



Recycled flatbed railroad cars can be converted into a wide variety of bridge sizes and styles, says Paragon Bridge Works.



"We can make a bridge as long or as short as you want," says the company. They commonly sell single units that are 40 ft. long and 8 ft. wide.

Low Cost Bridges Made With Railroad Cars

Noah Figueroa had a business recycling railroad freight cars and flat beds. When farmers started coming in to buy flat bed cars to make bridges, he saw a new business opportunity. He now runs Paragon Bridge Works.

"We saw some of the bridges that farmers had made with rail cars, and they turned out fantastic," recalls Figueroa. "We got some people together and analyzed the engineering. The bridges are safe."

Paragon Bridges turns rail cars into a wide variety of bridge sizes and styles. The company strips away the hoses, valves, brakes, running gears, and other components. What's left is the flat bed frame and decking.

"We can make a bridge as long or as short as you want," he says. "Our longest bridge

was 6, 90-ft. spans end-to-end and 5 spans side-by-side for an oil company to cross a wetland. It had 100,000 lb. capacity."

More commonly Paragon sells single units, such as a 40 ft. long, 8 ft. wide span. They can be outfitted with a wide variety of decking and fixtures like handrails and other options.

A typical 40 by 8-ft. bridge starts at \$9,000. Add \$2,000 for painting, \$1,000 in decking, and \$2,000 to \$3,000 in handrails. Paragon also will handle installation (\$5,000 to \$10,000 depending on the site) and footings (\$4,000 to \$6,500) or advise on installation using local crews and materials. Weight capacity is largely controlled by decking, explains Figueroa. Rail cars are structurally designed to hold 70 tons.

"For 40,000 lb. capacity and under, 2 by 4 or 2 by 6 decking is sufficient," he says. "If you need 70,000 lb. capacity, you will need 3-in. thick Douglas fir. More than 90,000 lbs. requires steel decking."

If building a bridge for a rural residence, Figueroa suggests checking with the local fire department for weight capacity needed.

"We need to know the length, width and weight capacity of the bridge; then we can see which package fits," says Figueroa. "We then send a computer model of the bridge and what it will look like. Once paint and other options are selected, we build it and send it out."

Structural engineering blueprints are available for an added charge. Company

engineers are currently licensed in 35 states. The company is headquartered in northern Colorado, but maintains storage locations at 7 sites around the country.

Standard bridge spans include 20, 40, 55, 60 and 89 ft. lengths.

The Paragon website carries extensive information on location, abutments and available options.

Contact: FARM SHOW Followup, Paragon Bridge Works, P.O. Box 200753, Evans, Colo. 80620 (ph 970 737-1174; info@paragonbridgeworks.com; www.paragonbridgeworks.com).

Heavy-Duty Cutter Chain Parts For Harvestore Silos

Les Furgason says his cutter and conveyor chains will outlast and outwork the competition. His heavy-duty cast parts are heat treated for longer life.

"After years of replacing cutter and conveyor chain parts for my customers, I finally designed my own cast parts," says Furgason. "They have fewer wear points and components. I chose cast because of its greater wear characteristics."

Furgason's parts are all cast, machined and assembled in the U.S. The Star 50 Cutter Chain features large diameter bushings for greater sprocket contact and one-piece construction so it won't pull apart. Zinc coated side bars fight corrosion from silage acids.

"We feature the thickest bushing wall currently available on the market," says

Furgason. "Our single piece cast bushing replaces a four piece, press fit bushing commonly used."

The 50 Series Cast Conveyor Chain has many of the same features as the cutter chain, including large diameter bushings and one-piece block link construction. Both also offer smooth pin bores for longer pin life. The conveyor chain uses thicker, heavy-duty, heat-treated sidebars for longer life compared to imported chain.

"We designed flat steel paddles that allow a much larger area for feed to drop into," says Furgason. "They are also half the weight of conventional paddles for half the cost and longer chain life."

He adds that every customer has noted a substantial increase in feed delivery rates,



Les Furgason's heavy-duty cutter chain and conveyor chain are shown at bottom of photo. Competitor's parts are above.

thanks to the design. The design also allows for a number of paddle options, including a large rubber "sweeper paddle" that keeps the center cleaned out.

Furgason supplies a dealer network with his parts and a strong warranty. He suggests checking with him for a dealer for parts and

installation prices.

Contact: FARM SHOW Followup, Quality Parts Inc., 4052 Trestik Drive, Milladore, Wis. 54454 (ph 715 652-2633; les@bluetubeparts.com; www.bluetubeparts.com).

Rotary Fork Catching On Fast

Scott Campbell's Rotary Fork for evenly spreading poultry bedding has been a big hit with Canadian growers (it was featured in Vol. 33, No. 6). Now the Ontario inventor has produced a larger version more suitable for U.S. poultry operations.

"I made a 10-ft. version that mounts on a skidsteer or tractor loader," Campbell says. "It's 10 times more powerful than the model for small utility tractors. It's wider and there's more torque because of the big hydraulic motor."

When Campbell took the rotary fork to the International Poultry Expo in Atlanta, he learned that U.S. growers wanted a bigger unit.

Campbell's new 9-ft., 8-in. model fits through 10-ft. doors, quick-connects and uses tractor hydraulics. It sells for \$5,700 with quick-attach and hydraulic coupler setups customized for the buyer's equipment. The unit has a heavy-duty frame and main

shaft, two 1,100-lb. swivel caster wheels for leveling, two smaller casters for support, and tines spaced an inch apart. Replacement tines are available at TSC stores.

"I recommend running it at 1,500 rpm's or less for the best spreading speed," Campbell says. Rotary Fork uses less bedding material and saves time. Besides straw it can be used to spread rice hulls, peanut shells and shavings.

He adds he also has something new for Canadian customers — a tongue attachment for the smaller 5 ft., 8-in. and 7 ft. models, so they can be pulled with ATVs and non-standard tractors.

Campbell invites U.S. poultry growers to check out the video of his new model on his website.

Contact: FARM SHOW Followup, Scott Campbell, RR 1 - 4482 110 Rd., Stratford, Ont., Canada N5A 682 (ph 519 271-2619; www.rotaryfork.com).



Hydraulic-operated rotary fork mounts on a skidsteer or tractor loader and is designed to evenly spread poultry bedding.