

# LITHIUM-ION BATTERY LOGISTICS

# THE INCREASING DEMAND FOR LITHIUM-ION BATTERIES

TOGETHER WITH **OUR CUSTOMERS** WE DEVELOP INDIVIDUAL **SOLUTIONS.**

Global demand for lithium-ion batteries is expected to rise from 185 GWh in 2020 to over 3,127 GWh in 2030. This sharp increase is primarily due to the electrification of transportation, which will account for the largest share of battery demand in terms of total energy storage capacity in 2030. As demand for electric vehicles and renewable energy storage continues to rise, the importance of lithium-ion batteries as a storage medium will continue to grow.

Hartmann International has many years of experience in the storage and transportation of lithium-ion energy storage systems.

*“Together with our customers, we develop individual solutions and concepts for sometimes very different applications,”* explains Björn Böhme, Managing Director at Hartmann International.

## THE SAFE HANDLING

### TRANSPORTATION



Compliance with ADR regulations with specially trained personnel



Firmly defined accident concepts



### DANGERS DURING TRANSPORTATION AND STORAGE

The handling of lithium-ion batteries harbours potential risks, such as a high risk of fire or corrosion. Efficient and safe storage is crucial to prevent these challenges. Once energy sources have caught fire, they are difficult to extinguish and require special equipment.

Hartmann International uses special testing mechanisms to check the temperature of the stored batteries and ensure that the storage racks are adequately ventilated.

### STORAGE



Storage of dangerous goods class 9 (M4)



Standardised process for incoming goods



Dedicated loading point for optimum loading conditions during storage (> 10 % and 80 %)



Spacing regulations for storage racks for optimum ventilation and fire prevention



Special equipment for firefighting



24/7 temperature monitoring

# SUPPLY CHAIN OF THE LITHIUM-ION BATTERY

We have many years of experience in the storage and transportation of lithium-ion energy storage systems.

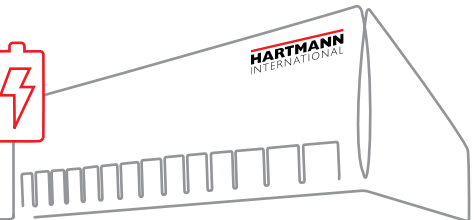


**IMPORT**  
Raw materials / components /  
Lithium-ion batteries

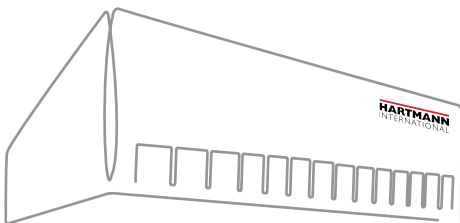
**PRODUCER**  
Batteries, storage

When charging lithium-ion batteries in accordance with ADR regulations, we use suitable and approved packaging that separates the batteries from each other. The load is stowed and fixed without gaps, so that inertial forces are prevented.

**DANGEROUS  
GOODS  
WAREHOUSE**



During storage of the lithium-ion batteries, our safety standards are checked at regular intervals by our trained personnel.



**TRANSSHIPMENT  
HALL**

Thanks to the direct link between our dangerous goods warehouse and the transshipment hall, shipments are connected to the European transport network with daily departures throughout the whole of Europe.

**EXPORT**  
worldwide



The goods can also be exported outside Europe through our Air, Sea and Rail department.

## ENOUGH SPACE

We are currently in the process of building a 20,000 sqm logistics property in Paderborn-Mönkeloh, which is designed as a dangerous goods warehouse.

