Preparation Technology for Lithium-Ion Batteries

Preparation of dry mixes, granules and degassed slurry in one single unit.
Innovative preparation technology for battery manufacturers and producers of raw materials.

EIRICH is a research partner for universities.

The preparation principle of using one machine allows:
- The input of mixing energy into the mix and the applied shear forces can be controlled efficiently.
- Complete disintegration of agglomerates
- Homogeneous distribution of binder
- Optimal wetting of active materials, conductive carbon black and additives
- Processing / adjusting to any viscosity
- Very short processing times
- High quality assurance and reproducibility due to continuous process monitoring
- Temperature, pressure and power input can be visualized and documented.

Other advantages:
- No detrimental dead zones and temperature gradients in the mixer
- Easy access and cleaning of the mixer, can be automated on request
- Small footprint
- Low energy consumption
- Excellent scale-up potential
- High flexibility

EIRICH customers and research institutes report benefits compared to other preparation technologies:
- Substantially shorter processing times
- No product cooling required
- Improved powder conductivity due to very good dry mixing
- Powdery binder is added directly, without preparing a separate solution
- Excellent adhesive properties of the coating on conductor foils
- Homogeneous coating surfaces
- Improved electrochemical properties of the cells
- Minimal deviations from standard

Bear in mind:
The appropriate mixing system is at least as important as your formula.

Top-name manufacturers around the world work with EIRICH mixing technology.
We would be glad to provide references on request.
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