

trak[®] monitor

The HOPPECKE fleet management system for charging station



Motive Power Systems

Reserve Power Systems
Special Power Systems
Service

Your benefits with HOPPECKE trak[®] monitor

- Higher battery and vehicle availability
- Reduced energy and maintenance costs
- Extended battery life
- Enhanced operational safety
- Administration of large battery pools
- Comprehensive battery management system

Typical applications of HOPPECKE trak[®] monitor

- Fleet operation
- Centralised charging stations



trak[®] monitor

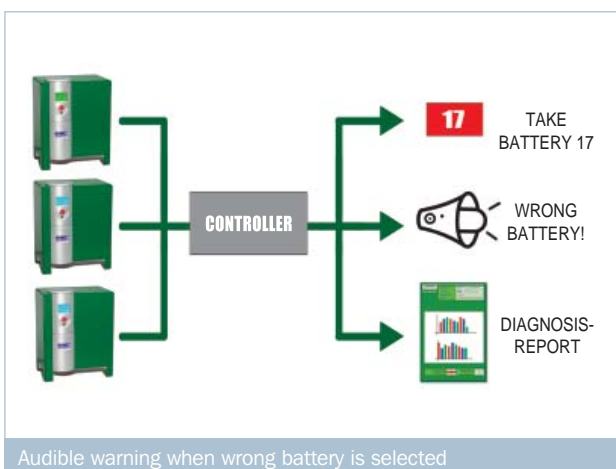
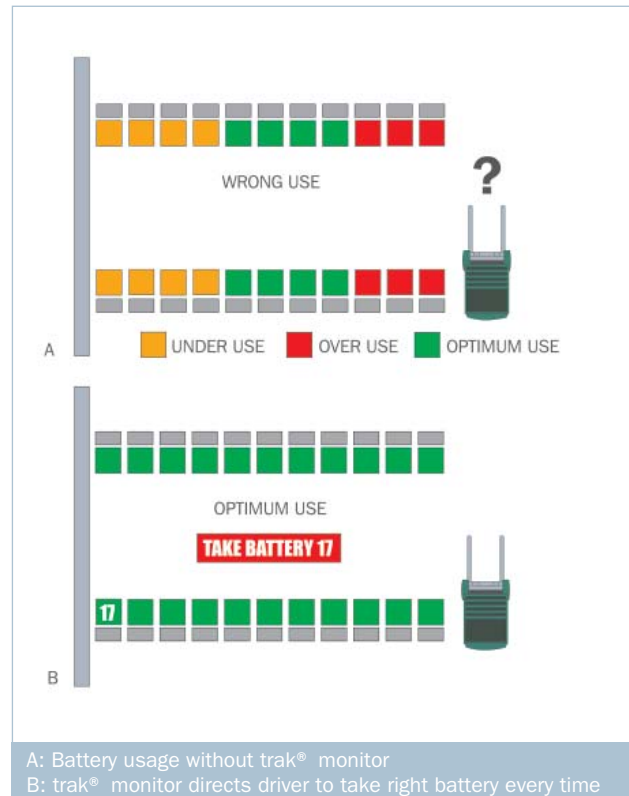
The HOPPECKE fleet management system for your charging station

Rapidly changing markets and strong competition present you with the challenge of constant reliability and efficiency in your internal operations such as conveying from A to B, stacking and order-picking.

As the sole energy source for your electric-powered vehicles, the traction battery must always be fully charged to ensure that your vehicles are constantly available for work, over normal shifts, extended shifts, or even 24 hours a day.

How can you as fleet operator, with numerous drivers who have more or less knowledge of batteries and work different shifts, ensure proper and correct use of the batteries in the charging station. Is the battery which has been taken fully charged and ready for use, or still under charge and not able to provide full capacity during the shift?

HOPPECKE trak[®] monitor offers you the best and most reliable answer to these questions.



trak[®] monitor: Interactive charging place allocation for the driver or the battery changing personnel

trak[®] monitor is connected directly to the charger and shows the vehicle driver in the charging station, on the first in/first out principle, the charging location number of the battery which is fully charged and which he should place in his vehicle on battery changeover. To avoid error, an audible warning sounds if he takes an incorrect battery.

trak[®] monitor

More than ten convincing benefits for you

■ **Extended battery life**

With trak[®] monitor you extend the life of your batteries, thereby obtaining considerable cost savings through the systematic use and constant utilisation of the traction battery pool in the charging station.

■ **Reduced maintenance costs**

With trak[®] monitor you avoid excessive or insufficient use of batteries, and so reduce the time and cost for maintaining your batteries.

■ **Higher productivity**

More uniform and optimal utilisation of traction battery capacity enable you to achieve higher productivity. Because of the constant high capacity utilisation achieved with trak[®] monitor, the charging station is used less often for battery change-over. This avoids loss of valuable time.

■ **First-class maintenance and planning instrument**

By connecting the control unit you obtain easy access to the stored data via a graphical display. Analysis of the data shows up clearly utilisation, charging times and waiting time (batteries charged but not in use) for batteries per day, per week or per month as specified by you. Incorrect treatment of batteries, such as manual interruptions to charging, may be investigated with this information and the necessary action taken.

■ **Comprehensive and effective battery management system**

The link between stored data from the HOPPECKE trak[®] monitor system and the HOPPECKE trak[®] power battery chargers provides you with a comprehensive and effective battery management system. All charging processes and the relevant cycle data are stored, allowing you to make at any time a simple and quick analysis of consumption data. The base for flexible internal activity allocation and external service accounting.

■ **Central system control including energy management**

The data are controlled centrally in the charging station or from your office. All chargers are connected centrally to a control-unit. For safe use in the robust conditions of the charging station, this control-unit is supplied in a separate housing (IP 54) suitable for wall mounting. If required, some chargers may be disconnected at times of heavy peak loads from AC power supply (energy management).

■ **Quick high-quality visual display in the charging station**

For a good quality, easy-to-read display in the charging station you have the option of an LCD screen (32" with IP 54 rating) or an LED scrolling display (continuous text display IP 65 rating).

■ **High level of flexibility**

If you are in charge of numerous fleets at different locations, then thanks to the GSM interface you may at any time retrieve data from the various locations remotely. A link to your LAN (Local Area Network) is also possible.

■ **Prompt detection of faults with audible warning signal**

You receive constant and up-to-date information on the status of your batteries and chargers in the charging station. An audible signal gives prompt warning of faults and protection from possible damage (e. g. charger fault, interruption to data bus, etc.). in addition, error messages are stored for future analysis.

■ **Administration of large battery pools**

With trak[®] monitor you can manage up to 200 chargers and batteries.

■ **Wide range of options for use (Battery Management System not tied to one charger's manufacturer)**

trak[®] monitor may be used with any type of battery or charger.

■ **Enhanced operational security**

In the event of a mains power failure, trak[®] monitor switches over to its own uninterrupted power supply, to give you greater operational security. In the worst case, your data will not be lost.



Motive Power Systems



Reserve Power Systems



Special Power Systems



Service



HOPPECKE subsidiaries and factories - European sales and service network

Industrial batteries - Complete energy systems - Full Service

- Low-maintenance and no-maintenance batteries
- Innovative battery chargers based on the latest technology
- Battery accessories
- Battery management systems and software
- Battery changeover systems
- Battery/charger servicing
- Battery recycling
- Applications engineering and technology
- Battery room design
- Technical training and seminars
- Leasing
- Power by the hour

Your partner for sustainable energy solutions!

Further information on www.hoppecke.com

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