





trak | systemizer dynamics

The coolest traction energy system for high-current applications





trak | systemizer dynamics specifically for applications with high performance requirements

trak | systemizer dynamics is the battery concept, which perfectly meets the requirements of the future classification "efficiency of industrial trucks" already today.

trak | systemizer dynamics is the battery system for applications, which require high currents in relation to the battery capacity.

3



Typical examples for application are the use in heavy-duty vehicles, simultaneously occurring load requirements such as lifting, accelerating, lowering, braking and loading tasks concerning bulk goods. trak | systemizer dynamics is a sealed maintenance-free battery system and, therefore, environmentally friendly with the lowest operating costs.



Powerful & efficient

trak | systemizer dynamics has an outstanding power density and offers at the same time high cycle stability due to the minimal internal resistance and the AGM system protecting the active mass. These features are especially noticeable with vehicles with permanently high performance requirements, as this results in considerably increased runtimes despite the same initital capacitiy as PzS batteries. The high voltage level due to the low internal resistance is a guarantor for the superior efficiency of this traction storage system.

trak | systemizer dynamics is now the most efficient lead-acid traction energy system for high-current applications.

Cool²

trak | systemizer dynamics minimises the waste heat (temperature development) developing from the flowing current. This is achieved by the minimal electrical resistance of the battery system. The waste heat (temperature development) developing simultaneously due to electrochemical processes is independent from the battery type and occurs proportionally to the conversion of the active mass. The implementation of a cooling via convection counteracts actively the temperature development (heating). This is achieved by the open construction of the battery system. In comparison to the conventional PzS batteries, trak | systemizer dynamics produces less heat and expels the produced heat efficiently. This means cool².

trak | systemizer dynamics is the coolest traction energy system for high-current applications.

Maintenance-free & simple

trak | systemizer dynamics is maintenance-free: No water has to be refilled during the entire lifespan of the battery. The system contains no free electrolyte and, therefore, is leak-proof.

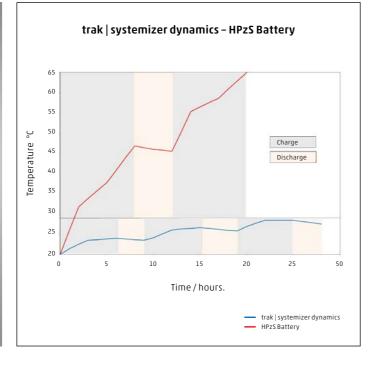
There is no need for service for the electrochemical system requiring a regular insertion of fluids or the removal of gases. Therefore, the battery system is constructed in a closed way. Damages to the environment / the surroundings of the battery system as well as damages to the (electrochemical) battery system by the surroundings / the handling in the application are eliminated this way.

Due to the construction, the maintenance requirements are considerably lower compared to the conventional PzS batteries. Functional checks and controls of the trak | systemizer dynamics can be implemented during the service interval for the industrial truck.



trak | systemizer dynamics for high-current applications with a discharge rate of \geq 0,8 x C.





Your advantage with HOPPECKE

Highest Efficiency

- Low investment volume
- No or less replacement batteries

Your advantage with HOPPECKE

- Coolest traction energy system
- No downtime due to cooling phases via intelligent heat dissipation



5

Your advantage with HOPPECKE

- Low maintenance costs
- No water refilling neccessary



Flexible & individual

trak | systemizer dynamics is projected application- and vehiclespecifically. At the integration of an onboard charger, opportunity chargings to increase the range can be performed flexibly. Due to the excellent power reception, even the shortest (opportunity) charging periods lead to effective capacity changes.

As the battery cells may be used in any position, the system is ideally suited for the placement in complex installation spaces and allows additional degrees of freedom for the development of new vehicles.

Your advantage with HOPPECKE

- Your individual solution
- Gain additional installation space





Typical fields of application

Forest and wood industry





Agriculture and Gardening

Port logistics



7



Metal industry/ Heavy industry





Construction machinery

Airports





HOPPECKE Batterien GmbH & Co. KG Bontkirchener Str. 1 D - 59929 Brilon Tel: +49 (0) 2963 61-0 Fax: +49 (0) 2963 61-449 E-Mail: motivepower@hoppecke.com All details in this brochure are based on state-of-the-art technology. Our products are subject to constant development. We therefore reserve the right to make changes. All illustrations similar.

05/2016

