

**WITHIN .005 OF AN INCH OF
BEING PERFECTLY TRUE**

Rebuilt Concaves Boost Efficiency 15 to 30%

"No matter how well you fine tune a machine, you won't reach maximum capacity if the concave isn't true," says Bill Schwerin, Walla Walla, Wash., who built his first "precision tuned" concave several years ago when custom harvesting.

FARM SHOW first learned about Schwerin and his concave-truing operation from Ray Stueckle, Caldwell, Idaho, well-known combine expert and author of "Combine Settings For Better Harvesting". According to Stueckle, "Schwerin's concave is as good as it sounds."

Schwerin got the idea for his concave as a custom harvester. Like most operators, he was having difficulty getting enough capacity out of his machines to cover enough acres to make a profit. He was faced with either putting too much grain out the back of the machine or slowing down.

"I turned to Ray Stueckle who had worked out procedures for setting and fine-tuning most makes and models of combines. I found that no matter how well you fine tune a machine you won't reach maximum capacity if the concave isn't true. Ray challenged me to build a better concave so I came back to the shop and began experimenting."

Schwerin bought lathes and other special equipment and began rebuilding his own and other farmers' concaves. Now he has concaves coming in from all over the U.S. and Canada for reworking. He also manufactures concaves which, he says, virtually eliminate walker loss in



Ray Stueckle, left, explains the benefits of Bill Schwerin's rebuilt concaves to a farmer at a recent western farm show.

small grain crops and improve overall efficiency 15 to 30%, depending on the overall shape of the rest of the machine. He says this holds true on most new combines, too.

When a concave arrives at Schwerin's shop, the rods are pulled to allow spacings of at least 1½ in. between each one. The vacant holes are welded shut with plugs. All the wires are pulled on some models and every other one on others. Next, strips of high strength steel are welded to each bar and the first four slots between the front bars are closed up. The concave is then ready for the lathe where it is bored out to within .005 of an inch of a perfect circle. The edges are then smoothed to finish the job. A grower can request to have the con-

**MAKES GEAR SHIFTING EASY,
EVEN AT HIGH RPM'S**

"Slick Shifter" For IH Tractors

You can eliminate gear grinding on 86 series IH tractors with the just-introduced "Slick Shifter" from Birch Ltd., Bennett, Iowa.

The shifter is operated electrically by two solenoid valves. One is activated by a switch on the clutch when the clutch pedal is depressed. The other, mounted on the shift lever panel, is activated by the gear shift lever when it's put into neutral and hits the sensor.

The valve body that relieves the pressure is mounted on the hydraulic oil pump cover plate. To install, you remove the cover plate and drill and tap in six holes, using a template

that's provided. The valve body sits on the outside of the cover plate.

Power for the system comes from the tractor battery via the fuse box to the switches at the clutch and gear shift. Martin notes that he feels most of these systems will be installed by implement dealers but that a farmer with a good shop could do the job.

Slick Shifter sells for \$300. Systems for 66 and 06 IH tractors are in the works.

For more information, contact: FARM SHOW Followup, Birch Ltd., P.O. Box F, Bennett, Iowa 52751 (ph 319 893-2962).

cave chromed as chroming doubles the life of the concave and doesn't interfere with the threshing process, according to Schwerin. He also offers a shim kit for the machine's cylinder and sends complete instructions with the kit for installation.

"On most concaves the bars are not set at a uniform height nor in a true circle. These imperfections in the concave affect both the quality of the grain harvested and capacity of the combine. Separation area is lost and cylinder speed must be increased to obtain good thresh and separation. The bottom line is lost dollars in grain out the back of the combine," says Schwerin. "On our concaves all of the bars are bored to a uniform height to form a true circle. This lets

the operator set the concave at '0' tolerance at the rear, creating an uninterrupted wedge from front to rear. It is designed to do the job up front where the work should be done."

Schwerin says that with his concave and Stueckle's recommendations, small grain producers are able to obtain a 20 to 30% increase in efficiency. The benefits in corn and soybeans are less.

The cost for rebuilding concaves ranges from \$500 to \$750. Schwerin-manufactured concaves sell for \$570 to \$845.

For more information, contact: FARM SHOW Followup, Schwerin Concaves, Inc., Rt. 5, Box 314A, Walla Walla, Wash. 99362 (ph 509 525-7556).

**HELPS PREVENT WASTE ON END ROWS
AND IRREGULAR-SHAPED FIELDS**

"Seed Saver" Turns Off Selected Rows

An Iowa farm equipment dealer has come up with a new "seed saving" planter attachment designed to turn off selected planter row units to seed end rows or odd corners of irregular-shaped fields.

Dave Heisterkamp, owner of Heisterkamp Equipment Co., Inc., Onawa, says his planter add-on lets you shut off either side of the planter with the flip of a switch, saving seed and chemicals and improving yields on outside rows by eliminating the need to double-plant some rows.

The 12-V solenoid-activated, wrapped-spring clutch system fits any planter or drill with a round or hex-shaped drive shaft, including Deere's Max-Emerge, Kinze, Allis Chalmers and others. It's not de-

signed to fit International air planters.

The coupler mounts in the driveshaft on either side of the planter transmission. On narrow-row planters it fits between the parallel linkage mechanisms. On grain drills it installs near the drive wheels. The clutch is engaged instantly by rocker arm switches in the cab.

The complete do-it-yourself kit includes shut-off mechanisms for both sides of the planter. You can either shut off all the rows on either side, or mount them so that only a selected number of rows shut off. Each unit handles up to 7 rows per side. On larger planters, you simply add more shut-off units to shut down all rows.

The shut-off clutch itself is just 4 to

The Sorenson "Shut-Off"

Another "seed saver", developed by Ed Sorenson, Prescott, Iowa, is also new on the market. Designed to fit Deere Max-Emerge and Kinze planters, it mounts above the central drive unit and uses a "cup system," activated by a small electric motor that's similar to that used on windshield wiper, to power it.

"It's simple to install. All you need is a drill, a tape measure, and a wrench," says Phil Fehrle, Creston, Iowa, who is marketing Sorenson's shut-off system. "It doesn't modify the planter at all. If for any reason you want to remove the system, you can re-

move it in 10 min. or less and plant normally again."

The Sorenson shut-off can shut down either side of the planter and installs on planters with up to 24 rows. Unlike the Heisterkamp unit, it can't be used to shut down only part of the row units on one side of the planter.

The Sorenson unit, tested on more than 10,000 acres last year, sells for \$345. A second model will soon be available for International air planters.

For more information, contact: FARM SHOW Followup, Phil Fehrle, Rt. 4, Creston, Iowa 50801 (ph 515 782-6693).

5 in. wide and 6 in. long. It installs in about 1½ hrs., according to Heisterkamp. It sells for \$795 and comes with all wiring and parts needed.

For more information, contact:

FARM SHOW Followup, Heisterkamp Equipment Co., Inc., 814 Pearl Street, Onawa, Iowa 51040 (ph 712 423-2337).