

Electrochemical energy storage fire protection industry





Overview

Are lithium-ion battery energy storage systems fire safe?

With the advantages of high energy density, short response time and low economic cost, utility-scale lithium-ion battery energy storage systems are built and installed around the world. However, due to the thermal runaway characteristics of lithium-ion batteries, much more attention is attracted to the fire safety of battery energy storage systems.

Why is safety important for the LFP battery energy storage industry?

A BESS made of LFP batteries exploded and caught fire in China, and several firefighters suffered death and mutilation in the blast in 2021 . Therefore, safety is crucial for the high-quality development of the LFP battery energy storage industry. Fig. 2.

How to protect battery energy storage stations from fire?

High-quality fire extinguishing agents and effective fire extinguishing strategies are the main means and necessary measures to suppress disasters in the design of battery energy storage stations . Traditional fire extinguishing methods include isolation, asphyxiation, cooling, and chemical suppression .

Are energy storage fire accidents increasing?

Similarly, as the battery energy storage industry develops, energy storage fire accidents are also increasing [16, 19]. Fig. 2 shows the installed capacity and accident data of global energy storage stations in the past decade .



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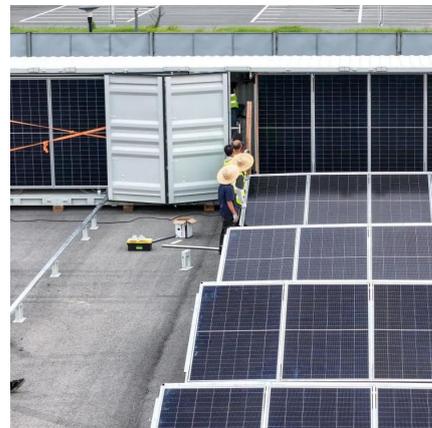
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