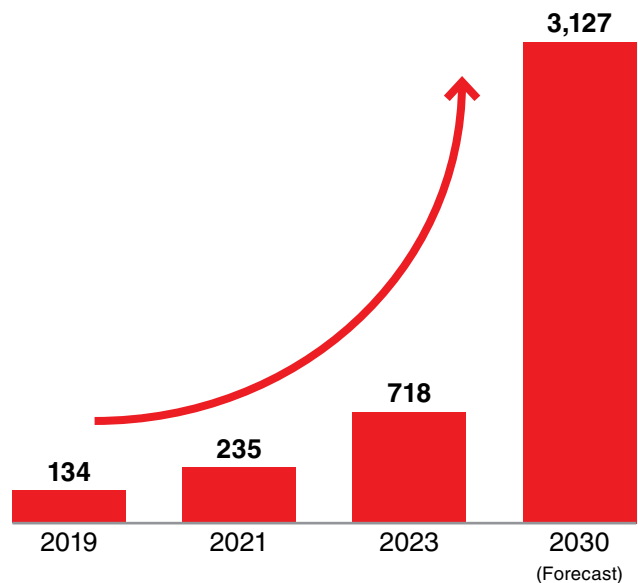
# OUR NEW DANGEROUS GOODS WAREHOUSE

Our new 20,000 square meter building closes the gap between the freight forwarding terminal and the self-storage facility on Pamplonastrasse. The expansion of the freight forwarding terminal, which will be connected to the new logistics property via an underground tunnel to avoid additional transportation, was not completed until the end of 2022. The new building is being constructed to efficiency house level 40 by the Bielefeld-based construction company Goldbeck and forms an important building block in the company's sustainability strategy. The construction of the multi-user logistics hall is the logical consequence of the continued growth of Hartmann International's logistics division.

For Hartmann International's customers, the closing of the gap means the complete integration of transparent warehousing with call-off controlled distribution to all continents. This means that logistics chains from collection in Asia, for example, to air, sea or rail freight, customs clearance and storage through to order picking and Europe-wide distribution are the order of the day.

Another advantage is Paderborn's geographical location in the heart of Germany with direct access to the highway network.

## GLOBAL DEMAND FOR LITHIUM-ION BATTERIES



**CAGR 2019 – 2023** (annual growth rate)

Source: worldwide; Roland Berger; Avicenne; Fraunhofer; IHS; 2019 until 2030



Terminal 3 logistics center (expected to be completed in spring 2024)



# EVERYTHING FROM ONE HAND

We are a medium-sized, globally active logistics company based in Paderborn and Ibbenbüren, are now in our fifth generation of family ownership. Around 730 employees work in our divisions every day.

LOGISTICS | FORWARDING | AIR, SEA & RAIL | REMOVALS | SELF STORAGE



## OUR CORE VALUES

VALUATION. PERFORMANCE. TRUST.

We attach great importance to respectful interaction, positive recognition and attentive communication. The performance and commitment of each individual are decisive for us.

## OUR VISION

Our vision is to be the leading provider of transport and logistics services. We focus on digitalization, customer satisfaction and independence.

As a family business, we strive for stable growth and the expansion of our logistics expertise. We are innovative, environmentally conscious and value the potential of our employees. Our aim is to offer our business partners an incomparable service. **“We take care of you.”**

## OUR MISSION

“We are pioneers in the logistics industry and transform future customer needs into smart solutions. By intelligently connecting people, organisations, technologies and data, we exceed expectations and set standards in the industry.”

**FAMILY-RUN  
COMPANY**

**OVER 730  
EMPLOYEES**

**15  
LOCATIONS**

**LOGISTICS  
SINCE 1856**

# LET'S CONNECT

Do you have any questions? **Just get in touch.**  
Our competent contact partners will be happy to assist you.

**Philipp Pinkernell**

Business Development Manager

[pinkernell@hartmann-international.de](mailto:pinkernell@hartmann-international.de)

+49 (0) 5251 7207 -815

**Marcel Niebuhr**

Business Development Manager

[niebuhr@hartmann-international.de](mailto:niebuhr@hartmann-international.de)

+49 (0) 5251 7207 -811

**Hartmann International GmbH & Co. KG**

Halberstädter Straße 77 | 33106 Paderborn | [www.hartmann-international.de/en](http://www.hartmann-international.de/en)