

Longbow has used his grain drill depth gauge for two seasons.

#### LETS YOU TELL DEPTH AT A GLANCE

# Home-Built Grain Drill Depth Gauge

"We've always had trouble consistently planting seed at the right depth with our 24-ft. Melroe hoe drill. On loam soil, it goes in too deeply and on hard knolls, it seeds too shallow," says Jack Longbow, Tisdale, Sask., who says he's solved the problem with an easy-to-read depth gauge that mounts on the front side of his drill.

Until he installed the gauge, Longbow says he had to guess the depth as he hydraulically adjusted depth on the go when seeding conditions changed. "It was always hard to know just where we were at," he says.

Here's how he made his depth gauge: "I welded a 5/16-in. rod about 40 in. long to the front gang lift mechanism. As the hydraulic ram rotates the front gang up and down, the pointer moves in a much larger arc across a

graduated scale which I made out of a piece of 14 ga. steel attached to a reinforced upright angle iron. Numbers are painted across the gauge about every 2 in.

"Number 9 is the deepest and number 1 is out of the ground. Now, with a quick glance, I can see exactly how deep we are seeding. With a bit of trial and error, I soon learned where to put it for our varying field conditions. We've used the gauge for the past two seasons and find it to be a big help in improving crop stands.

"I'm sure the idea would work on almost any drill although you may have to mount the indicator rod differently."

Contact: FARM SHOW Followup, Jack Longbow, Box 2033, Tisdale, Sask. S0E 1T0 (ph 306 873-4864).



#### "Vacuum Hopper" Cleans Out Grain Drills Fast

"It lets me clean out my 36-ft. grain drill in five minutes or less and can also be used to handle grain like a conventional vacuumblower," says Brad Thykeson, Portland, N. Dak., about the "vacuum hopper" he added on to a 1981 Kongskilde 300 grain vacuum-blower.

Thykeson salvaged a 30-gal. grain hopper from an old Massey Harris 90 combine and mounted it on a steel frame that he added to the rear of the Kongskilde machine. He made a cyclone out of a 30-gal. oil drum and welded it on top of the hopper, then ran a steel pipe from the discharge side of the vacuum-blower up to the cyclone. To suck seed out of his drill he simply replaces the vacuum-blower's 6-in. dia. hose with a 4-in. hose that's equipped with a 2-ft. long PVC nozzle on one end. Sucked-out seed is pulled into the hopper which is then emp-



Hammers fitted with dished fins swing through a row of sickle sections which can be adjusted up and down to control length of chop.

### HAMMERS CREATE HUGE AIR FLOW THAT THROWS CHAFF OUT AS WIDE AS STRAW

## Combo Chopper Spreads Straw & Chaff Over 50 Ft.

"We built it in response to farmers who told us they wanted a chopper that would spread both straw and chaff out over as wide an area as it came from," says Ron Lepp of Redekop Industries about the company's first-of-its-kind combo chopper that takes in both straw and chaff with no need for a separate chaff spreader.

Redekop Industries is known to FARM SHOW readers as the manufacturer of chaff collection systems for collecting chaff at the back of a combine by a tag-along cart, automatically dumping piles on the ground when it fills up. They have another machine that then augers the chaff up off the ground to haul back to the farm for feed.

To make their new straw and chaff spreader work, Lepp says the company had to come up with a new-style hammer. "The problem with most chaff spreaders is that they try to throw the chaff with brute force. But you can't throw it out very far because it's so light. Our new hammers create a tremendous air flow (8,000 cfm) that blows both chaff and straw out over an area of up to 50 ft. Or, you have the option of detaching the spreading unit and installing a delivery spout that lets you blow chopped straw and chaff into a trailing wagon."

Lepp says the new chopper is also the only one on the market that's hinged to swing away from the back of the combine for easy access to make combine adjustments. All weight is supported by brackets that attach solidly to the combine frame rather than the body of the combine.

Key to success of the chopper is the hammer and knife design. Hammers swing through closely spaced stationary knife blades (ordinary sickle sections) which can be easily raised or lowered to adjust length of straw chop (varies from 1 to 2 in.).

Chopper hinges outward to allow easy access to back of combine. Can be fitted with either spreader fins or a load-out chute (pictured) which lets you load chopped residue into a trailing wagon.

Hammers are fitted with dished hard-surfaced fins that pull straw and chaff through the knives, at the same time creating the air flow needed to blow residue out the back at a speed of over 90 mph.

"Chaff is pulled into the unit by the vacuum created and blown out the back over a 25, 30 or 50-ft. area, depending on how you set the spreader fins. We feel that this chopper is a necessity for anyone getting into reduced or zero tillage because of the uniform spread. Leaves no buildup of residue anywhere in the field," says Lepp.

Available in 40,50 and 60-in. widths, the chopper is designed to fit most models of Deere, Massey, New Holland and Case-IH combines from the last 10 to 15 years. Price ranges from \$4,200 to \$6,000 (Canadian) depending on width.

Contact: FARM SHOW Followup, Redekop Industries, Highway 16 West, Box 178A, RR 4, Saskatoon, Sask. S7K 3J7 Canada (ph 306 931-6664).

tied out by gravity through a door at the bottom of the hopper.

"It completely empties out drill hoppers, making short work of a time-consuming job," says Thykeson. "I can empty out the drill in only 5 min. even if it's half full. It works much better than the 5-gal. shop vac I had been using beccase I don't have to use my hands to dig seed out of the cups and I don't have to use any pails. Another advantage is that I work away from the vacuum hopper so I don't get covered by seed treatment powder dust. The 20-ft. hose can reach either end of the drill when the vacuum blower is centrally located.

"The 4-in. dia. hose is easier to handle

than the vacuum-blower's 6-in, dia, hose and has a smaller nozzle that easily fits into the drill box. A 90 degree elbow allows the nozzle to reach the bottom of the box.

"When I want to use the vacuum-blower to clean out bins, I reconnect the 6-in. dia. hose. Then I disconnect the pipe running to the add-on hopper and hook up the vacuum-blower's regular discharge pipe which I can swing out over a truck."

Thykeson spent about \$300 to add the vacuum hopper to his grain vac.

Contact: FARM SHOW Followup, Brad Thykeson, Rt. 1, Box 132, Portland, N. Dak. 58274 (ph 701 786-2227).