BHS SONTHOFEN

ENERGY DENSITY IN FOCUS

Modern technology for high-performance battery materials

TRANSFORMING MATERIALS INTO VALUE

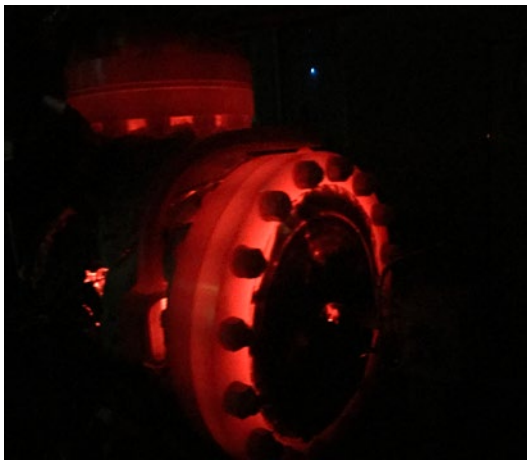
A key technology to realize the energy turnaround is the low-cost, hich-performance energy storage. Currently, the most promising storage technology is the lithium-ion battery technology.

BHS-Sonthofen provides a broad range of modern and flexible technologies for producing electrode pastes, drying single components, or even processing high-temperature treatments to obtain the required dryness or chemical reactions.

Benefits

- Superior quality of reacting, drying and mixing with constant reproducibility
- Tailor-made machine design for single or multiple products
- High reliability and low downtime

Pilot plant
Compact design, equipped with chopper and measuring instruments.



Perfect performance
High temperature – up to 650 °C and robust machine design.

Learn more

www.bhs-sonthofen.com/batteries

Cost effective production of materials with high energy density
BHS-Sonthofen has developed a high-temperature reactor, which opens up new possibilities for the production of battery materials. High temperature is a critical factor in the processing of high performance anode and cathode materials. In addition, the dynamic BHS drying principle ensures high product and temperature homogeneity. An ideal basis for reaching a higher energy density.

Electrically heating
The electrically heated BHS dryer reaches process temperatures of up to 650 °C, a significant increase compared to conventional dryers heated with thermal oil. There is no risk of the product and the system being contaminated by high-temperature thermal oil. The dryer is particularly suitable for the production of ternary cathode materials that require a high degree of product homogeneity. The complete system with heating and controls is designed as a compact unit.

High temperature, high homogenity
Electrode materials are complex powder mixtures, which need to be highly homogeneous and contain extemely low moisture (usually below 10 ppm, since water reacts with lithium ion). BHS mixers and dryers provide excellent mixing results. With our vacuum drying technology at heating temperatures up to 650 °C it is possible to reach a minimal quantity of water and any other volatile components.

Pilot system
BHS provides a pilot system for high-temperature applications to test batches of approximately 100 kg. Our process engineers support you in process design and scale-up for your industrial production plant.

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