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trak | FNC

The enduring battery system for toughest operating conditions

Typical applications:

- Continuous operation 24/7
- Operation in extreme temperatures
- Operation under difficult conditions (e.g. high levels of vibration)

Your benefits:

- Vehicles can be used 24 hours/ 7 days a week without battery changeover
- Excellent performance in extreme temperatures (e.g. cold stores and foundries)
- Use under difficult conditions – very good mechanical and electrochemical stability

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Features and benefits

If you wish to use vehicles 24 hours/7 days a week without battery change or under exposure to extreme environmental conditions (e. g. extreme temperature range or mechanical vibration), then the HOPPECKE **trak** | FNC system provides the unique solution for you! The **trak** | FNC alkaline battery system comprises a HOPPECKE traction battery using FNC (fibre-structured nickel) technology, combined with a microprocessor-regulated charger and a battery control unit.

Automatic docking station

The trak | FNC technology

Especially in businesses which produce or operate round the clock, the benefits of **trak** | FNC technology really show up to full advantage!

The special properties of this alkaline battery make battery changeover unnecessary. Utilisation for opportunity charging of the pauses in work which occur every day allows 24-hour use of both vehicle and battery. At the same time, virtually 100% availability of vehicles makes possible a reduction in vehicle fleet size.

The extremely high mechanical stability of **trak** | FNC batteries gives long-term resistance to vibration and rough treatment.
The robust design of the cell therefore means an absolutely reliable energy store, even under the most severe operating conditions. The lack of sensitivity of the nickel-cadmium battery to external factors (e.g. low temperatures) and to incorrect handling excludes the risk of sudden battery failure ("sudden death").

A monitoring unit ("fuel gauge") specially developed by HOPPECKE for this system gives the fork-lift driver information on availability of the vehicle at any time. Battery capacity and charging current are derived from the vehicle's profile of use and selected so that the normal daily sequence of operations is not interrupted by unforeseen opportunity charging.

In addition, the monitoring unit still has the task of countering any incorrect use, by drawing the driver's attention to the need for any required charging, by stopping lifting movement. Other functions such as recording operating hours or energy balancing are also integrated, and make the system complete.

24 hours/7 days a week without replacement batteries through opportunity charging technology and the ability to accept high currents

- **Maximum vehicle availability**
  Reduced charging times and excellent ability to accept high currents
- **Maximum operating cost savings**
  No changeover batteries
- **Maximum energy density**
  Lower battery weight, volume and size
- **Excellent mechanical and electro-chemical stability**
  May be used under difficult conditions, e.g. at the loading ramp
- **Good performance at low and high temperatures**
  May be used in cold stores and foundries
- **Good reliability for planning purposes**
  No sudden system failure
- **Decentralised charging**
  No need for a central charging station
- **Maximum operating reliability**
  Constant monitoring of battery capacity by the battery control unit

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