

Do-It-Yourself Precision Air Seeder

"It does the job of a state-of-the-art \$60,000 air seeder at a fraction of the cost," says Robert E. Stahl, Binford, N.Dak, happy with the precision air seeder he put together from a used Wil-Rich seeder with the help of neighboring farmer-engineer Sherman Quanbeck who was once part owner and design engineer for Wil-Rich Mfg.

Stahl says there are a lot of used Wil-Rich air seeders on implement dealers' lots, as well as other manufacturers' similar field cultivator-type air seeders, which can be picked up at relatively low cost. The problem, he says, is that although farmers liked the big width and versatility of that type of seeder, they didn't like the poor seed placement.

"The Wil-Rich unit placed the seed under the sweep but it was hard to keep at an even depth, Either the sweeps skimmed the surface, often leaving seed on top of the ground, or they ran too deep, resulting in poor germination. No one ever came up with a good way to control depth on field cultivator shanks," says Stahl.

The modification consists of adding gangs of high-clearance Danish spring tines behind the field cultivator. Mounted in three rows, the tines are spaced on 7-in. centers - centered directly between the cultivator shanks, which are also on 7-in. spacing. Each Danish tine is fitted with a depth control gauge wheel and a special seed boot - fabricated by Sherman Quanbeck - that drops seed in a wide 1-in. band. Stahl explains that dropping seed in a wider band behind the tines means that some seed goes to the right, some to the left and some in the center.

"Seeding in a 1-in. band allows a heavier application of starter fertilizer and causes less competition for moisture by seedlings at germination - because seed is more spread out - than when you use disc openers that drop seed into a narrow 1/8-in. wide furrow. In effect, it gives us 6-in. spacing between rows. Another advantage is that when we swath the crop for harvest, it helps hold the windrow up better," he notes.

Stahls says he's used the 28-ft. wide, pto-powered air seeder for wheat, flax and a new oilseed crop called crambe. "I've had perfect stands, using the machine to cultivate and seed at 5 to 6 mph with a 175-hp tractor, seeding 16 acres an hour."

One feature Stahl likes about the Wil-Rich seeder is that you can see all the seed runs as they come out of the front of the seed tanks so no electronics are needed. If arun gets plugged, it's readily visible to the eye. Another benefit is that each seed tank is divided into two hoppers so he can also carry chemicals. He plans to apply Treflan granules while he seeds, dropping the granules onto the ground ahead of the cultivator and letting it incorporate them ahead of the seeding times.

"The best thing about this idea is that you can pick up these seeders cheap and because of the simplicity, it should last as long as you want. Also, parts are still readily available from Wil-Rich. I'll be happy to show it to anyone who wants to come up to my farm to see it," says Stahl.

Contact: FARM SHOW Followup, Robert E. Stahl, Rt. 2, Box 121, Binford, N.Dak. 58416 (ph 701 676-2126).

"No-Spill", Two-Bucket Bean Dispenser For Gravity Wagons

If you use your gravity wagon or grain truck to supply soybean seed for your planter, you'll like this no-spill "bean dispenser" made by Richard Layden, Hoopeston, Ill., that mounts below the grain chute and lets you easily fill two 5-gal. buckets at a time without spilling.

"It's a simple, low-cost idea but it works," says Layden. "The dispensers are easy to install and easy to adjust. Most farmers who try to fill 5-gal. buckets out of their gravity wagons or grain trucks end up spilling a lot of beans, and they can fill only one bucket at a time. By the time they get back from unloading one bucket into the planter, the other bucket is full and already spilling beans onto the ground. My bean dispenser lets me fill two buckets at a time and when they're full, the seed flow automatically stops."

Layden simply clamps a 6-in, wide sheet metal tray under the wagon's unloading chute. He cuts a pair of 2-in, dia, holes spaced about 2 ft, apart in the bottom of the tray, then bolts a small slide gate under each hole.

Layden attaches old socks (with the bottom cut out) to the bottom of each slide gate to form flexible fill tubes.

To fill the buckets he sets one under each sock, then opens the unloading chute about 2 in. and opens the slide gates. As the beans fill the buckets they also fill up the socks which causes the seed flow to automatically stop.



"The buckets are usually full by the time I get back from the planter with two empty buckets," says Layden. "Once I got onto it, I found that I didn't even need to use the slide gates. I just grab onto the end of the sock, pull the bucket out, and drop the sock into the empty bucket."

On gravity wagons with an unloading chute close to the ground, Layden doesn't have to use fill socks between the slide gates and buckets.

"Make sure the holes are spaced far enough apart so they're centered over each bucket," says Layden. "Some neighbors have used my dispensers to fill buckets with ground hog feed. However, the holes should be bigger, about 3 to 4 in. in dia., so feed won't cake up inside the holes once the flow stops."

Layden sells the bean dispenser for about \$50.

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"One-Legged" Three-Tank Fuel Stand

Arvid Whitehead, Red Deer, Alberta. made a one-legged, three-tank 1,500-gal. fuel stand by erecting a single concrete pillar with a platform on top for less than \$100.

"It looks neat and it's easier to mow around," says Whitehead. "Mounting three conventional fuel tanks on legs would take up more space and would require mowing around 12 different legs. With this set-up I only have to mow around one leg."

Whitehead poured a 6-ft. deep concrete footing and then mounted a 3-ft. high, 12-in. dia. masonite-covered "sonotube", used to form concrete footings or pillars,

on top. He also cut the bottom out of a 10-in. high, 12-in. dia. fiberglass flowerpot and mounted it on top of the sonotube, then filled both the sonotube and flowerpot with concrete. The flower pot helped funnel concrete into the tube and made the pillar taller.

Four lengths of 1-in. dia. rebar extend 1 in. out the top of the pillar. Whitehead welded a nut on top of each rebar, then bolted a 1-in. thick round steel plate onto each rebar. He used 2 by 2-in. sq. tubing and sheet metal to build a 5-ft. long cradle for the tanks, then welded the cradle to the steel plate. He used 1/8 by 2-in. steel straps to secure each tank to the cradle.



The top tank and one of the bottom tanks hold diesel fuel and are hooked up together. Contact: FARM SHOW, Arvid J. Whitehead, Rt. 2, Red Deer, Alberta, Canada T4N 5E2 (ph 403 347-0207).