

World leaders in dehumidification.



DEHUMIDIFICATION IN LITHIUM BATTERIES PRODUCTION



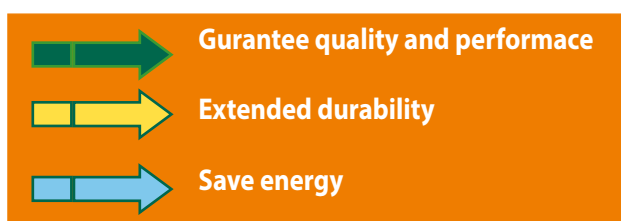
DST Dehumidifiers for Lithium Battery Production

DST is an expert in energy-efficient humidity control. In 2011, DST's subsidiary DST China made their first dehumidification installation at a lithium battery company in China. It turned out to be the first of many installations at lithium battery manufacturers.

The manufacturing process of lithium batteries demands one of the highest humidity controls in any market. It needs to be below 1% relative humidity for the lithium not to be affected. If it gets too humid in the production room the lithium can react with the humidity and transform into lithium hydroxide and hydrogen. Thus, both the quality, performance, and durability will deteriorate significantly if the lithium batteries come into contact with moisture. With that said, it is not possible to manufacture lithium without humidity control.



To avoid these moisture problems, dehumidification is being installed for the production rooms. It means that the production rooms will be made into clean rooms where the ventilation is being mixed with return air and treated by the dehumidifier so that both temperature and humidity is being controlled by the same unit. For a lithium battery company, it means that if they have a dehumidification installation from DST they can guarantee their quality and durability on their products at the same time as they are being more energy efficient.



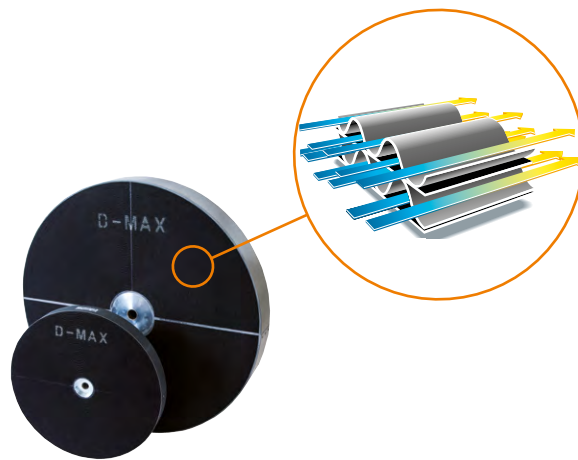
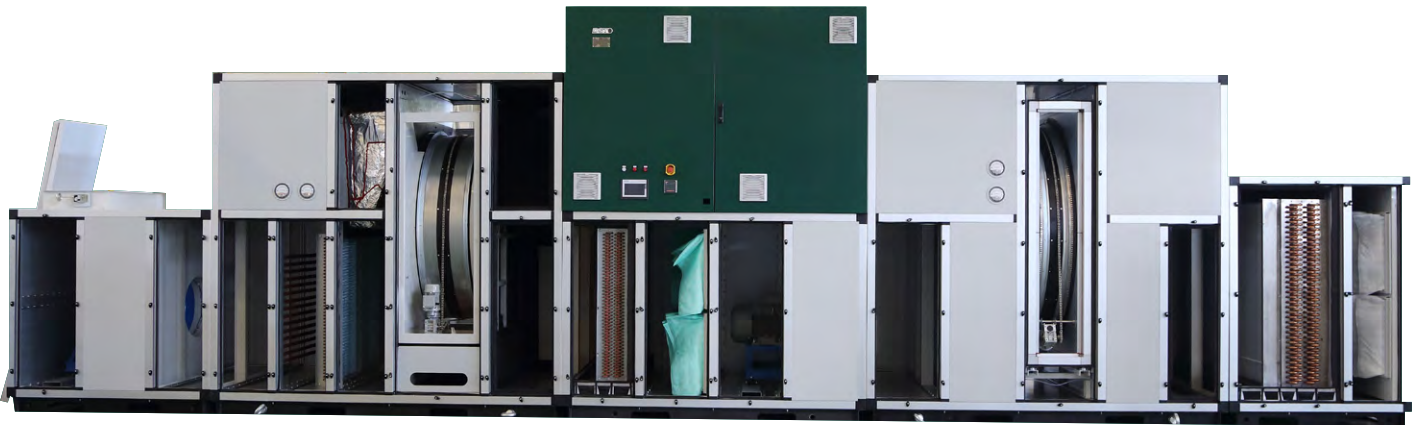
Humidity creates big problems for lithium battery manufacturers because lithium reacts strongly with moisture.

By controlling the air and moisture in the production facilities the negative reactions are being avoided and the battery manufacturers can guarantee their quality.

