



ELECTRIC  
VEHICLE  
BATTERY

**Li-Ion**

# Anode & Cathode Material Production

Vacuum Dissolver Solutions

# Anode & Cathode Material Production

## Vacuum Dissolver Solutions

Various materials can be used for production of anodes and cathodes. In addition to different materials, there are also various manufacturing methods. Each manufacturing method includes a variety of steps and processes. However, there is one thing that all batteries have in common: the so-called slurry. For both anodes and cathodes, raw materials are mixed together in slurries in order to be further processed — either as a solid or as a film coating.

It is extremely important to create a product that is as homogeneous as possible and finely dispersed. The DISPERMAT® shoulders the bulk of the slurry manufacturing process. The dispersion ensures a uniform particle size, which is necessary, on the one hand, to produce a uniform layer across the whole surface of the coating and, on the other hand, to guarantee uniform electrical conductivity in the final product. The DISPERMAT is great for conventional Lithium-Ion battery development but also used in the development and manufacturing of solid-state battery technologies.



Since the materials used tend to react with oxygen, VMA-Getzmann vacuum-based dispersers are the ideal solution.

- Variable speed adjustment
- Digital display of speed, torque, timer and product temperature
- Electric height adjustment
- Control for the innovative height adjustment system
- Constant speed or constant power setting
- Net power calibration
- C technology package for data tracking, processing and storing of different batches and formulas
- Vertical or horizontal design depending on viscosities and particle size requirements
- Nano kit available for sub 100nm particle size requirements
- Wall scraper option
- Optional nitrogen purging valve available



BYK-Gardner USA  
9104 Guilford Road  
Columbia, MD 21046  
USA

Phone +1-800-343-7721  
+1-301-483-6500  
Fax +1-800-394-8215  
+1-301-483-6555

[www.byk-instruments.com](http://www.byk-instruments.com)

Visit [dispermat.com](http://dispermat.com) or contact Andy Stummer to learn more, 240-529-6659 and ask about our Wallingford, Connecticut Upscale Lab.

A member of  ALTANA

 BYK