

1 | Challenge: Fitting out a new logistics hall

A new dispatch hall, many different vehicles, many batteries: this requires a lean and well thought-out energy concept.

Greenfield planning - a term familiar to project managers in particular. A task that seems simple, yet brings more challenges than may be apparent at first glance. There is a lot to consider when planning the interior design of a logistics centre, from shelf height to the sensible arrangement of individual items. Above all, the fleet of industrial trucks must be included in the planning - this also includes the development of an efficient loading strategy and the design of a matching loading and changing station.

The client's customer, an agricultural machinery manufacturer, had built a new logistics hall for shipping spare parts. The customer was to take over the

organisation of the logistics there. This included not only equipping the hall with the appropriate industrial trucks, but also developing such a concept for charging the vehicle batteries.

Different types of forklift trucks were to be used in the hall, which required different drive batteries. In addition, it was important to the client to be able to charge in the most space-saving way possible while always guaranteeing a high level of occupational safety. The battery change should be as simple and quick as possible so that the vehicles are well utilised during working hours.

New constructionOf a logistics hall

Efficient changing station required

Space-saving solution wanted

Different types of forklift trucks



Four different charging possibilities

Space-saving installation of charging platforms

Efficiency through individual charging methods

Low standing hours
through exchange
batteries

2 | Solution: Fourfold changing station for every requirement

Altogether four different charging options were installed by HOPPECKE at the logistics hall:

- A charging station which allows the batteries to be charged directly in the vehicle without taking them out.
- A charging station for exchange batteries, so that the vehicles only have short downtimes.
- A charging station for exchange batteries on rolling beds, so that the battery change of heavy batteries gets simplified.
- A charging station for reach trucks.

The different kinds of charging stations enable the use of the best charging procedure for the respective vehicle and battery type. Through this adaptation, the station reduces the risk of injury because of simplified operation – especially the rolling beds have an ergonomic advantage for the user during the battery change.

For the equipment of the exchange station, HOPPECKE used the trak | charger HF premium and classic

charging devices. The installed shelves come from the trak | Xcharge CS series and have an additional plug fixation for simplified use. The roller-mounted exchangeable batteries stand on standard roller beds in the trak | Xchange BS-OF battery frame with an open front for the simplest and quickest possible battery change.

Batteries from the trak | uplift and trak | uplift iQ series with the trak | air electrolyte circulation system were used in the industrial trucks. This means that the batteries are optimally matched to the chargers and can be charged gently. The trak | uplift iQ battery with smart-charging function can be charged particularly quickly and is thus optimally suited for charging in the vehicle.

The station was recently put into operation. With the applied solution, the customer can now charge all industrial trucks in the most efficient way and keep the downtimes of his vehicles low through user-friendly changing stations.

Key Benefits

- Minimised risk of injury through user-friendly operation of the charging station
- Different charging stations allow an efficient loading of all kinds of vehicles and batteries
- Deployment of vehicles can be coordinated as individually required
- Best price-performance ratio with fulfilment of all customer requirements

3 | Products:

▶ Batteries: trak | uplift air, trak | uplift iQ

▶ **Charging devices: trak** | charger HF premium, **trak** | charger HF classic

Changing frame: trak | Xchange BS-OFCharging platform: trak | Xcharge CS



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