Home-Built Semi Hopper Bottom Semi Trailer

Van Kemenade and Lindsay bought a used 28-ft. flat deck trailer and mounted a double compartment hopper on it that they built from scratch.

"We couldn't find anything we liked on the market so we built our own. It has a lot of unique features," says Bernie Van Kemenade, Grosse Isle, Manitoba, about the hopper bottom semi trailer that he and his farming partner Jim Lindsay built.

The men already owned an International semi tractor. They bought a used 28-ft. flat deck trailer and mounted a double compartment hopper on it that they built from scratch. They used 2 by 4-in. steel tubing to build the frame and 1/8-in. thick flat metal for the hopper. One compartment holds about 325 bu. and the other 475 bu. Then they welded in the floors, seed and fertilizer chutes, center divider, and sidewalls. The seed and fertilizer chutes mount side by side. The unloading hoppers under the deck are 25 in. off the ground and 16 in. in from the outside edge of the trailer. The hoppers are covered by a manually-operated roll tarp.

They also built their own seed inoculant treater. It's powered by a 12-volt water pump that operates off the semi tractor's electrical system. The nozzle, attached to a length of hose, mounts permanently alongside the trailer frame and can be swiveled for use on either hopper. The inoculant is stored in a 25-gal. commercial tank. Two toggle switches, one for the seed treater and one for a light, mount next to the chutes.

"We used the trailer last spring for the first time and it worked great. We use it to handle wheat, barley, oats, canola, and flax crops," says Van Kemenade. "The two old single axle trucks we had been using to fill our 340-bu. Flexi-Coil air seeder were getting old. We already had a semi tractor that we didn't normally use at seeding time.

"Our rig has a number of advantages over commercial models. Total capacity is about 800 bu. compared to 600 bu. on most commercial slide-in models. The unloading chutes mount at the side of the trailer instead of in the middle, so we can fill our air seeder without having to use a hydraulic-operated 'belly auger'. Our semi tractor doesn't have hydraulics and we didn't want the hassle of adding hydraulics to operate another auger.

"The chutes mount side by side, not 10 ft. apart as on commercial models, so we never have to move the trailer when switching from seed to fertilizer. Sometimes we use both hoppers for seed or for fertilizer. The swiveling bracket makes it easy to move the seed treatment nozzle to the other chute. We simply loosen a bolt and move the bracket over. Another advantage is that the hoppers are built low so the trailer won't tip over as easy. Material from one hopper flows over the top of the right main frame and underneath the left main frame. On commercial slide-in models, all material has to slide from one side to the other which makes the trailer heavier on one side and therefore unbalanced.

"We've also found that it works beautifully as a grain trailer. The trailer is 13 ft. high so the unloading auger on our Deere 9600 clears it nicely.

"We paid $3,500 (Canadian) for the trailer and about $3,000 for steel so our total cost was only about $10,000.

"This year we plan to add a 100-gal. fuel tank and 50-ft. hose at the back of the trailer so we'll be able to add fuel to the tractor as we're filling the air seeder."

Contact: FARM SHOW Followup, Bernie Van Kemenade, Box 40, Grosse Isle, Manitoba, Canada R0C 1G0 (ph 204 322-5520; fax 5220).

"Just Get Close" Gooseneck Coupler

Hitching a gooseneck trailer to your pickup is easy with this new self-guiding, self-latching coupler that attaches to the trailer hitch and guides the ball into the locking position anywhere within a 6-in. "capture" area.

When the coupler lowers down over the ball it pushes a 3/4-in. dia. steel shaft upward and automatically latches two steel dogs around the ball.

"All you have to do is get close," says Frank Harr, Transportation Technologies, Moorcroft, Wyo. "Being able to see the ball from the driver's seat of a crew cab pickup or one equipped with a toolbox or extra fuel tanks can be a real problem

"Releasing the trailer from the pickup is easy. You stand beside the pickup bed and insert a 'T' handle into a slot on the coupler, then twist the handle to unlock it. A cable can be installed on the coupler and pulled to release it. We also offer an optional push button-operated electronic unit which allows the hitch to be automatically disconnected."

