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FLASH BATTERY FINALIST TO THE BAUMA INNOVATION AWARD 2022

“Flash Data Center 4.0”, the proprietary software that harnesses artificial intelligence for automatic remote data control, has been shortlisted for the prestigious recognition in the “digitalisation” category

At the next Bauma – to be held from 24-30 October in Munich – Flash Battery will be presenting its proprietary software “Flash Data Center 4.0”, the automatic real-time data control system that harnesses artificial intelligence.

It won't be, however, a simple participation in the largest international construction machinery and materials exhibition for this Italian company, a leading European manufacturer of customised lithium batteries. That's because Flash Battery was named a finalist by the judges of the “Bauma Innovation Award 2022”, shortlisted in the “Digitalisation” category and the only Italian among the nominees to the prestigious recognition.

“What an amazing satisfaction this is”, underlined Marco Righi, CEO of the company based in Sant'Ilario d'Enza (Reggio Emilia) operating with a staff of 70, 30% of which devoted to research and innovation. “It's a recognition that goes beyond the quality of our batteries into everything that's linked to them in terms of reliability, advanced and predictive analysis of the big data from the battery systems, and the constant performance checks and improvements that customers can concretely measure and control on their own”.

Flash Data Center 4.0, in fact, is an automatic real-time data control system that uses artificial intelligence; the cloud system is integrated into a virtual environment with a Containerized Architecture that harnesses machine learning and AI technologies to guarantee the interconnection between battery systems made by Flash Battery.

Righi explains: “This means that Flash Data Center 4.0 learns and improves performance based on the data analysed, giving OEM manufacturers and end customers the opportunity to carry out advanced and predictive analyses of the big data from their battery systems in real time, thanks to the support of machine learning and AI technologies”.

Righi continues: “The new graphic interface and user experience were designed as a single intuitive dashboard that provides end-users with real-time analysis of all the battery's key metric data, including Cycle Life, State of Charge - SOC, State of Health - SOH, and Operating Temperature for each interconnected battery.”

From the very beginning, Flash Data Center 4.0 was conceived to enable predictive maintenance and the advanced planning of extraordinary maintenance work. This avoids expensive downtime, saving time and money. At the same time, the system lets customers manage “end of life” autonomously, thanks to a control system that accurately keeps tabs on the battery's state of health (SOH).



“In this way”, says Flash Battery CEO, “SOH and End of Life are accurately predicted and make it possible to sustainably plan the replacement of end-of-life batteries in entire fleets, optimising and reducing the cost of disposal and making the process of re-using components more efficient thanks to the component blockchain”.

Righi concludes: “Predictive maintenance as we envisioned it in Flash Data Center 4.0 is an important advantage not only in terms of battery end-of-life but also in terms of extraordinary maintenance events requiring on-site repair, because it allows a certain amount of planning, which here, too, saves time and money”.

So here you have it, the complex system that takes into account performance, safety, costs and management autonomy already selected by the jury as a finalist in the Bauma Innovation Award 2022, as we get ready to go live in late October for the full-on days at the trade show.

About us

Flash Battery produces lithium batteries for industrial machinery and electric vehicles. Since 2012, the year in which Flash Battery was founded, the company has designed and produced more than 15,000 lithium batteries, created more than 500 different custom models and installed over 200 MWh in various industrial machinery and electric vehicle applications.

Flash Battery batteries are in use in 54 different countries around the world and automatically monitored on a daily basis by our proprietary Flash Data Center remote control system. Flash Battery was born out of the passion for electronics and technology of Marco Righi (CEO) and Alan Pastorelli (CTO), two young men with expertise in lithium batteries and automotive systems. Our mission is to supply lithium batteries to builders of industrial machinery and electric vehicles who have moderate production volumes and a strong need for customisation.

To learn more, visit: flashbattery.tech