LOGISTEED

News Release

February 19, 2025

Improving the storage efficiency for lithium-ion batteries
～All-steel fire-resistant container "LIB-CON™"～

LOGISTEED, Ltd. has engineered an all-steel, fire-resistant container named "LIB-CON™" to enhance the storage efficiency of lithium-ion batteries. We are currently applying for a patent.

LIB-CON™
Lithium Ion Battery- Container

1. Background and Purpose

Lithium-ion batteries (hereinafter referred to as LIB) have become a growing market in recent years, particularly for use in EVs. Not only new LIBs but also those in the fields of recycling and reuse have become a focus of Japan's industrial policy and economic security policy. On the other hand, when storing LIBs in warehouses, there are many restrictions on the storage methods and the structure of facilities depending on the total amount of electrolyte, and there are concerns about the shortage of storage warehouses. In light of this situation, we have developed a dedicated container that meets the requirements of the Fire and Disaster Management Agency Notification: Fire Hazard No. 303 of Reiwa 6. When storing this container in a general warehouse, the regulations on the open space between hazardous materials (containers) are relaxed, allowing for the storage of more containers.

We have been implementing this at our group's logistics center since January 2025. We will continue to respond to the needs for expanding the storage and handling of LIBs in the future.

*1 Fire Hazard No. 303: A notification regarding the storage and handling of lithium-ion batteries, including technical standards for LIBs storage methods and equipment.

*2 The electrolyte volume requirements for each container of LIBs are less than 200L for non-aqueous LIBs and less than 400L for aqueous LIBs.

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2. Features of LIB-CON

LIB-CON is a dedicated all-steel container designed for the safe and efficient storage of LIBs. By utilizing LIB-CON, it becomes possible to store LIBs even in general warehouses, addressing the shortage of storage warehouses and reducing storage costs. LIB-CON has the following five features.

1. The design enables high storage efficiency through its foldable and stackable structure.
2. Safety measures to prevent electrolyte leakage.
3. Workability due to the double-door structure.
4. Design expandability that allows for customization according to the stored items.
5. Reliability that meets the standards set by Fire Hazard No. 303.

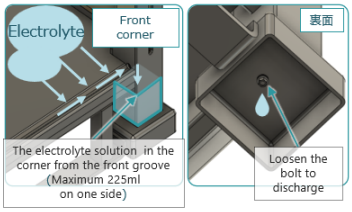
①High Storage Efficiency

Each container can be folded and stacked when not in use.

※ The canopy part is detachable

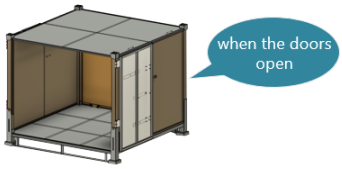
②Equipped with measures to prevent electrolyte leakage

Even if the electrolyte leaks, it can retain up to approximately 450ml. The discharge process is also simple.



③High Workability

The front of the container has double doors, making it easy to store and retrieve contents.



④Customizable

We propose specifications tailored to the dimensions, weight, and packaging of the stored items, as well as the container operation requirements.

⑤Compliant with Fire Hazard No. 303

Confirmed to meet the standards set by Fire Hazard No. 303 through performance evaluation tests.
The body is made entirely of steel and does not use any flammable or soluble materials.

Fire Resistance Test

Compression Test

【Attention】
Operational methods may vary depending on the local guidelines. For details, please check with the fire department of each municipality.

The LOGISTEED Group aims to become the most preferred global supply chain solutions provider in the global supply chain, and we provide logistics services with a high level of safety, quality, and productivity through our advanced logistics engineering capability.

【Reference】
LOGISTEED packaging solutions
https://www.logisteed.com/en/service/solution/packaging/

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