Works with any 2 5/16-in. dia. flat top ball (a 1-in. rise is recommended).

Sells for $290 to $579 plus S&H.

Contact: FARM SHOW Followup, Transportation Technologies, LLC, Box 455, No. 5 Country Lane, Moorcroft, Wyoming 82721 (ph 800 578-9633; fax 307 756-3896; E-mail: franhar@trib.com; Website: www.kissackcoupler.com).

Self-guiding, self-latching coupler attaches to trailer hitch and guides ball into locking position anywhere within a 6-in. "capture" area.

When coupler lowers down over ball it pushes a steel shaft upward and automatically latches two steel dogs around ball.

Tractor-Powered Wood Splitter

"I call it my 'Johnny Chopper' because it's made out of an old Deere pull-type mower and chops wood," says Carl Kappedal, Fosston, Minn., about the wood splitter he built out of a stripped-down No. 5 Deere trailing mounted mower.

"I looked at factory-built splitters but I didn't like them for three reasons. First, they're too low to the ground so you are bent over all the time. Second, you pay for an engine and pump that sits idle most of the time. Third, they're too expensive."

He left the mower's original subframe intact. It attaches solidly to the back of the tractor with a trailing caster wheel on back. The unit came with a sicklebar that could be hooked up to it with two pins. The splitter consists of a 7-ft. long section of railroad track fitted with a sliding wedge and a 4 by 24-in. hydraulic cylinder.

He made a pair of telescoping "drop-down" dolly legs and mounted one on each side of the splitter. Each leg is equipped with a small caster wheel.

"I spent less than $300 to build it," says Kappedal. "I built it because I had been splitting wood for years by hand and finally decided that I was getting too old to have back aches all the time when splitting wood. Most commercial pull-type models are so low to the ground that you have to bend over every time you split the wood, whereas I can split wood standing straight up. Another advantage is that the caster wheel is underneath the unit and out of the way where I can't stumble into it.

Built out of an old Deere trailing mounted mower, Kappedal's wood splitter is high enough that he can split wood while standing straight up.

"When we're done using the splitter I can back it into a shed and drop the dolly wheels down, then pull the two hitch pins, unhook the hydraulic hoses, and push the unit anywhere I want to inside the shed," notes Kappedal.

Contact: FARM SHOW Followup, Carl M. Kappedal, Rt. 3, Box 97 B, Fosston, Minn. 56542 (ph 218 435-1355).

Four-Way Log Splitter Cuts Twice As Fast

"It lets me split big chunks of wood four ways in one pass instead of having to make two passes," says Harvey Nielsen, Melfort, Sask., about his home-built 4-way log splitter.

The splitter rides on three 14-in. wheels and is equipped with a 4 by 16 hydraulic cylinder that mounts on top of a 10-in. wide steel I-beam. The 14-in. high, 12-in. wide wedge is made from 3/8-in. thick steel. It consists of a vertical blade and a pair of horizontal blades welded onto the sides. The combination of the vertical and horizontal blades allows the log to be split into four pieces.

Power is provided by a 14 hp Kohler electric start gas engine which belt-drives a hydraulic pump. The engine, battery, and pump mount on a platform below the splitting table and are protected by a pair of steel shields, which swing up out of the way for access.

"I built the four-way wedge because we split a lot of big logs," says Nielsen. "We often use our 4-wheeler to pull the splitter to a hunting cabin a few miles away.

"I built it mostly from scrap materials so it didn't cost much to build. I bought the engine for $50 from a neighbor who had been using it to operate a grain auger. When the connecting rod burned up he threw it away. The engine didn't have many hours on it so I fixed it up."

Splitter rides on three 14-in. wheels and is equipped with a four-way wedge for splitting big logs.

Contact: FARM SHOW Followup, Harvey Nielsen, Box 1032, Melfort, Sask., Canada S0E 1A0 (ph 306 752-9253).