



As worm-drive gearbox rotates arm up and over the wagon bed, a grapple fork places the big square bale on the load.

Self-Loading Wagon Makes Big Bale Handling A Snap

When Calvin Carls went looking for a big square bale mover he knew what he wanted but he just couldn't find it. Like thousands of other FARM SHOW readers, he decided that if you can't buy it, you might as well try to build it.

Carls's big bale mover not only carries up to 24 large bales from field to barn, it also loads and unloads the 640-lb. bales. And it didn't cost anywhere near what he would have paid for a commercial bale carrier.

"I wanted a machine that would pick up and haul a large load of square bales over a long distance because I often work alone in the fields, and I don't have anyone to drive wagons," says Carls.

The Pennock, Minn. farmer had done some small equipment modification projects in the past, but he had never tackled a job this big or complex. After drawing his ideas out on paper to get a better feel for the design in his head, Carls began to assemble the pieces he would need.

Two axles from a gooseneck trailer, a used hoist from a light duty tandem truck, and steel from a local blacksmith shop formed the base. A worm-drive gearbox, used hydraulic motors, cylinders and more steel finished out the parts list. After uncounted hours and an expenditure of about \$4,600, Carls had his big bale mover.

The 9-ft. wide bed of the wagon consists of 32-ft. long steel rails laid about 6 in. apart. The two axles, rated at 9,000 lbs each, are more than capable of handling the 15,360 lbs. in an average 24-bale load. Designed primarily for 2 by 3 by 8-ft. bales, Carls reports that the unit can handle other size bales as well.

Three hydraulic remotes and a hydraulic motor are required to run the unit. A rotating



Operator can swing the endgate free allowing the stacked bales to slide free of the wagon when the hoist is engaged.

arm complete with hydraulic-activated grapple forks grabs the bale and lifts it. The hydraulic motor on the worm-drive gear box activates a chain drive on the second section of the arm to rotate the bale up to 360 degrees. The combined action stacks the bale as the arm is retracted up and over the wagon. A steel framework on two sides and the back end helps to form and hold the stacked bales.

Once up to 12 bales have been loaded by the arm and grapple forks, the front-mounted hoist raises the bed, forcing the first tier of bales to slide to the rear. When the wagon is full, it's pulled to the storage site, opening the end gate and raising the hoist to allow the bales to slide completely off the wagon.

Carls reports that he has applied for a patent on the bale mover, and a couple of companies have indicated an interest in manufacturing it. In the meantime he's busy using his invention as he intended, moving bales quickly and easily from field to farm yard.

Contact: FARM SHOW Followup, Calvin Carls, 12670 120th Ave. NW, Penneck, MN 56279 (ph 320 264-5514).



Hoist slides first tier of bales to rear during loading and later deposits entire stack for storage. Grapple hooks tuck beside wheels during transit.



"Swift Lift" mounts right behind the cab and is powered by an electro-hydraulic unit.

Pickup Hoist Looks Like A Roll Bar

If you've ever wished you had a lift hoist on your pickup but you didn't like the looks of them or the inconvenience of having them in the pickup bed, you'll like the new "Swift Lift" which looks like a roll bar and leaves the pickup bed totally free.

The Swift Lift was invented in South Africa. Dennis Patterson of Vancouver, British Columbia, distributes it in North America. "We've had tremendous response. Pickup owners have been looking for something like this that would add to the look and value of their trucks, not detract from them," notes Patterson.

In transport position, the Swift Lift is positioned right behind the cab and looks just like a roll bar. When needed to lift, it simply lifts up and swings out to the side. It's powered by an electro-hydraulic unit that mounts on the side of the pickup bed to provide the lifting power. All you have to do is wire the unit to the truck's 12-volt system.

The lift is rated at 650 lbs. Sells for \$2,495



When needed to lift, it simply lifts up and swings out to the side.

(Canadian). There's also a 1,000-lb. model. And you can lower the cost by opting for a hand crank instead of the hydraulic-powered unit.

Contact: FARM SHOW Followup, Dennis Patterson, Swift Lift, 3176 West 37th Ave., Vancouver, B.C. V6N 2R5 Canada (ph 604 261-1107; fax 604 261-2307; E-mail: dennisp@home.com)



New "Trail-R-Mate" tracks are designed to mount on non-powered implements, such as this anhydrous ammonia running gear.

Add-On Tracks Fit Implements, 2-WD Tractors

Mattracks tracks for pickups have been popular across the Midwest and other areas for years (see FARM SHOW'S Vol. 19, No. 6). The track conversion system can be fitted to nearly any 4-WD vehicle including pickups, vans, SUV's, and even school buses. It consists of four separate triangular, 16-in. wide tracks.

Recently Mattracks showed off its new "Trail-R-Mate" tracks designed to mount on non-powered implements such as gravity wagons, round balers, anhydrous trailers, dirt scrapers, etc. They can even be used to replace the front wheels on 2-WD tractors.

Jerry Brazier, vice president of sales and marketing, says the tracks are still at the testing and prototype stage. The 16-in. wide tracks reduce ground pressure, with 18.7 sq. ft. of surface contact, providing "unbelievable flotation", according to Brazier. The tracks take about 20 minutes apiece to install.

Contact: FARM SHOW Followup, Mattracks, 202 Cleveland Ave. E., Karlstad, Minn. 56732 (ph 218 436-7000; fax 7500; website: www.mattracks.com).



The 16-in. wide tracks can be used to replace the front wheels on 2-WD tractors.



Tracks can be mounted on round balers or many other implements.