

Bulk Material Handling Solutions for Battery Production



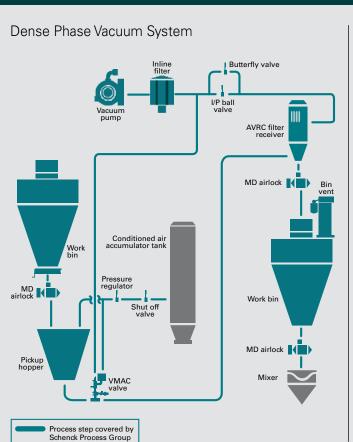
When it comes to handling raw or refined bulk materials, Schenck Process has the experience and production expertise to meet the challenges for producing high energy lithium-ion batteries. From anode and cathode transfer systems to gravimetric feeding or dust collection, Schenck Process can provide the equipment and overall project management to meet your operational needs.

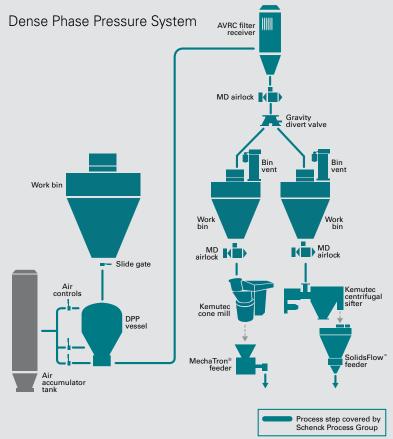
Anode & Cathode Transfer Systems

It is important to transfer refined anode and cathode powder in a controlled, energy-efficient manner. This is done through either vacuum or pressure dense phase conveying systems where velocities are minimized and abrasion is mitigated.

Overall Process Implementation

By including processing equipment upstream and downstream of the transfer systems, one point of accountability for an entire process is achieved. Whether it's a cone mill or a sifter, a gravimetric feeder or a flow meter, Schenck Process has the product offerings and knowledge to recommend the right solution for each application.









Simplex FB Min Feeder

Stainless steel loss-in-weight feeder for difficult to feed materials

- Internal agitation
- Flat bottom design with vertical hopper walls
- Excellent mass flow
- Modular concept

SolidsFlow™ 2000 Feeder Mass flow vibrating feeder

- No material segregation
- Feeds abrasive materials and various sized particles
- No moving parts, minimizes maintenance
- · Instantaneous cut-off of flow rate



and gravimetric feedersHighly accurate systems reduce

- rightly accurate systems reduce product loss
 Complete disassembly from the
- Complete disassembly from the non-process side speeds cleaning and maintenance
- Robust design withstands harsh environments
- Feed rates up to 1,100 ft³ (32,000 l) per hour are achievable



Pneumatic Conveying

Dilute or dense phase conveying of bulk materials

- Dilute phase pressure or dilute phase vacuum capabilities
- Enhanced dilute phase conveying reduces power consumption, material degradation and system wear.
- Dense phase conveying for low material breakage and energy efficiency
- Ability to operate multiple systems from a single air source



PPS Air Classifying Mill

High energy grinding for producing ultra-fine powders

- Temperature controlled grinding
- Constant output
- Tight particle size distribution
- Easy to adjust particle size capability



Kek Centrifugal Sifter

Industrial rotary sifter for powder and granule processing

- Removal of fines and extraneous material
- No tools required for stripping down and cleaning
- Easily removable sifter screen for inspection and cleaning
- High efficiency design reduces inspection, cleaning and maintenance



Kemutec® Kek Cone Mill

High efficiency material size reduction conveying systems

- Gentle grinding action
- Uniform size distribution results in minimal fines generation
- Low dust levels eliminate the need for air filtration
- Ideal for sizing in both wet and dry granulation processes



Vertical Cartridge Filter (VCF)

Easy maintenance collector for nuisance dust applications

- No confined space entry for easy cartridge removal
- Vertical cartridge design cleans more efficiently
- Industry leading Pred of 6.4 psi
- HEPA options are available



MCF PowerSaver® Dust Collector

Energy efficient filter that can save up to 50% of operational costs

- Precision cleaning prevents over-cleaning and maximizes bag life
- No tool design bag change-out saves hundreds of hours of installation and maintenance over filter life
- Requires no integrated plant air to function generating energy cost savings over conventional pulse jet filters
- Cleaning capacities over 250,000 CFM



Air Filtration Systems

- Filter/Receivers for pneumatic conveying
- 100 to 250,00+ CFM filtration options
- HEPA options for facility air reclamation
- Explosion mitigation equipment incorporated into system designs



Precise bulk material handling systems provide accurate material delivery while reducing overall cost.

We put a charge into your battery production

