Measuring 65 ft. long, 12 ft. high, and 14 ft. wide, this giant grain cart holds a whopping 5,000 bu., or about 25 dumps from the Johnson's combines.

Huge Grain Cart Keeps Combines Moving

Eric Johnson, Saskatoon, Sask., never liked sitting in his combine cab waiting for a truck or grain cart during harvest. Neither did his father, Harold. And in recent years they've had trouble finding anyone to drive their trucks for them.

The Johnsons grow 1,230 acres of peas, canola and wheat near Nokomis, Sask. Johnson also works in Saskatoon as an accountant. Harold is retired, except when Eric needs help in the field. To make harvest more efficient, Johnson designed the biggest grain cart FARM SHOW has ever seen. He got help engineering it from Tony Kaminski at the Saskatchewan Research Council and then hired Leon Ram, Yorkton, Sask., to build it in his metal shop, at a cost of about $85,000 (Canadian).

"It holds 5,000 bu., or about 25 dumps from the combines," he says. "It lets us both run combines for the better part of a day before we have to haul grain back to the farm."

The grain cart is 65 ft. long, 12 ft. high, and 14 ft. wide. It weighs in at 26,000 lbs. empty. Johnson says it's more of a portable bin than a cart, since it doesn't move once it's full of grain. Hydraulic cylinders raise the tandem axles up once the cart is in the field, so all the weight is on the frame rather than the tractor drawbar or the wheels.

A 9-in. auger that runs from back to front across the bottom of the bin empties into a 13-in. unloading auger in front that can be positioned to fill trucks on either side. Both augers run off the pto on a 4-WD tractor that pulls the cart to and from the field. At idle speed, it can load trucks at the rate of about 100 bu. a minute, so it takes only about five minutes to load a 500-bu. straight truck.

At the end of an average day, the Johnsons cover the cart with a roll tarp. Then they spend their mornings hauling grain, since crops are often too tough to combine then anyway.

If he were doing it again, Johnson says he'd first cut the load-out rate a little, since 100 bu. a minute can be too fast at times.

Secondly, he says he'd set the wheels inside the frame and a little farther forward. And he'd shorten the 12-ft. long hitch. "It doesn't corner as well as I'd like, but I think these changes would solve that problem," he says. Johnson says he knows other farmers might question the economics of making such a big cart. "I'm sure you could hire a truck driver with just the interest on the $85,000," he admits. "But it allows us to more fully use our own time. And if my father should ever decide to fully retire, I'll be able to harvest alone on my own schedule. It's getting so hard to hire help that I feel I need to be prepared for that. It'll also pay off in years when weather at harvest time isn't as good as it has been in recent years and I have only a few good days to get a crop out of the field."

Contact: FARM SHOW Followup, Eric Johnson, 504431 Third Ave. N., Saskatoon, Sask. S7K 4Z3 Canada (ph 306 652-5229; fax 306 244-1219).

Giant Slow Speed Fan Ideal For Livestock Barns

Showgoers at the Wisconsin Farm Progress Days near Janesville got a close look this fall at a giant new "high volume, low speed" fan for livestock confinement buildings .

"It could reduce electric bills by hundreds of dollars compared to using conventional cooling fans," says Pat Ederer, Ederer Dairy Supply, Plain, Wis.

The new fan is available in diameters up to 24 ft. It's fitted with 6-in. wide aluminum blades direct-driven by an electric motor. The fan is designed to hang about 15 ft. above the floor, spaced about 50 ft. apart.

The big fan pushes air down and outward, creating "waves" of air that move toward the side walls. The fans come with variable speed drive.

"It keeps air moving throughout the entire building in a way that's very energy efficient," says Ederer. "The up-front cost of the fans is comparable to what you'd spend on conventional fans. However, they cost much less to operate. One 24-ft. fan uses only about 3 amps of electricity, which is about the same as what one small conventional fan uses. It costs about $11 per month to operate compared to $126 per month for conventional ventilation fans. So you could save more than $100 per month in electricity on each fan.

"Our giant high volume, low speed fans can reduce electric bills by hundreds of dollars compared to using conventional cooling fans," says Ederer Dairy Supply, Plain, Wis.

"Another advantage may be higher production. Conventional fans have such limited air dispersal that they can't be spaced to provide even coverage. As a result, most people don't use enough of them because they're so expensive to operate. Our fans keep the air moving throughout the entire building.

"We recommend running the fans slowly during the winter to push warm air down from the ceiling. However, the fans should be operated at full capacity in summer."

An 18-ft. fan sells for $3,750.

Contact: FARM SHOW Followup, Ederer Dairy Supply, E5663A Hwy. B, Plain, Wis. 53577 (ph 888 337-6455 or 608 546-3713; fax 608 546-3718).

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Harold M. Johnson
Founder & Publisher Emeritus

Editor/Publisher - Mark Newhall
Senior Editor - Bill Gergen
Contributing Editor - Mick Lane
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