



## Significant energy savings thanks to highly efficient LIONIC® energy systems

BENNING supplies highly efficient lithium-ion energy systems to one of Germany's largest semi-automated textile logistics centres.

Meyer & Meyer Holding SE & Co. KG in Osnabrück is a global transport and logistics company with over 1,800 employees with a network of subsidiaries and partners in Germany and abroad. It specialises in fashion logistics and has a modern logistics complex in Peine that can handle both hanging and flat packed garments. Using state-of-the-art technology, various processes can be carried out here quickly and accurately, such as quality checks, intermediate storage or final shipment.

In 2013, to achieve the goal of saving energy in storage systems as part of their continuous improvement, Meyer & Meyer started to work with GS-Gabelstapler Service GmbH. Their competitive tender offered the greatest economic benefits, based on a leasing model combining 25 forklift trucks with the highly efficient BENNING LIONIC® energy systems and the corresponding BELATRON Li+ high-efficiency charging units.

### Extremely economic

Compared with lead-acid batteries, the LIONIC® energy systems immediately offer several significant advantages, one of which is that they are easy to charge, this can be done at a number of local convenient charging points. This eliminates the need for a separate battery charging room with special air supply, ventilation and acid-resistant flooring. Also, in continuous operations, having local charging points means the forklift trucks have a shorter distance to travel, making these resources more efficient overall.

All LIONIC® drive batteries can also be recharged within a short period at any time. Usually, normal work breaks are sufficient to maintain the required battery capacity for a two-shift operation. There is no need to replace batteries, which is time-consuming, or

to top up regularly with water, as the Li batteries are virtually maintenance-free.

When considering the charging process on the whole, the method of travelling directly to and from charging points and connecting at the charging station was also studied in detail. The charger arms that were developed at the client's request also made connecting and disconnecting at the charging points simpler and faster.

### Maximising energy efficiency

Whereas lead-acid batteries are only 70% efficient in converting the chemical process to electrical energy, LIONIC® energy systems are clearly much more efficient at up to 95%.

This is because the charging involves virtually no charging factor, less voltage surge and lower temperature rise during charging and discharging, increasing energy efficiency substantially. Overall, this reduces energy costs by approximately 30%, maintenance costs by around 75% and battery handling costs by almost 60%.

### More plans in progress

Thanks to this intelligent combination of innovative warehouse technology and highly

*Charging is simplified by the convenient charging arm for the charging station and the connection point, which can be easily reached from outside.*



LIONIC® energy systems are available in a range of capacities in 24 V and 48 V versions.

efficient LIONIC® energy systems, the desired goal of achieving a significant reduction in the energy used in warehousing has already been achieved. So plans are already being made to continue this successful partnership long-term. □

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### About GS-Gabelstapler Service GmbH

The company was founded in 1979, and moved to its newly built premises in Wolfenbüttel in February 2017. The management offices, repair shops and warehouses are located on a site approximately 12,000 m² in size.

Torsten Franke, GS-Gabelstapler's managing partner, says, "Our core competences lie in consultancy; assessing requirements and designing warehousing solutions; and selling forklift trucks, charging and energy systems. We also provide financing for the products and services concerned by offering leasing and lease purchase packages."

www.gs-gabelstapler.de