

"Efficienculture" machine consists of central power unit and a 50 ft. toolbar wing on each side.

## WHOLE CROP MACHINE ELIMINATES COMPACTION

## One-Pass Plant, Till, Harvest Machine

"This is the machine of the future," says Ray Nienberg, Glandorf, Ohio, who's built a huge 108-ft. wide firstof-its-kind machine that's designed to plant, till and harvest without ever driving through the growing area and do it faster than any machine on the market.

The "Efficienculture" machine, as Nienberg calls it, consists of a central power unit and two 50-ft. toolbar "wings" that spread out to either side. The power unit is designed to run along established roadbeds in the field and all tillage, planting and harvest equipment mounts on the wide toolbars. The machine eliminates the need for field tractors, swathers, combines, forage choppers and all conventional field equipment. "Once in operation, no weighted wheel will ever run through the crop itself, restoring fields to their virgin state of tilth, according to Nienberg.

"Most farms have a fence row strip that hasn't been plowed for 50 years. Take a look at it. It'll have the finest tilth of any land on the farm. But it only takes a few years farming before it's as compacted as the rest of the land. Restoring it to its original organic state can boost yields 50% or more," claims Nienberg.

The new machine is also fast. "It'll plant 1,000 acres in a 24 hour period, traveling 5 mph. Because you don't have to drive through the fields, it lets you plant as soon as the soil is workable to a depth of 3 in. so there are no late-planting yield losses. Because you don't have to leave room for wheel travel between rows, you can plant in row widths designed to shade out weeds and conserve moisture. The most idle farmland in

America today is between rows.' Nienberg says that to operate the machine, 8-ft. wide bluegrasscovered permanent runways will be established through the field for the power unit. Support wheels at the end of each boom will run on the next roadway 50 ft. away. The space taken up for the roadways will be more than made up for by the narrower row spacing in the fields, he says.

"With this design you'll be able to spray for weeds, insects, or other problems at any stage of growth whenever the spraying needs to be done, regardless of the soil conditions. No markers will be needed and there will never be any skips or spray overlaps. You'll also be able to interseed any crop into standing crops at any point in the growing season,' says Nienberg.

The power unit on his prototype machine is powered by a 320 cu. in. Ford engine. Everything on the machine is hydrostatically-driven. The unit has an arched frame to accommodate underbelly conveyors that'll handle crop material as it's carried to the power unit from the wings. The power unit has an auto pilot wheel that will follow the roadway so the operator can concentrate on field operations. The booms fold back along the sides of the unit for transport and hydraulic cylinders along the booms control their height. Nienberg says that roadways will be laid out so as to cover 100% of fields, with no need for turn-around space. The booms are designed to flex on hilly or uneven ground.

Nienberg's prototype machine is equipped to harvest vegetable crops which is the most likely initial market for the machine in his area. However, in his patent he detailed plans for equipment to handle virtually every field operation.

Planting: The planting attachment on each boom will have 75 clockwise-turning discs, powered by hydraulic motors. The discs will cut 1-in. wide slits in the soil to a depth of up to 3 in. Press wheels will firm the soil around the seed. Seed will be augered on-the-go from a truck on the roadway ahead of the machine, and will be augered through tubes to each row unit. The planter will place dry fertilizer and herbicides in the soil with the seed.

Grain and Forage Harvesting: Blades attached to roller chains will cut standing grain or forage. Conveyors will carry grain to the underbelly of the power unit where it will be augered to the grain separator or forage choppers towed behind the power unit. Grain reels will be hydraulically-powered, while the grain separator will be pto-powered off the power unit and have twin cylinders with divided double-wide separating capacity. Crop residue will be chopped and blown back onto the land by powerful blowers. Grain trucks will follow on the roadway.

Balers: You'll be able to harvest forage regardless of field conditions and green chop all season. Balers will tow behind the power unit in the roadway.

Other Equipment: Cotton pickers, vegetable harvesters, backhoes, forklifts, buckets, blades, plows, discs, and other equipment will be available where needed.

'Many farmers have as much as \$500,000 worth of equipment that stands idle 10 months of the year. We'll be able to cut that substantially by mounting everything on this one machine," says Nienberg, noting that he expects his machine to sell for about the cost of three full-size combines. "Because of its speed, once roadways are established, several farmers could share a machine. Since field conditions are not an obstacle, time would not be the constraint that it is now when farmers share equip-

Nienburg, who is testing his prototype machine this summer and fall, is looking for a manufacturer.

For more information, contact: FARM SHOW Followup, Ray Nienberg, Box 44, Glandorf, Ohio 45848.

## WHEN YOU NEED TO **MILK MORE COWS**

## New Rental Milk Parlor

When you're remodeling your old barn, or if you get a chance to buy a bunch of cows before you've got the facilities to handle them, you'll want to investigate a new rental milking parlor developed by Germania Dairy Automation, Waunakee, Wis.

The company says its Rent-A-Parlor is not suited for emergency milking situations, such as when a fire or storm burns down a barn, since those cows must be milked immediately, whereas it usually takes 2 to 3 days to deliver the new portable parlor to the farm. By then, notes company president Rolf Reisgies, most dairymen caught in an emergency have already made alternative arrangements.

"Our parlor works best for the dairyman who needs additional milking capacity for a planned reason. Maybe he's remodeling his old barn, or has been lucky enough to find a herd of cows and picked them up before he builds the facilities to milk them," says Reisgies. "Using our parlor, he can milk the cows for a while before deciding whether to keep or sell them. Then he can install our parlor permanently or put up a new facility."

The Rent-A-Parlor, consisting of a single 6 or double 6, is built extra heavy-duty and mounted on a trailer. The entire parlor is self-contained, complete with its own machine room, vacuum pump, air compressor and its own self-contained CIP system. It's equipped with a pipeline, receiver group, pulsation system, claws and an automatic backflush system. Power-operated entrance and exit gates, and an overhead feeding system, are all available as options.

The parlor is mounted on an overthe-road trailer without sides so it must be enclosed - either in the barn's holding pen, which is the ideal location, or in a lean-to type building constructed temporarily outside the dairy barn. It requires hook-up to sewer, water and electricity. The only major component it doesn't contain is a bulk tank.

The trailer is 8-ft. wide, 8 ft. tall, and about 20 ft. long. It can be pulled with a 1-ton pickup. It'll handle 30 cows per hour. Reisgies says the typical rental period is generally from 2 to 4 months. The cost ranges from \$95 per day average cost for the first four months, to \$25 a day for the 16th month and every month thereafter.

For a free booklet explaining the benefits of the new Rent-A-Parlor, contact: FARM SHOW Followup, Germania Dairy Automation, P.O. Box 248, Waunakee, Wis. 53597 (ph 608 849-5012).