

How to handle lithium-ion  
batteries safely

## *Strain*Lock

The storage cabinet for lithium-ion batteries  
with an integrated filter system



## ***Lithium-ion batteries. Safe?***

Damaged lithium-ion batteries cause pressure surges that may also involve explosions. The gases that are created are highly toxic. The risk scenario has changed fundamentally to the previous hazardous goods storage solutions. The risk of fire is no longer limited to the outside of the cabinet, it acts inside the cabinet and is, as described, accompanied by flames, explosions and toxic gases.



***Rapid increase  
in incidents with  
lithium-ion batteries***

### ***Causes of damage***



#### **mechanical damage**

Battery falls onto the floor, E-bike topples over



#### **thermal impact**

Direct sunlight on smartphone



#### **aging & creation of dendrites**

Deep discharging, chemical changes



#### **electrical impact**

Overcharging, deep discharging



*Damage (inner short circuit) to a lithium-ion battery in a test environment*

## ***The StrainLock storage cabinet is the solution.***

Stöbich technology has the solution for safe storage of lithium-ion batteries. It is used everywhere where employees work with potentially faulty battery systems. The storage cabinet has a special filter that holds back toxic gases as well as the flames. An integrated thermal management system ensures that there is no critical increase in the temperature of the outer walls. This prevents contamination around the storage cabinet in case the batteries inside are damaged.

- +** Targeted discharge and prior filtering of the toxic gases
- +** Mechanical stability is also ensured even at very high pressure levels
- +** Almost all solids are filtered

***Safety of  
persons  
and assets***



### ***Special new development***

**Coordinated to the special risks of battery damage.**

Gas filter system

No escaping sparks or flames

Pressure-resistant design

No escaping fluids and solids

Mechanical resistance

Also for critical and faulty lithium-ion batteries

Tested safety system

Secure and reliable lock



***Protection against explosions  
Protection against leaking gases***

## *Strain*Lock

The combined storage and charging cabinet for lithium-ion batteries



-  Also available with a charging function as an option
-  The power circuit of each drawer is equipped with its own fuse
-  The colour can be chosen optionally
-  The individual drawers lock in the event of damage



### **Stöbich technology GmbH**

Pracherstieg 5  
38644 Goslar

+49 5321 5708-825  
service@stoebich-technology.de

***stoebich-technology.de***