

# Monarch's Autodrive Marks the First Commercially Available, Fully Autonomous Feature in a Driver-Optional Tractor

By [Monarch Tractor](#)

[Monarch Tractor](#), creator and manufacturer of the [MK-V](#), the world's first fully electric, driver-optional, smart tractor and Wingspan Ag Intelligence (WingspanAI) energy and digital platform, announces a landmark accomplishment in the ag robotics space. For the first time, a [fully-autonomous feature in a driver-optional tractor](#) — EV or diesel — is commercially available for dairies.

“This is a monumental moment for Monarch Tractor and the entire agriculture industry,” says Praveen Penmetsa, CEO and co-founder of Monarch Tractor. “We’re delivering on our promise to provide farmers with cutting-edge technology that solves real-world problems. Autonomous feed pushing offers immense value to dairy farmers by improving operational efficiency while increasing milk production. It allows the dairy farmers to focus on what matters most – the health and well-being of their animals.”

**Cows produce more milk with consistent access to feed, increasing a dairy's profit margin.**

The MK-V takes a conventional tractor's ability to perform multiple operations and stacks on fuel and emissions savings from electrification and labor optimization through autonomy. For dairy farmers, autonomous feed pushing helps solve labor shortages making it a gamechanger for maximizing milk output, an essential for fiscal viability. The ability to monitor feed pushing remotely while tending to other critical tasks ensures cows can be consistently fed every hour.

Because the MK-V is an electric tractor, dairies save significantly on fuel expenses. An EV tractor runs quietly with zero emissions, resulting in a calmer, healthier environment for both cows and farm workers. As a smart tractor armed with Monarch's Wingspan Ag Intelligence, [WingspanAI technology stack](#), it tracks performance metrics while 360-degree cameras record video footage for real-time and historical insights. The MK-V Dairy is also a mobile power wall with 12v, 110v, and 220v plugs. Stored power gives a farm greater security against power outages.

### **Scaling automation with market-specific solutions and value.**

Being a single hardware platform capable of automation in a variety of markets sets the MK-V apart from other manufacturers. This innovation allows Monarch to scale its hardware platform at a competitive cost with software packages providing differentiation in automation and digital insights for each of its markets.

“Enabling our tractors to autonomously perform a complex task like feed pushing was a significant technical achievement,” says Saurabh Gupta, CPO of Monarch Tractor. “Replicating the nuanced decision-

making of a human driver in a dynamic farm environment demands an incredibly sophisticated AI system. This launch demonstrates the power of our technology and its potential to transform agriculture.”

Working closely with dairy farmers and other industry voices, Monarch is committed to strengthening and expanding partnerships to ensure continued farmer-first developments.

### **A trifecta of industry firsts secures Monarch’s prominence in ag robotics.**

Since its debut, Monarch set a blistering pace by bringing its innovative version of an advanced tractor, the MK-V, from concept to market entry in just four years. Less than a year later, it released [Row Follow](#), making autosteer available to specialty farms for the first time. With the launch of Autodrive, Monarch is the first tractor manufacturer to take an autonomous operation from beta testing and release it to the market. With their predictable, flat ground, broad lanes, and generous headland space, outdoor dairies proved to be an excellent environment to transition Monarch’s Autodrive feature to commercial availability.

Autodrive for the MK-V Dairy currently works in outdoor feed lanes and outdoor lanes covered with shade cloth. Monarch is actively testing Autodrive for partially covered and indoor dairies and anticipates releasing this feature in the near future. Additionally, the company is refining its Autodrive technology with robust testing on vertically trellised (VT) farms including vineyards, apples, and cherries, as well as berries, sod, and solar.

Monarch is hosting an immersive in-person Autodrive demonstration

at a working dairy on February 12, at 3 p.m. in Tulare, CA. Monarch's specialists and engineers will talk to attendees and give them the opportunity to learn about and engage with the tractor. Reservations for the demonstration can be [made here](#). Anyone interested in Monarch's Autodrive feature is encouraged to attend. Dairy farmers can also [set up a demonstration](#) at their own farm.

**Founded in 2018, Monarch Tractor's MK-V is the world's first fully electric, driver-optional, smart tractor that combines electrification, automation, machine learning, and data analysis to enhance farmer's existing operations, cut overhead costs, reduce emissions, increase labor productivity, and improve safety. Monarch Tractor is committed to elevating farming and land management practices to enable clean, efficient, and economically viable solutions for today's farmers, land managers, and the generations to come. With cutting-edge technology, global reach, and an experienced team, Monarch is delivering meaningful change for the future of agriculture and land management. For more information on Monarch Tractor, visit [www.monarchtractor.com](http://www.monarchtractor.com).**

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