

Batteries: News flash

PARTNERS PULL
TOGETHER FOR
BATTERY RESEARCH.
BY ROBERTA PRANDI

Kaitek Flash Battery, an Italian manufacturer of lithium batteries for industrial machinery and electric vehicles, will be one of 17 European partners involved in joint research and innovation projects and initial industrial production in the field of new generation lithium batteries.

The Important Project of Common European Interest ("IPCEI") is founded by the European Commissions and jointly funded by Belgium, Finland, France, Germany, Italy, Poland and Sweden and aims at supporting research and innovation in the common European priority sector of batteries.

The project will look at building a lithium batteries value chain entirely in the European Union, which will produce raw materials, cells, modules and battery systems on a large scale. The selected companies and research institutions that will join the project have been chosen to develop advanced disruptive technologies that meet performance, cost and safety objectives that are currently not met in the lithium-ion battery sector.

Kaitek Flash Battery was founded in 2012 and reached €14 million turnover in 2019, with trading partners in 54 countries. The product portfolio includes more than 300



Batteries by Kaitek Flash Battery use Li-Fe-PO4 lithium and feature remote control to monitor the health of the component.

www.flashbattery.tech

different battery types and reached an installation record of 7500 batteries above 10 kWh capacity operating in the field.

STABLE LITHIUM CHEMISTRY

Marco Righi, CEO of Kaitek Flash Battery, explained that the company supplies its batteries for industrial and off-highway vehicles for example for aerial platforms, airport ground equipment, utility vehicles, other types of off-highway machinery and marine applications.

"Our company uses Li-Fe-PO4 lithium, which is the most safe and stable lithium chemistry currently available on the market," Righi said. "This lithium type has a much longer life than other lithium types, up to more than 4 000 recharge cycles.

"Moreover, it is available in large-capacity elements (100, 200 and 300 Ah) which is

ideal for industrial systems as it avoids using several cells connected in parallel with a reduced stability and safety. Also, larger elements mean that the lithium cells are easy to exchange and maintenance can be done on site."

According to Righi, Li-Fe-PO4 lithium technology has more advantages compared to conventional lithium batteries: over 20% quicker active and passive balancing with about 30 minutes in total; 50% recharge in 30 minutes; and more flexibility in designing custom battery systems especially for intensive-operation applications.

Batteries by Kaitek Flash Battery feature an electronic remote control – Flash Alert System - to constantly monitor the health status of every battery thus ensuring maximum availability of the vehicle. The system performs predictive maintenance and sends notifications in case of anomalies so that unexpected maintenance operations can be performed very quickly. The machine's productivity is thus increased and the collected operational data can be used to improve future designs.

Kaitek Flash Battery is gearing up to meet the demand for new generation lithium batteries and Righi anticipated that a new production facility near Reggio Emilia will be inaugurated later in 2020.

Kaitek Flash Battery installed 7500 batteries worldwide in applications such as aerial platforms, airport ground equipment, marine crafts and utility vehicles such as this sweeper by Dulevo.

