## One-Pass Planter, Tiller Powers Itself

You've never seen anything quite like this — a "one pass" planter, powered by a 368 hp. diesel engine mounted right on top of it. It's the brainchild of Nebraska corn farmer, Floyd Wahlgren, of Gothenberg, who used it last spring to plant 1900 acres of corn "in half the usual time".

"We planted 24 acres an hour," says Wahlgren. "Once, just goofing off, we ran it at 9½ mph. — 3 miles over normal speed — and it did a great job."

The 25,000 lb. planter is a no-till, one-pass machine, and needs the 368 hp. auxiliary engine because of its 40-ft. width (16 30-in. rows). Here's how it works:

Across the front are two 20-ft. decks of FMC Sidewinder roto-tillers. They prepare the seedbed and use most of the power off the auxiliary diesel engine. Engine output is geared down and split off to the two decks by a Rockwell truck axle gear box. The planter uses two IH Cyclo planting units. Hydraulics off the engine operate the two air drums. A combination of Dickey-john and Orthman planter monitoring units gives the tractor driver a digital readout for each row. Normal planting rate has been 28,000 plants per acre in 30 in. rows. The



Wahlgren's 40 ft. planter is powered by a 368 hp Detroit diesel engine, mounted right on the planter frame (at right).

tractor carries a 600-gal. tank on the unit for applying 8½ gal. of liquid starter fertilizer per acre.

He's planted in the same rows for the last 10 years, using a 20-ft. ptopowered version of his new machine. "I'm convinced the new planter will work in any area of the country for either corn or soybeans," he told FARM SHOW.

Roto-tiller decks are mounted on

Orthman folding toolbars and, in field position, lift to a maximum height of 5½ ft. at each end. The unit pulls down the road on an end mount trailer at a narrow, 14 ft width.

What's the economy of running two full-sized engines at once?

"We use 1 gal. of fuel per acre to get the crop in because we only make one trip," explains Wahlgren. He mounted an auxiliary gas tank on the front of his tractor both for weight and for the extra fuel it carries.

Wahlgren estimates total cost of his home-built planter at \$40,000 to \$50,000. He's considering manufacturing the hybrid machine.

For more details, contact: FARM SHOW Followup, Floyd Wahlgren, Cornshucker Sales, Route 2, Gothenberg, Neb. 69138 (ph. 308 537-2988, or 537-2873).

## HARD FACING CONCAVES MAKES 'EM LAST FOUR TIMES LONGER

## New Life For Your Combine

"Hard faced and rebuilt concaves work like new and last 4 times as long," says Max Farrar, president of the Farrar Corp., Norwich, Kan."

His company specializes in hard facing concaves for all makes of combines. "It puts new life in older combines and keeps new combines operating at peak efficiency. We have many owners of spanking new combines who bring the concaves in to be hard surfaced before the machine goes to the field for the very first time," say, Farrar.

He keeps more than 100 of the most common makes of concaves in stock. For quick service, customers can drop off concaves and pick up concaves which have already been reworked.

The actual hard facing of a concave can take from a few hours to two days, depending on the make of concave and how much it has to be rebuilt. Farrar points out that there are more than 60 models of combines and as many sizes, and that makes his work complicated.

He tells of a Nebraska farmer who

flew in one day last summer. The farmer slept at the local air strip in a sleeping bag, then came to the plant the next morning with the concave from his combine. Farrar and his workers had it ready to go by 1:30 that afternoon and the man flew back to Nebraska the same day.

"Hard facing concaves is important for all crops, not just for small grains," Farrar points out. "Although a worn concave may do an adequate job on big grain such as corn, a lot of junk can slip through if equipment is badly worn. On small grains, it's essential that there not be any uneven gaps between the concave and the cylinder bars."

In addition to concaves, the company also hard faces cylinder bars for all makes and models of combines. Farrar notes that most cylinder bars wear the most about 1/3 of the way in from either end, and almost not at all on the ends or in the middle. To get "like new" performance out of badly worn equipment, it is sometimes necessary to build up the bars at the same time the concave is being hard



Hardfacing quadruples effective life of a concave, according to Farrar Corp., which also hardfaces combine cylinder bars.

faced and rebuilt. Farrar explains, Farrar can make a quick exchange of worn bars for rebuilt bars if he has them in stock. He doesn't keep as large an inventory of bars on hand since the majority of his business involves reworking concaves. According to Farrar, hard facing will quadruple the effective life of concaves, and double the life of cylinder bars. When both bars and concaves are reworked, they will remain effective 8 times as long together. Farrar suggests that anyone interested in having work done first check on the company's workload. Because each job varies, you probably won't be able to get a quote over the phone. If your concave or eylinder bars are worn 1/8 in. or more, they will first have to be rebuilt, and that doubles the hard facing cost. To get an idea, hard facing a Deere "95" concave would cost about \$82, and the bars about \$195. The "7700" would be \$153 for reworking the concave, and \$268 for the bars. Costs would be higher if the concaves had to be built up.

For more details, contact: FARM SHOW Followup, Max Farrar, Farrar Corp., Norwich, Kan. 67118 (ph 316-478-2212).