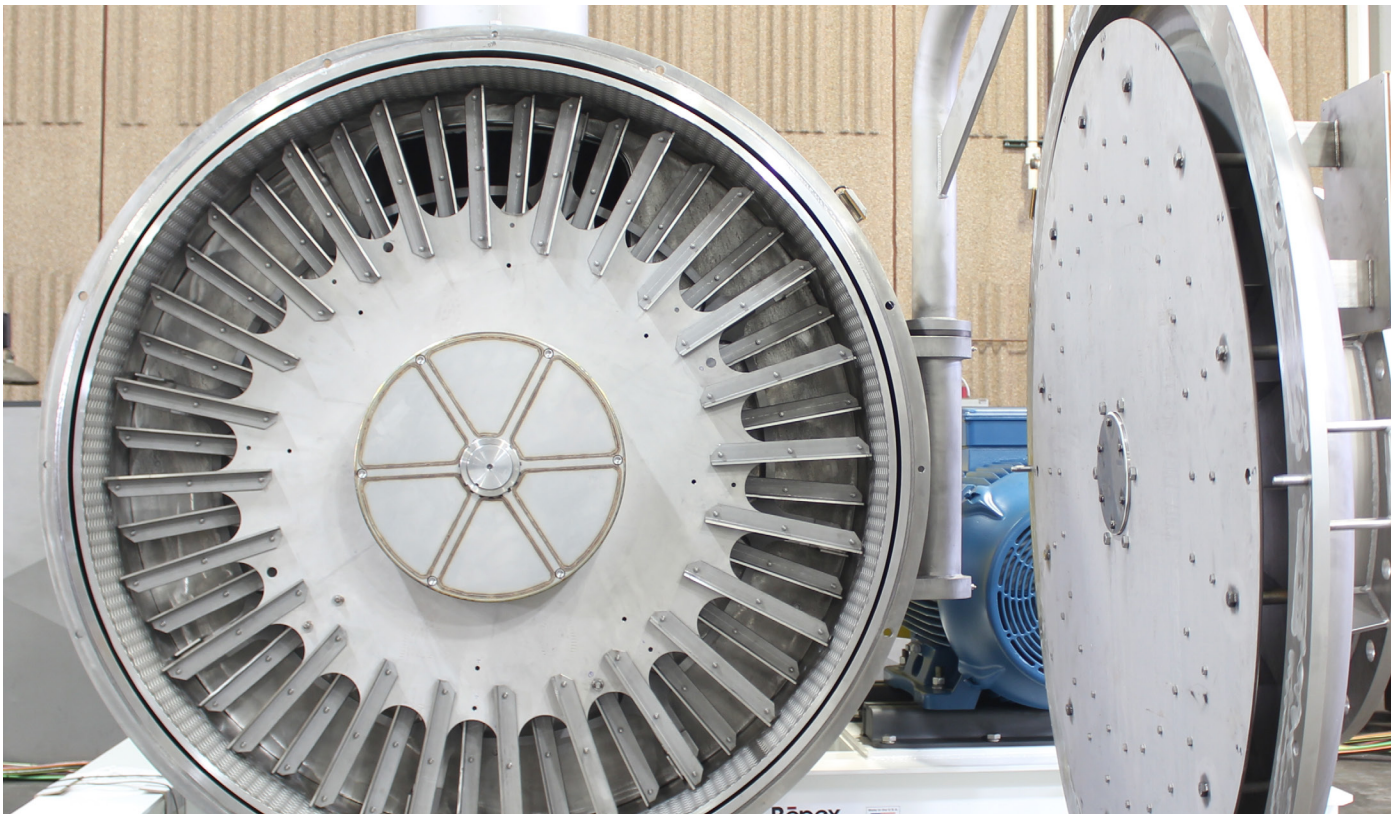
PCX FLASH DRYER

The Bepex PCX Flash Dryer is a direct thermal technology designed to process high-moisture materials including non-pumpable wet cakes, pastes, and slurries. Rotating dispersion plates exposes additional surface area for more efficient evaporation. The PCX delivers high evaporation rates in a more compact footprint than traditional spray and ring dryers.



MAKE IT DRY

Rapid drying of wet cakes, pastes, and slurries to a fine powder or small granule. Rotating dispersion plates provide intense mixing, negating the need for external back-mixing components.

MAKE IT EFFICIENT

Dry difficult to handle materials without adding carrier fluid, reducing utility requirements. Agitation and dispersion provide better heat transfer from the process air to the wet solids.

MAKE IT COMPACT

High evaporation rates are accomplished in a more compact footprint when compared to spray, ring, and rotary dryers. Dispersion plates expose additional surface area for more efficient drying.

MAKE IT SAFE

Safely dry high-moisture organic materials while minimizing material degradation and ignition hazards. The high evaporation rate provides evaporative cooling, lowering material temperatures and potential hazards.

DRY GRANULATE MICRONIZE REACT DEDUST GRIND DENSIFY EXTRUDE SOLUBILIZE BLEND
DEVOLATILIZE DEWATER DELUMP INSTANTIZE PUREE HEAT COOL COAT BRIQUETTE
CRYSTALLIZE PELLETIZE CLEAN CHOP SHRED AGGLOMERATE HYDRATE MIX

The Material Transformation People™

Bepex

OPERATING PRINCIPLES

The PCX Flash Drying system utilizes direct thermal design, meaning the process material is in direct contact with the heat-transfer media. In most cases, this media is heated process air.

Process air is drawn through a gas, electric, hot oil, or steam air heater or heat exchanger. The heated process air is drawn by a single system fan, located at the back-end of the system.

Wet feed is either dropped into the heated inlet air stream or introduced directly into the PCX Dryer. Inside the dryer, dispersion plate rotation increases solid surface area for rapid heat and mass transfer.

Evaporative cooling protects the solids by keeping the product below the wet-bulb temperature of the drying air. The solids residence time inside the dryer is maintained under three seconds. Following the dryer, a classifier and/or a baghouse filter collector separates the dried product from the moisture-laden process air.

In some applications where build-up is a concern, a fraction of the dried product will be recycled back to the PCX to help serve as backmix.

The resultant product size can be adjusted, from fine powders to coarse granules (up to 1-2 mm), based on operating conditions and dryer setup.

Bepex | (612) 331-4370
www.bepex.com