ULT Dry-Tec® Systems

Filtration, Drying, and Conditioning in Dispensing and Packaging Processes
High product quality and productivity by means of dry process environments.

During the processing of pulverized bulk materials, often a very low relative air humidity is mandatory. In addition, there are requirements to process air, such as:

» Particle and dust free zone(s)
» Constant ambient temperature

To reduce the air’s residual moisture content to a minimum, so-called sorptive processes (adsorption, desorption) are required. Using a sorption wheel helps to meet these objectives.

High-level hygroscopic, i.e. physically water-retaining substances serve as technical adsorbents, e.g. silica gel (SiO₂), zeolites or technical molecular sieves. Because of their molecular structure, they have an extremely large surface, on which water molecules may accumulate. One gram of silica gel, for instance, can provide an inner and outer active surface of up to 800 m².

**Industries and application scope:**

» Chemistry and pharmacy
» Packaging and filling
» Food and beverage
» Battery production (lithium-ion)
» Electronics manufacturing and high-tech storage
» Clean rooms, test chambers, drying rooms, and others.
Process air drying and filtration

The system ULT Dry-Tec® from ULT is a recently available solution to achieve extremely dry process air. The modular system concept enables dew-point temperatures of down to -65° DP with particle-free process environment at a constant temperature.

Depending on requirements in air recirculation, the ULT Fil-Tec® filter module is equipped with either cleanable cartridge filters or storage filter units. Optionally, the integration of an ULT Vac-Tec® vacuum exhaust system for capture and extraction of pulverized material directly at the emission source is possible.
ULT is certified according to ISO 9001:2008. The plants are designed meeting international standards. If required, they will be certified according to ATEX and W3 and tested to meet H requirements.

In addition, the plants always comply with current EC directives on energy efficiency (ErP directive: Total energy efficiency of ready-to-use ventilation systems or minimum energy efficiency of electric motors).

Detailed technical information can be found on device specific data sheets or on our website. All technical data is general and not binding and does not guarantee the suitability of a product for a specific application.