## ISOLATE + MITIGATE





# LITHIUM BATTERY RISKS ARE DIFFERENT



#### **Explosion & Heat Risks**

- Violent explosions
- Gas combustion
- Extreme temperatures



#### **Toxic Gas Exposures**

- Heavy smoke
- Hydrogen flouride gas
- Explosive pressure



#### Fire Fighting Challenges

- Spread quickly
- Re-ignition events
- Extremely difficult to extinguish

## U.S. LITHIUM-BATTERY INCIDENTS, INJURIES & FATALITIES

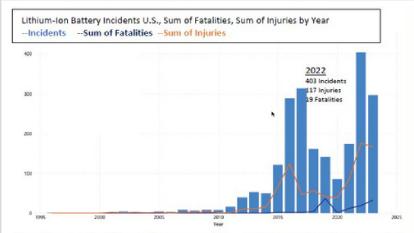


Figure 1b. Data gathered by UL Solutions on U.S. lithium-ion battery incidents by year. Graph shows reported incidents sourced from government databases, fire department reports, media reporting, journal articles, and other web-based information.

Data gathered through August 2023

#### YOUR MISSION IS AT RISK FROM LITHIUM-ION BATTERIES

DynaLocLTC can mitigate those risks by storing unsupervised batteries and will isolate batteries that are

DDR: damaged, defective, or ready for recycling.

Transporting suspect or DDR batteries will be safe and secure within DynaLoc LTC.

#### **VIEW TEST VIDEO**



#### **MADE FOR MISSION READINESS**

#### **Interior ballistic protection**

basis of design is ATF Daybox standards. Offers non-sparking protection of exposed battery contacts. Prevents molten plastic and metals from igniting surroundings.

#### 2-hour fire-rated interior coating

reduces exterior box temperatures to below 100°F\* during a runaway event, preventing ambient ignition of adjacent materials or additional thermal runaway.

#### **Gas filter**

reduces gas emissions, releases pressure, and directs smoke

#### Welded aluminum construction

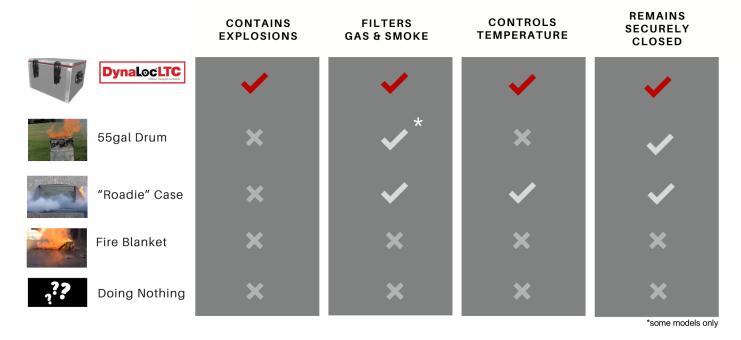
for strength with reduced weight.



<sup>\*</sup>Temperatues will vary based on number of batteries contained. Representative of 9 cells in full runaway.



#### **HOW WE COMPARE**



### **KEEP IT CONTAINED**

WOOD LINING AND PROPRIETARY COATING KEEPS THE INTERIOR INSULATED AND TEMPERATURES LOW. AND CONTAINS EXPLOSIONS AND VIOLENT KINETIC ENERGY.

SIDE-BY-SIDE TESTING PROVES THE DURABILITY AND SAFETY OF THE DYNALOC LTC.

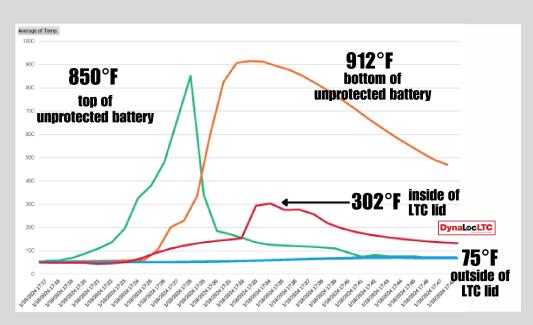
#### **TEST RESULTS**



Overcharged battery sent into runaway. Heat reached over 900 degrees. Thick, toxic smoke obscured vision and violent explosions damaged equipment.



In a DynaLoc LTC box, the battery flames and explosions are safely contained. Gas and pressure are directed through the filter.



In the test, the 56V 5.0Ah 280 WH battery spiked at over 900 degrees, exploding so violently, the sensor on the top was destroyed within 12 minutes.

The same overcharged battery in the LTC never released any flame and explosions were safely contained.





#### LTC 509

Exterior dimensions: L 14" x W 10.5" x H 9"

Max capacity: 3.0 gal



#### LTC 511

Exterior dimensions: L 16" x W 14" x H 10.25"

Max capacity: 5.6 gal



#### LTC 521

Exterior dimensions: L 25.125" x W 18" x H 13.125"

Max capacity: 18.9 gal

#### **CUSTOMIZED OPTIONS AVAILABLE**

#### **WHO WE ARE**

A leader in hazmat storage structures since 1993, US Chemical Storage has been the gold standard of engineered solutions for those who utilize flammable, combustible, toxic, and other hazmat chemicals, both on base and off.

We have created buildings for charging, storage, and testing of large volumes of lithium-ion batteries for over a decade, so creating a solution for smaller volume users that was equally safe but portable was a priority.

Be mission ready with U.S. Chemical Storage.



#### U.S. CHEMICAL STORAGE

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