



CUSTOMER RESULTS



“We never even considered using another supplier. Thanks to their all-round expertise in and lengthy experience of lithium-ion technology, Crown is one of the market’s leading innovators.”

Henning Voigt
Managing Partner
Voigt Logistik

Real customers,
real stories,
REAL RESULTS.

To learn more and contact
your local Crown dealer
visit crown.com

Voigt Logistik

Clean Lithium-Ion Technology Does Away with Time-Consuming Battery Swaps

APPLICATION

Founded in 1933, Herbert Voigt GmbH & Co. KG is one of Northern Germany’s leading transport and logistics services providers. Via a network of precisely scheduled routes, some 50 vehicles leave the company’s premises each day, transporting general freight of all kinds throughout Europe according to strict delivery timetables. Voigt also manages storage facilities for various industrial, chemical and trade customers.

CHALLENGE

To increase capacity, Voigt Logistik commissioned a state-of-the-art, 10,000-square-metre distribution hub with 106 loading gates. The company follows the Green Logistics philosophy, always striving to use the most energy-efficient technology available. Crown’s robust SC Series counterbalance trucks, DT Series double stackers and WT Series pallet trucks, all previously powered by lead-acid batteries, had already proved their worth in the company’s logistics centres. But Voigt’s challenging two-shift operation made battery changes unavoidable. This resulted in expensive peak loads on the power grid when all the batteries were connected to charging stations simultaneously. It also meant that too much time and money was spent on battery maintenance and other unproductive activities, as well as replacement batteries.

SOLUTION

Still at the planning stage, Voigt Logistik and Crown jointly developed a new, sustainable energy concept for operating the company’s forklift truck fleet using an innovative battery technology with shorter, more flexible charging cycles. Crown recommended clean, energy-efficient lithium-ion technology, because the batteries’ fast-charging capability means that they can be given a top-up recharge at any time and recharged from empty in just two hours. The positioning of charging stations alongside loading gates and near rest areas was specified during the construction planning phase, to ensure that battery charging was fully integrated with operational and logistical workflows. A photovoltaic array was installed on the roof of the building, delivering storable electricity that is used to power both the building’s electric systems and the forklift fleet’s battery chargers. Thanks to lithium-ion technology, the company no longer needs to change batteries, pay for expensive replacement batteries, or spend unproductive time on cleaning and filling lead-acid batteries with water.

RESULTS

- The **lithium-ion fleet** has achieved a **cumulative efficiency level of around 90%** – an **improvement of 50+%** over conventional lead-acid batteries
- The fleet’s **sustained high performance without performance drops**, coupled with its **top-up recharging capability**, means that rest periods and downtime can be used productively, resulting in significantly **increased productivity**
- **Efficient, clean lithium-ion technology** plus the building’s **self-contained, clean electricity supply** based on photovoltaics are a good fit with Voigt Logistik’s **Green Logistics philosophy** and **sustainability strategy**

50+%
BATTERY
EFFICIENCY
IMPROVEMENT