

Add-On Joystick Delivers Comfort And Safety

AGCO's Fendt brand introduced the ErgoSteer retrofit kit to bring joystick steering to its FendtONE line of 500 to 1000 Vario series tractors equipped with Profi+ specifications.

The kits come as two components: a replacement left armrest and a joystick portion that mounts above the armrest and plugs directly into the tractor's CANBUS network port. Software updates aren't necessary.

The ErgoSteer joystick capabilities include a shuttle button to change directions and an auto-steer engagement to turn GPS functions on or off. It also features return-to-center positioning and a retraction steering mode. When activated, the machine drives straight ahead once the joystick is released. The direction of travel is changed at the steering joystick, including a stop-and-go function.

"A sensitivity adjustment changes from 0 to 100, so it can be set aggressively and snappy or turned down for more precise slower movements," says Fendt Sr. Marketing Product Specialist Blake Bullinger.

As a safety feature, the joystick steering control is limited to speeds of 15 mph or less. Farmers still need to use the tractor's steering wheel for road operation. The kit also adds driver comfort by allowing them to use proper seat posture in an ergonomically safe position rather than reaching and leaning forward to turn the wheel.

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He recommends that interested customers contact their nearest dealers for ErgoSteer pricing, availability and installation details.

"It's easy to get used to as well. If you've driven a skid-steer or a payload, you'll be right at home with it."

Contact: FARM SHOW Followup, Fendt, 4205 River Green Pkwy., Duluth, Ga. 30096 (www.fendt.com/us).



Schraner's family tractor uses a 1931 Model A Ford 4-cyl. gas engine.

Makeshift Tractor Still Going Strong

"Back in the 1940s, it wasn't really possible to buy a new tractor, so my father put together a Model A Ford from the parts and pieces he could come up with," says 90-year-old Linus Schraner. "The rear end actually came from a 1 1/2-ton truck."

This method was common in those years, as tractors were a large investment and parts were scarce. Farmers often took older tractors apart, rebuilt, repaired and reassembled them.

"The Model A was our main machine back then and the first piece of equipment I ever drove," Schraner says. "It's been around a long time, and we still run it today and play around with it a few times a year to keep it limbered up."

The 1931 Model A's 4-cyl. gas engine is original, although it's been overhauled. The tractor boasts two transmissions for a low and

higher gear ratio, a governor made from the generator, and a belt pulley.

Schraner used the belt drive to run a 9-in. Deere hammer mill and a cutoff saw to cut firewood. The makeshift tractor has pulled a 1956 New Holland hay baler, a 6-ft. tandem disc, a 14-in. mounted plow, a binder to cut small grain, and hauled grain bundles to the family's threshing machine.

"When it got warmed up, it ran well, but in the dark, you could see the exhaust glow red hot," he says.

Schraner still takes the Model A to town for get-togethers and to show it off. He says the cherished tractor will stay in the family.

Contact: FARM SHOW Followup, Linus D. Schraner, 11150 Urban Rd., Derby, Ind. 47525 (ph 812-719-2079).

Battery-Powered Mixer Works In Different Containers

EvenMix developed a new battery-powered mixer to stir liquids in totes, tanks and drums. Unlike the company's earlier air-driven or 110-volt mixers, this unit runs on standard Dewalt or Milwaukee batteries.

The specialized mixer is modular and can be used with a drive pipe and blade assembly in all three types of containers.

The standard-duty digital gear drive is their most popular unit and is designed for intermittent mixing. Patented variable pitch folding blade sets (16 by 4 in.) match a 32-in. shaft and fit through a 6-in. opening on most IBC totes. A drum bung blade set (15 by 2 in.) fits on a 29-in. shaft and slides through a 2-in. bung opening on most steel or polymer drums. Simply install the battery and select an adjustable speed setting from 0 to 20.

"Depending on the battery amperage, you get about an hour of run time for 2 amps," says EvenMix Commercial Director Chris Lintner. "They have very low energy consumption. Just turn them on and walk away."

The mixer is ideal for farm chemicals like atrazine and corn gluten, as well as thicker liquids that settle out, such as adhesives and polymers. All mixers are no-shear and max out at 150 rpm.

"What sets our mixers apart is they're lightweight at under 20 lbs.," Lintner says.

"Also, our patented blade design recirculates material well in square containers. With the module aspect, you can use the same drive in a tote, tank or barrel, saving money as you don't need to buy numerous units."



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The battery-powered mixers are assembled in Ohio and shipped directly or from dealers.

Prices range between \$3,500 and \$5,500 plus S&H. Batteries aren't included.

Contact: FARM SHOW Followup, EvenMix, 4641 Spring Rd., Cleveland, Ohio 44131 (ph 440-753-6886; info@evenmix.com; www.evenmix.com).

Using agri-food waste for added value will provide market opportunities and prevent these waste residues from going to landfills.



Precision Fermentation Adds Value To The Food Chain

In simple terms, precision fermentation is the modification of bacteria or fungi to produce specific molecules, explains Dr. Pooba Ganeshan, Principal Scientist of Fermentation and Bioengineering at the Saskatchewan Food Industry Development Centre Inc.

"The bacteria or fungi themselves aren't consumed, but the product produced by them after modification can be purified and used as food or food ingredients," Dr. Ganeshan says. "In essence, the bacteria or fungi work like 'microbial cell factories' to produce molecules of interest. The molecules themselves aren't different from those produced naturally. They're just being produced more efficiently and rapidly in large tanks (fermenters) where the bacteria and fungi grow to produce the desired product, which is then extracted and purified."

The Food Centre uses precision fermentation, bioengineering and downstream processing technologies to assist start-ups in validating their processes at a scale suitable for producing advanced ingredients for new food applications. They offer contract research and manufacturing, incubation, expertise, resources and certified facilities to help companies bring these food, beverage

and ingredient innovations to market.

"We're filling this gap in manufacturing wherein there's tremendous potential to produce healthy, nutritious food products sustainably, but there's a lack of infrastructure to produce them," Dr. Ganeshan says. "We're helping startups and small and medium enterprises (SMEs) to get their precision fermentation products quickly to market. While the current large-scale capacity at the Food Centre is still not a high throughput commercial production scale, it allows for proof-of-concept and early commercialization efforts for these startups and SMEs."

Dr. Ganeshan believes precision fermentation allows for the efficient use of resources to derive maximum benefit. For example, in today's context, there's a lot of emphasis on circular economy and the upcycling of agricultural residues to derive more value. Using agri-food waste for added value will provide market opportunities and prevent these waste residues from going to landfills.

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