



VENSYS GROUP - HYDROKIT

WITH TURNKEY ELECTRIC RETROFIT, HYDROKIT HELPS YOU GO ELECTRIC IN LESS THAN A YEAR WITH A CARBON FOOTPRINT HALF OF THAT OF A NEW ENGINE.

As an integrator of electric kits, Hydrokit is also a Parker “Certified Mobile Electrification Center” partner. Their expertise in mobile machines puts them in an excellent position to meet regulatory and environmental requirements for reducing CO2 emissions.

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François Brochard, head of electrification activities at In Situ and Vensys Group.

CHALLENGE: A RAPID TRANSITION TO ELECTRIFICATION

The electrification of off-road mobile machines represents a serious challenge for construction vehicle fleet managers and to the major players in the agricultural and construction markets, who need to offer zero-emission machines in their extensive range of models.

SOLUTION: TURNKEY KITS

Hydrokit partners with Parker Hannifin and Forsee Power. This integrator designs, manufactures and integrates complete kits for electrifying diesel-powered off-road vehicles, as well as zero-emission power units.

BENEFITS: SPEED & RELIABILITY

Mobile machinery manufacturers can convert their vehicles in less than a year for a first machine, or a few months for mass production, at controlled costs. CO2 emissions are nil during use. Noise pollution is greatly reduced, as are maintenance costs.

Hydrokit is part of the Vensys group, along with Soerma TP, InSitu and E-Neo. Nearly 50 engineers and experts work in the design office, including a dozen dedicated to electrical projects. Heir to 5 generations of Audureau family entrepreneurs, Hydrokit is renowned for its design of hydraulic kits for the agricultural, construction and industrial sectors.

To support its development in low-carbon solutions, Hydrokit has formed a dual partnership: the SME integrates Parker Hannifin motors and variable speed drives, and Forsee Power electric batteries, into its kits.

Hydrokit's strength: turnkey electrification combined with the credibility of Parker products

The reputation of Parker Hannifin's Group, present in many industrial segments, is a major asset in terms of credibility: electrical, but also hydraulic.

François Brochard, head of electrification activities at In Situ and the Vensys Group, explains: "We offer a generic platform with qualified, standard components: Parker motors and drives, Forsee Power batteries. We integrate the kits into the machine via electrical, mechanical and hydraulic interfaces that we adapt. This flexibility in the choice of interface increases and facilitates integration possibilities."

The depth of Parker's ranges and their reputation in electrification represents a unique offering for manufacturers of mobile machines using hydraulic and electric technologies, designed to operate in harsh environments.

Alexandre Moalic, Sales Manager Mobile & Offroad Parker Hannifin, adds: "One of the integrator's strengths is also wiring, which enables us to offer turnkey solutions for electrification. Hydrokit offers a complete system with wiring harness and electrical



distribution, not just a technological brick."

Nicolas Gazeau, in charge of innovation and market intelligence for Vensys Group, confirms: "Hydrokit comes from hydraulics and mobile machines. We're very familiar with mobile machine applications and can offer a complete solution, from the interface with the hydraulic pump to the man-machine interface (MMI). We also have the solutions to make hydraulics more energy-efficient."

Reliability, quality and a culture of openness

François Brochard highlights the reliability of Parker solutions: "We work with professionals who expect reliability from their electrical components. In difficult conditions of dust, temperature and intensive use, we were impressed by the recognized quality of Parker products. Retrofitting is by no means synonymous with poor quality."

The specialist also confides: "Parker has a culture of openness, which is conducive to partnership. Parker Hannifin shares its documents and makes its case openly, which is an essential point. We need trust to move forward. This gives us a better understanding of Parker's products and their integration." Hydrokit is set to become Parker's second "Certified Mobile Electrification Centers" in France. The mission of

CMECs is to help mobile equipment manufacturers electrify their machines.

Nicolas Gazeau adds: "Parker's R&D department is located in France. This geographical proximity is consistent with our decarbonization approach. It also favors responsiveness. We save a lot of time and can now offer machine manufacturers certified solutions that can be implemented very quickly (between 6 and 12 months), and very soon complete kits that can be directly integrated." Access to Parker's programming software and support significantly reduces development time.

CO2 emissions reduced by 50% compared with a new electric machine

François Brochard illustrates the reduction of CO2 emissions using the example of the French market. Retrofit electrification can halve the CO2 emissions of a mobile machine compared with a new electric machine, thanks to the reuse of existing equipment.

What potential for electrification?

"End-user demand is real, says François Brochard. However, they lack visibility on possible technical electrical solutions. There's a shortage of off-the-shelf products to really stimulate supply, and that's what we intend to address with our range of electric kits and gensets. Purchasing subsidies are also desirable to really kick-start the energy transition among construction and agricultural professionals."

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