



## GEMÜ valve solutions for mixing electrode slurries

### Process description

The first step in the manufacture of Li-ion battery cells is to mix the electrode slurry, which is then applied to the electrode foils (anode/cathode) as a layer in the next step.

The slurry comprises a mixture of active materials, solvents, binders and additives. When mixing slurries, it is particularly important to feed in the different components in precisely the correct quantities.

GEMÜ has the appropriate valves, measurement and control systems to ensure the process reliability of this manufacturing step.

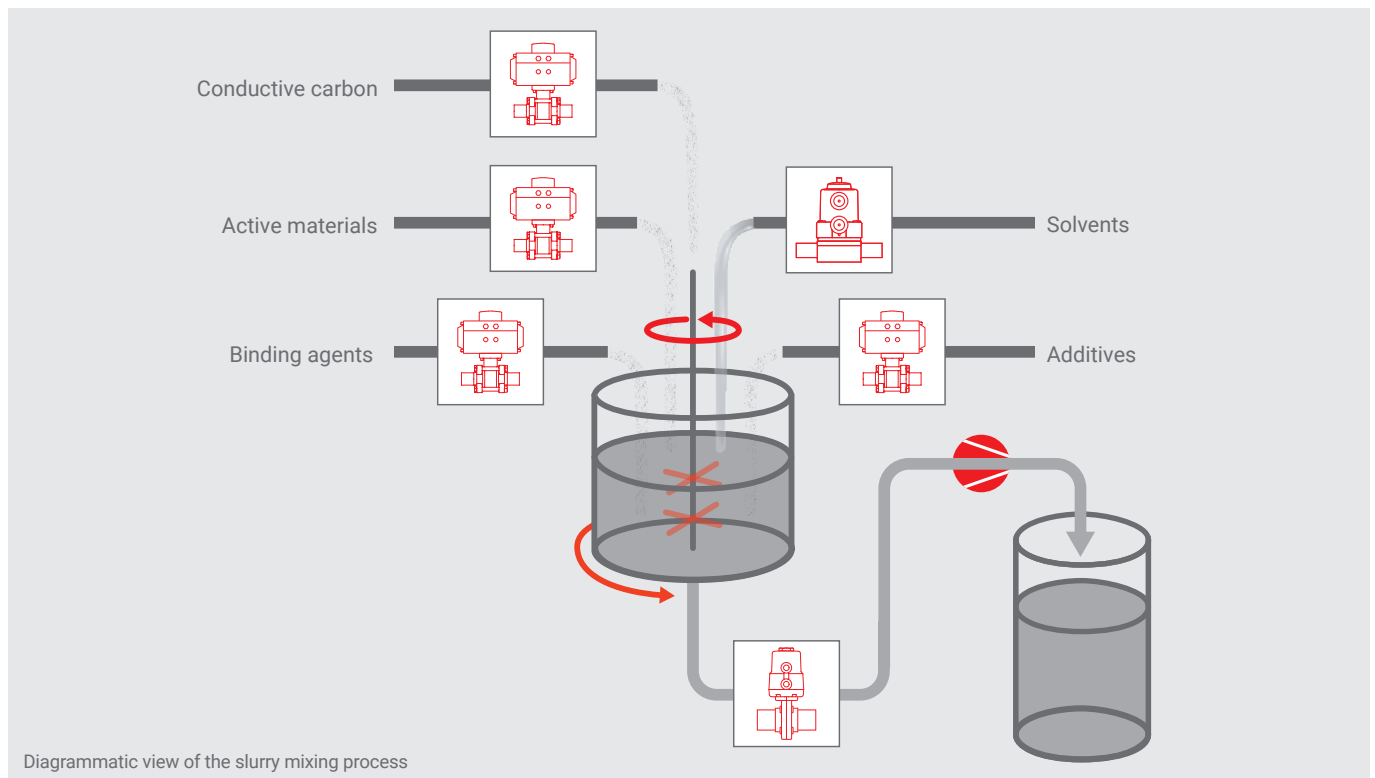
### Different mixing procedures

The slurry can be mixed via various procedures. With what has become known as batch mixing, an individual container is always filled and then mixed. It is a batch-based mixing procedure. With continuous mixing, this process is automated and makes slurry continuously available to the coating systems. Both mixing procedures place stringent requirements on the components used.



Example slurry mixing plant

## Diagrammatic process visualization



## Advantages at a glance

- Appropriate functional principle for requirements of the respective application
- Careful and safe media handling of active materials and solvents
- GEMÜ valve components are designed with minimal deadleg and allow self-draining and consequently simple cleaning
- ATEX certification allows use in explosion-proof zones
- High chemical resistance of the stainless steel components used

## Suitable GEMÜ products

