

All-Electric Tractor Outperforms Diesels



New Holland introduced its new T4 Electric Power tractor at the Farm Progress show in Decatur, Ill.

By Jim Ruen, Contributing Editor

Better performance than diesel, lower operating costs and electric power on demand for remote welding and other tool use are only a few of the features of the 74-hp., T4 Electric Power (T4EP) utility tractor from New Holland.

The T4EPs prototype was introduced in late 2022. Recent Farm Progress Show attendees got to see the real thing. Everyone else (aside from those who attend Agritechnica in Germany) will have to wait until 2024 when the groundbreaking tractor will be offered commercially.

“The T4EP utilizes a fully electrified drive train with state-of-the-art features and components,” says Lena Bioni, New

Holland. “With the battery bank, it’s a slightly heavier utility tractor than the equivalent PowerStar diesel, which contributes to best-in-class ground traction.”

The T4EP is equipped with all the standard features of a utility tractor plus the latest technology. What it doesn’t have is diesel fuel, DEF, oil or oil filters. As a result, operating costs are up to 54 percent less compared to fuel and maintenance with a diesel-powered alternative.

Bioni notes that the T4EP also offers better performance than diesel, with high torque (maximum torque of up to 440nm) and fast response achieved at the lowest speeds. This reduces the need to change gears, improving

drivability for operators, regardless of their skill level.

The smooth and gradual delivery of power at low speeds and constant delivery at high speeds increase the operator’s control and precision with implements and loader.

“It’s an easy-to-use machine,” says Bioni.

A big advantage of the powerful battery packs and AC110/220V outlets on the T4EP is its exportable power. “The tractor can serve as a power source for welding, drilling and cutting machines in remote areas and fields,” notes Bioni. “While not suitable for use as a true whole home or vehicle-to-home solution, it can be used to keep limited, essential house (or farm) circuits functioning.”

The T4EP offers a follow-me, semi-autonomous function and CNHi Invisible Bucket. Other digital viewing assists include Over the Air updates, Live View, Map Maker and Remote Diagnostic Access.

The Invisible Bucket will allow the operator to see the view blocked by a loader bucket or other attachments. The real-time camera view is seen on the tractor’s 14.8-in. touch screen.

The Advanced Driver Assistance System makes these functions possible. It uses computer vision techniques and machine learning algorithms for real-time object recognition, as well as classification. These autonomous features are expected to be officially available in the T4EP tractors released later in 2024.

Components include sensors, cameras and control units in the Smart Roof with 360°

Awareness Mode. The operator can activate the tractor via a smartphone app. Machines can be synced together with tasks assigned to each piece of equipment. Implement recognition ensures the tractor links up with required attachments. Off-board digital services let farmers run the tractor while monitoring its performance and battery level from anywhere.

“It can automatically differentiate between various obstacles, such as vehicles, pedestrians, animals and stationary objects, providing warnings to the operator and initiating collision avoidance measures,” says Bioni.

The 110kWh maximum energy storage capacity, lithium cell chemistry battery modules offer up to a full day of operation, depending on the workload. They take just 1 hour to recharge to 100 percent power using commercially available fast charging systems.

As with other EVs, the T4EP operates at a reduced noise level. This makes it less disruptive around livestock and conducive for use in nighttime operations in urban areas. With zero emissions, it’s especially attractive for use in sheds, barns and confined spaces, whether livestock related, municipality, greenhouse or other uses.

A price for the T4 Electric Power tractor has not yet been set.

Contact: FARM SHOW Followup, New Holland (<https://agriculture.newholland.com/en-us/nar>).

Air Tank Add-On Allows For Easier Drainage, Storage

Hans Strayer of Grapevine, Texas, has upgraded his vertical air compressor for easier drainage. “Being a disabled Army veteran, turning my vertical air compressor over to open the drain valve was becoming a real problem,” he says. “I had a couple of extra air chucks and repurposed them into an extension, so I don’t have to turn the compressor over. I simply reach down and turn the valve handle.”

Strayer also made a wooden box that he bolted onto the front support bracket. He keeps a small toolbox within this additional storage space for all his air tools. Mounted on the outside is a reel with 100 ft. of air hose.

“It took me longer to find the parts than the time it took to assemble it,” Strayer shares. He had all the necessary parts from older projects and didn’t need to buy anything, though he estimates the cost would have been about \$25.

Overall, the project has streamlined the process of draining the tank. “The original drain valve was so difficult to use that I drained it once a week, but now I drain it daily because the new valve extension is so easy to use,” he says. “With the male end



Strayer used some extra air chucks for an extension to make draining the tank easier. He also added a tool box and cord reel for hose storage.

on this, one can attach a section of air hose and run the water discharge away from the tank. However, since the tank is on wheels, I usually roll it outside my shed and drain it in the grass.”

Contact: FARM SHOW Followup, Hans Strayer (hpfstrayer@hotmail.com).

Rare Prototype “B” Cotton Picker

A hardworking and dedicated group from Chapter #23 of the National IH Collectors Club worked for several years to restore a Farmall “B” Cotton Picker Prototype. The restored prototype was delivered to the Mississippi Ag and Forestry Museum in November 2022 and was a highlight of the museum’s Harvestfest. The meticulously restored cotton picker is now a main feature of the museum’s cotton exhibit.

Contact FARM SHOW Followup, Mississippi Ag and Forestry Museum, 1150 Lakeland Dr., Jackson, Miss. 39216 (ph 800-844-8687).



Prototype cotton picker took club members several years to restore.

Schlabach added an option for 10-in. wheels and a handle to pull the bed around and steer it like a wagon. The wheels are heavy-duty for 1,000+ lbs. and roll easily over most surfaces.



Raised Garden Beds On Wheels

Dean Schlabach’s raised garden beds are portable so they can be moved easily to sunnier locations or inside a garage or shed on cold nights to extend the growing season.

The owner of Harmony Acres in Shipshewana, Ind., started selling raised beds in 2021 (Vol. 46, No. 3). Made with red cedar beds, aluminum frames, and stainless-steel fasteners, they’re built to last for years. Plastic 2 by 2-ft. reservoirs with connecting hoses at the bottom of the bed and fill pipes that go up through the soil create a self-watering system which is especially useful to keep plants watered while on vacation.

This year, in response to customer requests, Schlabach added an option for 10-in. wheels and a handle to pull the bed around and steer it like a wagon. The wheels are heavy-duty for 1,000+ lbs. and roll easily over most surfaces.

He also offers a removable greenhouse cover as an option that provides protection from bad weather and warmth to start plants earlier and extend the growing season.

“One of our dealers pulled it in and out of

the garage and grew food in it all winter,” Schlabach says, adding the wheels have become a popular option. They’re ideal for people who live in the suburbs or have limited space and want to grow some of their own food.

He offers stain options that are food safe and meet standards for organic growers. The beds are 29 in. tall and 2 ft. wide, so they’re a comfortable height for seeding, weeding, and harvesting. Beds come in three lengths, 2, 4, and 8-ft. An 8-ft. raised bed with self-waterer is \$466.22 (\$661 with wheels, \$1,420 with wheels and a greenhouse cover). Less expensive models without the self-waterer are also available.

Schlabach says he has shipped to several states and includes simple assembly directions. He has dealers in the Midwest and is interested in adding more dealers throughout the U.S.

Contact: FARM SHOW Followup, Harmony Acres, 11565 W 300 S, Shipshewana, Ind. 46565 (ph 260-593-2135).