the left. Each blade shatters and brings up soil to blend in residues and broadcast fertilizer. This could not be accomplished with an ordinary twisted shovel. Also, points are replaceable and the moldboards are reversible, which represents a considerable saving to the Soil-Master owner."

Can the Soil-Master be used in the spring?

"Yes, but you'll want to run it shallower than in the fall. You can start just as soon as soil conditions permit getting into the field. This type of primary tillage allows rapid deterioration of residue for preparation of an early seedbed," explains Nussbaum.

The Soil-Master is available in 3 models: SM-7 (8 ft., 9 in. cut); SM-9 (11 ft., 3 in. cut) and SM-11 (13 ft., 9 in. cut). The SM-9 has a shank spacing of 15 in., 9 helical chisel blades, and 19 20-in. disk "slicer" blades (7½ in. apart). It weighs 5,190 lbs. with spring shanks; 4,740 lbs. with rigid shanks. Retail for \$4,412 with spring shanks.

For more details, contact: FARM SHOW Followup, Landoll Corp., 1700 May St., Marysville, Kan. 66508 (ph. 913 562-5383).



Circular design of roof-mounted dryer allows grain to pass through the center. Models ranging in cost from \$400 to \$700, less fan, are available with gas (450,000 to 1,000,000 btu's) or electric (2 to 22 KW).

"UPSIDE DOWN" CONCEPT CUTS COSTS

New Way to Dry Grain

If you'd like to equip new or existing grain bins for high-capacity in-storage drying without spending a lot of money, or update an existing system, Harold Dougherty's new "roof dryer" may be the answer.

This Nebraska farmer-manufacturer has literally turned in-storage grain drying "upside down" with a first-of-its-kind dryer that you install in the roof opening. It's in-storage drying in reverse and, according to Dougherty, is "at least 50% more efficient than conventional drying in cold, humid weather." Here's how his Drie Down system works.

Incoming air is heated (gas or electric) and pulled into the bin by your present dryer fan, if you already own one, which is operated in the exhaust position. "The hottest heat is applied to the wettest grain," explains Dougherty, who notes that his idea of hot air falling isn't as contradictory as it appears: "When hot air hits the cold grain, it becomes increasingly cooler. As it passes down through the grain, the air gets colder and heavier and falls, as anyone in bare feet who has opened a refrigerator door can testify."

A key feature of the new concept in grain drying is its price tag. Individual units cost from between \$500

to \$700, depending on size. Its low-cost design, coupled with the fact that the system can utilize solar heat, makes it one of the most efficient and economical dryers on the market, says Dougherty.

When installing it, he recommends brushing a coat of black paint on the roof and the top half of the top ring. "Utilizing solar heat collected by the roof can mean as much as a 5° rise in temperature, and up to a 50% savings in fuel consumption," he points out. Grain can be dried layer by layer as it's loaded into the bin. Or, a full bin of wet grain can be dried, except it takes more time than layering. Dougherty also advises using the Drie Down in conjunction with a perforated floor, and a fan with a capacity of 1 to 2 cu. ft. of air per minute per bu. of grain. Instead of blowing air into the bin, as with conventional in-storage drying, the fan is reversed to pull air out of the bin. Dougherty is selling his new dryer both direct to farmers, and through assigned distributors in some selected areas. Dealer inquiries welcome.

For more details, contact: FARM SHOW Followup, Dougherty Products, Route 2, Burchard, Neb. 68323 (ph. 402 865-5231).