SILICA GEL ROTOR THE HEART OF DST'S DEHUMIDIFIER

Washable, highly efficient rotor

All DST dehumidifiers are fitted as standard with D-MAX, a high quality sorption rotor from DST's parent company Seibu Giken, inventor of the silica gel rotor. These rotors offer a high dehumidification capacity and a long service life thanks to its hard surface and chemically bonded silica gel. The D-MAX rotor is washable, non-flammable, without cracking and dropping slag. Further three unique rotors are available as an option.



D-MAX
EFFICIENCY BY DESIGN

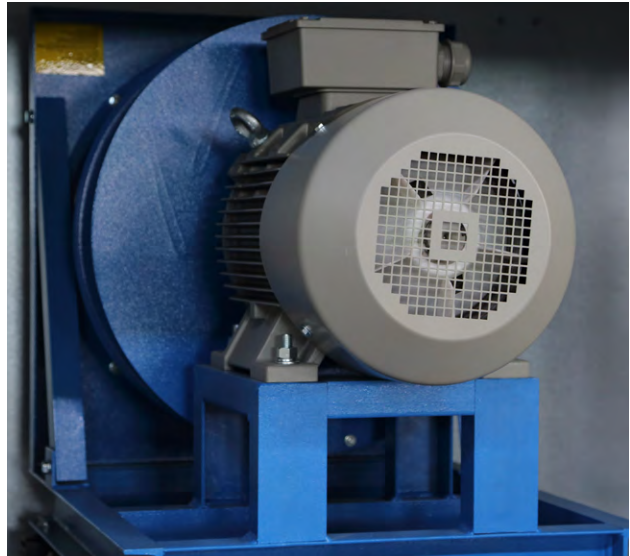
D-MAX Z
100% SILICON FREE

D-MAX H
BACTERIAL & HYGENIC

DLR
ZEOLITE ROTOR

High efficiency fans

Direct driven fans ensure low energy consumption with frequency inverters on the wet air fan and larger process fan and EC-motors on smaller process fans. Frequency inverters and integral measuring devices allow air flow to be altered and adjusted with ease. The frequency converters and EC motors also save energy due to the fact that no dampers are required for adjustment.



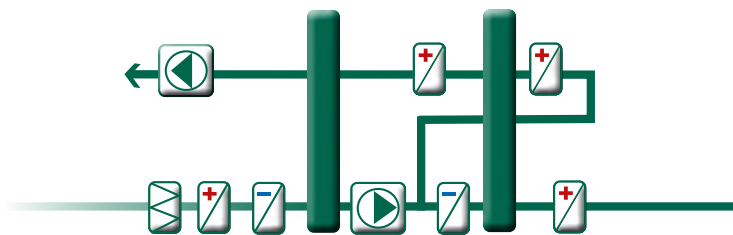
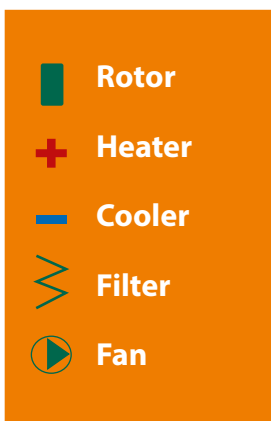
Energy efficient control

From basic PLC with 2 line text display up to full graphic touch panel. Several communication options including Modbus, Profibus and Bacnet.

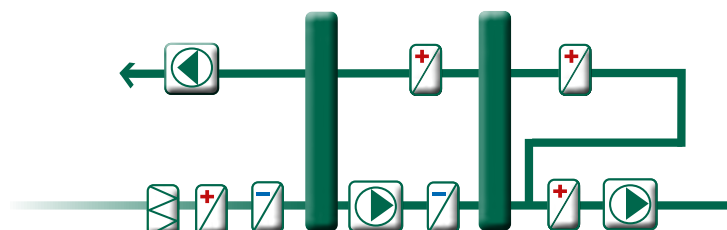
Capacity and Smart Control

Great dehumidifying capacity able to reach -80 degrees celcius at SA air outlet.

Dehumidification flow chart for steam, gas or electrical regeneration heaters



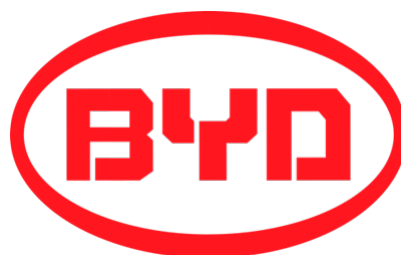
Dehumidification flow chart for hot water or D/X regeneration heaters

