

Energy-efficient modular chargers

The new Hawker® LifeTech® Modular and Hawker® Life IQ™ Modular high-frequency battery chargers from EnerSys® deliver increased flexibility, efficiency and reliability with reduced downtime, costs and carbon footprint across a wide range of materials handling, automatic guided vehicle and motive power applications. They reduce energy consumption by up to 25% compared with conventional chargers and can cut charging times by up to two hours.

The chargers are configured using a number of identical power modules so that performance can be matched to the specific application requirement. Each module is a standalone unit which is managed independently by the control board to deliver peak efficiency at all times. The advanced design of the chargers delivers increased efficiency and reduces energy consumption compared with conventional models. The chargers convert 94% energy input into usable battery power, an industry-leading.

These performance and efficiency gains result from innovative design and use of advanced components to optimise the chargers' power factor at close to one which is ideal for battery installations. Optimised power factors minimise reactive power from the mains supply and ensure there is no voltage drop, overheating or resonance in the power circuits.

The optimised charging profiles of the Hawker LifeTech Modular and Hawker Life IQ Modular chargers have been developed for all low to heavy duty applications. The recharge time is reduced by around one hour for standard batteries and up to two hours when used in conjunction with an electrolyte recirculation system. The modular design supports continuous operations with reduced downtime. If a module should develop a fault it is automatically bypassed while the remaining units continue to operate as normal until the battery is fully charged.



The built-in diagnostics provide rapid fault identification on the charger's screen supporting simpler and quicker maintenance. Faulty modules can be hot-swapped quickly and easily while the charger continues to work with no disruption to ongoing operations. Depending on specific model and configuration, the chargers are available in single and three-phase versions with outputs from 12 to 80V. An on-board screen provides a simple user interface while the built-in USB port supports connectivity and allows historical operational data to be downloaded for further analysis and reporting.

www.enersys-hawker.com

Cab constructor with foresight

One step ahead: Fritzmeier Systems GmbH has adopted this motto as its company philosophy. At CeMAT, the specialist in sophisticated detailed cab solutions presented integrated systems, smart interfaces and new components. The overriding objective is to offer cab drivers the maximum in safety, ergonomics and driver comfort, together with optimum flexibility and cost benefit.

The focus this year lies on an innovative cab control system with integrated digital controller, which Fritzmeier Systems has developed in recent months in cooperation with Bosch. "The basic idea is that the cab driver can control important functions in the cab centrally via a tablet, and that they are no longer required to grapple with individual operating functions," explains managing director of Fritzmeier, Fritz Schadeck.

The cab driver is presently able to control a wide range of functions via the user-friendly tablet interface. These include



the windscreen wiper system developed together with Bosch, with programmable options such as wiper speed, wiping angle up to 320 degrees and parking position.

A further function enables individual heating and cooling with a single click, as well as data exchange with existing air conditioning and heating systems. At the same time, the cab mirrors can be electrically adjusted via the tablet and even heated if necessary. The additional installation of an indicator function for the cab mirrors is also available on request. It is also possible to actuate and program the warning beacon. Depending on the

requirement or working situation, all electronic components and consumers in the cab can be programmed individually.

"We are the first manufacturer in the off-highway sector to use this type of control system, which is already widely in use in the automotive sector in a similar form," explains Schadeck. "We will be modifying and expanding the control options on a step-by-step basis over the coming months and years, depending on the requirements and interests of our customers."

In addition to the advantages for the users, the new high-tech control also brings customers of Fritzmeier Systems cost savings with system integrations through wireless connection of the cab functions via the tablet, because individual components are more simple or even superfluous. Added to this comes the use of more economical high volume production parts such as the control units.

www.fritzmeier.de