Lithium-Ion Battery Fabrication: From Lab to Grid

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Why Lithium-Ion Dominates Yet Struggles?

we're all power addicts. Your smartphone, EV, even grid-scale storage systems demand better lithium-ion batteries. But here's the rub: while global lithium-ion production surpassed 700 GWh in 2024, manufacturers still grapple with 18-23% production yield losses. Why does this trillion-dollar industry keep tripping over electrode alignment and electrolyte filling?

A battery gigafactory humming with robotic arms. Suddenly, moisture alarms blare - a single droplet sneaked into the dry room. Twenty thousand pouch cells become scrap metal. This isn't fiction; it's Tuesday at most battery plants. The strict humidity requirements (

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