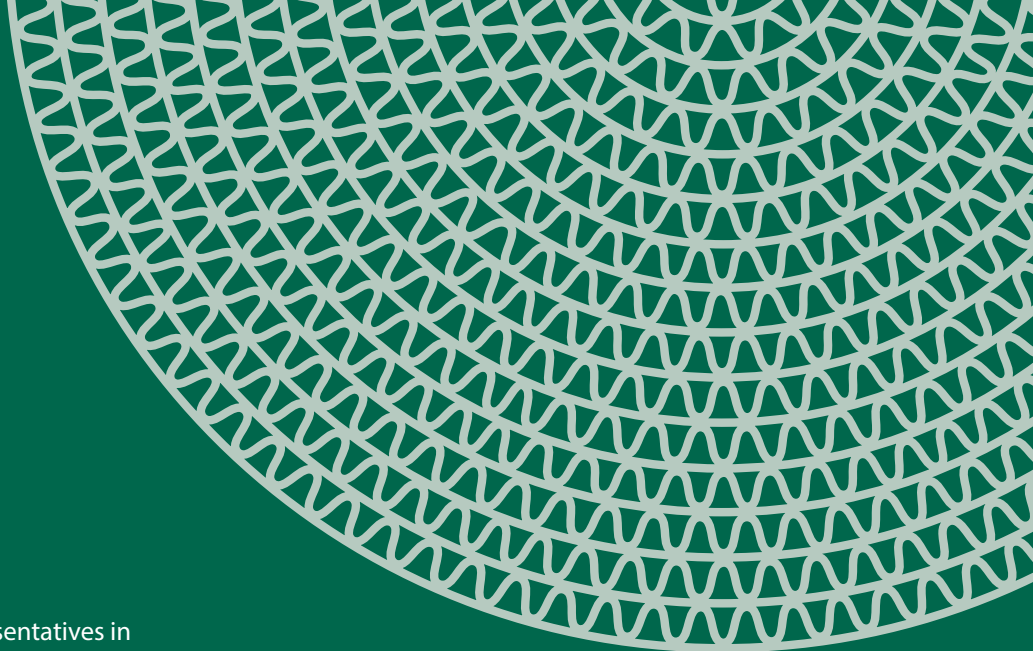


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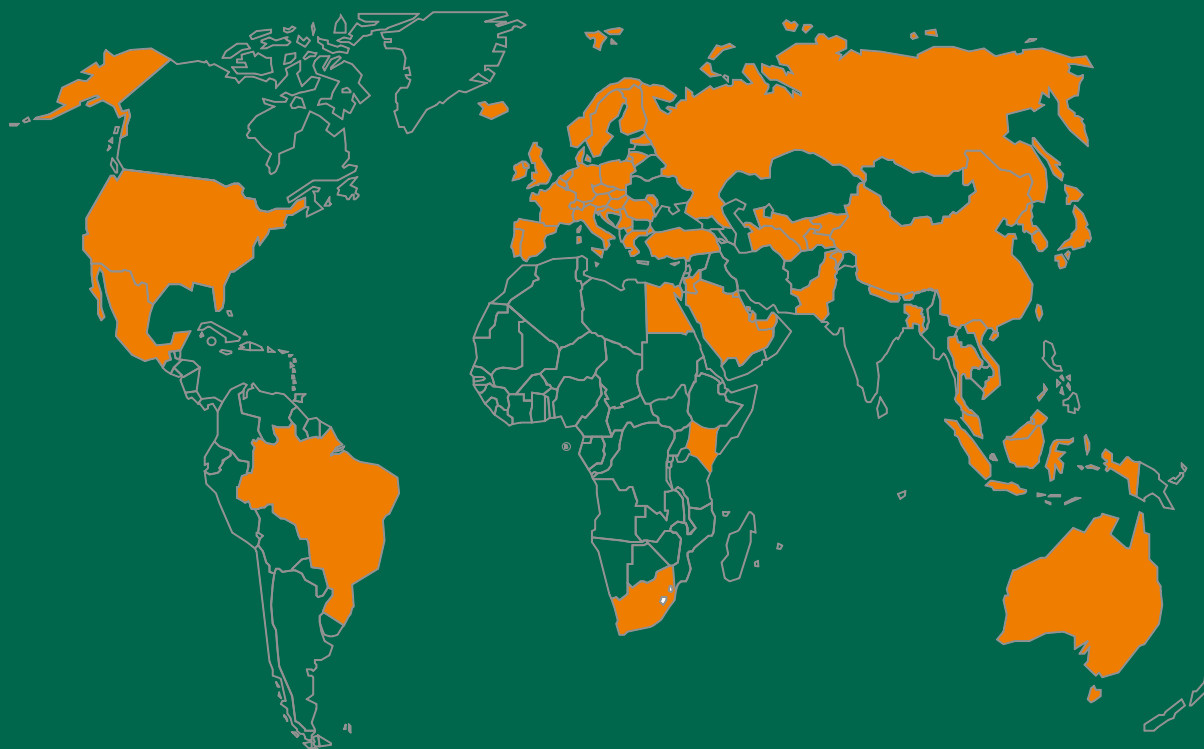
So far, the world's top 10 lib manufacturers have purchased DST dehumidification equipment without exception, and also 80% of the world's top 20 lib manufacturers have chosen DST dehumidifiers.

Rich industry experience has given DST a broad international vision, and has improved the design of DST lithium battery dehumidification and the manufacturing level of rotary dehumidifiers.





Seibu Giken DST AB has representatives in more than 50 countries worldwide.



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CERTIFIED
ISO 9001
Quality management systems



Seibu Giken DST is certified
according to ISO 9001

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