Grain farmer Dale Beamish uses this SP auger to fill his 65 bins at harvest time.

Self-Propelled Auger Makes Harvest Easier

Grain farmer Dale Beamish used his spare time to simplify his busiest season. Beamish, who farms with his mom and brother at Jarvie, Alberta, found an easier way to fill his 65 bins at harvest time by building a self-propelled 13-in. dia. auger.

He built the auger itself totally from scratch and says it's built so strong he can even use it as a bin crane to pick up empty bins and move them.

He estimates the project took 250 hours to complete and his material cost was $4,800. The only things he purchased new were the main auger pipe, flighting, bearings, pulleys and belts; the rest was salvaged.

Beamish started with the engine and transmission from a Massey Harris 21 combine. The driveshaft is off the front of the engine that he uses for ground drive. The back of the engine is fitted with an independent automotive-type clutch and output shaft for driving the auger. The axle and chain-drive unit that powers the two drive wheels was widened out to 12 ft. for maximum stability.

The unit has four forward gears and one reverse, but since it's "geared low," it only travels about 6 mph maximum. It uses a hydraulic lever for steering the two smaller rear wheels.

Two steps lead to the open air operator platform which is located on the left side of the auger, facing the discharge end. A seat from a Massey Harris 21 combine was used.

The auger itself was made from scratch using a 60 ft. length of oilfield pipe.

The auger is top drive, using double 60 roller chain. The 90 degree gear box is from a White 8650 combine. The rear lift arms, which lift independently, are positioned on the center of the jackshaft and gearbox so that the belt tension doesn't change, no matter what height the auger is at.

A 13-ft. hydraulic cylinder under the auger tube is used to raise the discharge end and another smaller hydraulic cylinder under the rear lift arms is used to raise the intake end of the auger for transport or cleaning the hopper out.

About 5 ft. up from the auger base, two lights are mounted directly above the angle drive gear box. They provide good visibility when unloading at night into the integrated intake hopper.

Two steps from the hopper, is a control panel where the engine on/off switch, light switch, throttle and clutch for engaging or disengaging the auger are located. To simplify night moving, two additional lights are positioned about 15 ft. from the top of the auger.

There's no slip clutch or shear pin. Instead, when the bin is full, the auger plugs and stalls the Chrysler industrial engine. Then, Beamish simply moves the full auger to the next bin. The heavy driveline allows this to be done with no damage. Beamish says he's already plugged and stalled the auger more than 500 times.

Contact: FARM SHOW Followup, Dale Beamish, Beamish Seed Farms, Box 67, Jarvie, Alberta, Canada, TOG 1HO (ph 780 954-2166 or 780 954-3960).

Long-Lasting, Industrial-Size Burn Barrels

If you use a 55-gal. drum to burn trash, you know they don't last very long. You might want to check out the heavy-duty industrial-size burn barrels made by an Iowa farmer out of old fuel storage tanks.

"I've built 175 trash burners since I started making them in 1989," says Don Bartels, Lytton, Iowa. "They range in size from 300 up to 2,000 gals., with walls typically 1/16 to 1/8 in. thick. They'll last eight years or longer depending on use.

"I use old fuel barrels that I get at farm auctions. I make sure the barrels are thoroughly cleaned out before cutting a clean-out door in one end and a loading door in one side. I put hinges on the cut-outs, then reattach them. I install 36 or 48-in. tall chimneys made out of 8-in. dia. steel elevator auger tubing with a piece of grating over the opening so big pieces of burning material don't float up and out the chimney. I cut a series of 2 to 4-in. long slits in the bottom of the barrels to let water drain out.

Bartels makes industrial-size burn barrels like this one out of old fuel storage tanks.

"You can make the access door big enough to burn large items like packing crates or pallets." Bartel's burners sell for $150 up to $300. He'll make plans available for $15 if there's interest.

Contact: FARM SHOW Followup, Don Bartels, 2442 Xavier Ave., Lytton, Iowa 50561 (ph 712 466-2450).

Welch reversed his 1947 Ford 9N to run backward and also turned the loader and seat around.

"The reversed tractor is much easier to maneuver inside barns than a conventional loader," says Welch.

Reversed Ford Tractor Great For Loader Work

Clifford Welch, Beaver Dam, Wis., reversed his 1947 Ford 9N to run backward because it was too difficult to maneuver with a conventional loader inside barns.

He turned the loader around, reworking mounts on the sides of the tractor. Power brakes were installed so he could move them to the back. To accommodate the steering, a ball joint was welded onto the steering arm and then attached to an International gearbox. The easiest part, Welch says, was reversing the clutch using linkages and turning the seat around.

With the loader reversed, Welch says the tractor has much more traction besides being more maneuverable. He added counterweights to the front of the tractor to balance out the weight.

The reversed loader is used to clean the barn, move snow, haul wood, move dirt and gravel and do numerous other "odd" jobs. A manure bucket with tines is interchangeable with a snow bucket.

Contact: FARM SHOW Followup, Clifford Welch, W9606 Jackson Rd., Beaver Dam, Wis. 53916 (ph 920 887-2134).

"It doesn't tear up the ground like skid steers do and it's easier on fuel and tires," says Steve Kabay about his company's new "Coyote" articulated mini loaders.

Articulated Mini Payloader "Better Than A Skid Steer"

"It has a lot of advantages over skid steer loaders of comparable size. It doesn't tear up the ground like they do, it's easier to operate, and it's easier on fuel and tires. Yet it sells for about the same price," says Steve Kabay, Coyote Loader Sales, Inc., Hudson, Ohio, about his company's new "Coyote" articulated mini loaders, which also compete favorably with new "telehandler" chore tractors.

The hydraulic-driven Coyote is made in Germany and powered by a water-cooled Perkins diesel engine. Kabay's company offers six different models ranging from 22 to 50 hp. They're available with a wide variety of interchangeable attachments including a silage clamp, broom bucket, utility bucket, fork and grapple, post hole auger, pallet fork, etc. A hydraulic locking system secures the attachments without the driver having to get out of the cab. The loader arms are equipped with a unique "Z-bar" leverage system that produces a high breakout force and quickens the bucket's lifting speed by maintaining precise parallel lift. A lever on one side of the seat is used to control bucket movement.

"They're small and highly maneuverable and work great in livestock barns," says Kabay. "They steer and operate much like a car, with an accelerator foot pedal used to control speed. The operator has a great view in front and, compared to a skid steer loader, a much better view in back. The cab is easy to get into – you don't have to climb over anything like you do with a skid steer loader. One big advantage is that the wheels on our articulated payloader have much less rolling resistance when turning than do the wheels on a skid steer loader. A skid loader has to push dirt sideways when turning which wears tires out fast. Normally you have to replace the tires on most skid loaders about every 500 hours, compared to about every 5,000 hours on our machine.

"Another advantage is that our payloaders have much better ground clearance than skid steer loaders, especially on soft ground."

Kabay adds that the company can provide adapters for loader attachments made by other manufacturers.

Model 170, one of the smaller models at 32 hp, sells in the low $20,000 range.

Contact: FARM SHOW Followup, Coyote Loader Sales, Inc., 6721 Chittenden Road, Hudson, Ohio 44236 (ph 330 650-5101; fax 5105).