SOLIDAIRE

The Bepex Solidaire is a thin-layer indirect paddle dryer. Thin-layer operation delivers high heat transfer along the jacketed vessel walls. The Solidaire is capable of processing solids, slurries, pastes, gels, or wet cakes in a variety of applications, including drying, devolatilizing, reacting, cooling, and crystallizing.

MAKE IT DRY

Short to long residence time drying of solids, pastes, wet cakes, or slurries. Thin-layer drying provides the most efficient thermal operation, maximizing heat transfer without sacrificing footprint.

MAKE IT REACT

Gain strict control over residence time, gas contact, temperature, and shear to carry out difficult reactions. The adjustable paddle rotor provides the appropriate conveyance to work through difficult transition phases.

MAKE IT SAFE

Safely remove and recover volatile organic compounds from your solids. Evaporate under an inert environment to prevent dangerous operation.

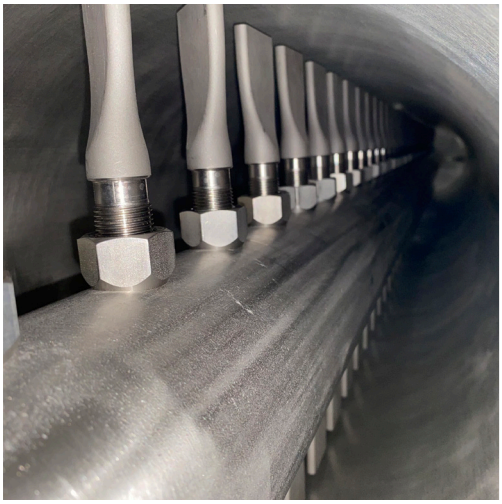
MAKE IT CRYSTALLINE

A custom split-jacket vessel provides heating and cooling in a single unit. Heat your solution in the first zone, and cool to induce crystallization in the second zone.

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

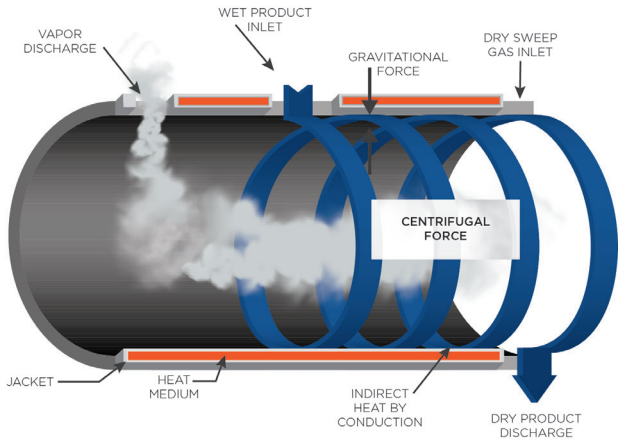


OPERATING PRINCIPLES

Wet materials are metered into the inlet end of the Solidaire, via solids feeder or pump. The adjustable paddle rotor rotates at a high enough speed to disperse the feed into a thin layer along the vessel walls. The paddles on the rotor are adjustable to control residence time, layer thickness, and shear.

As material is conveyed down the length of the Solidaire, the heated or cooled vessel walls impart heat transfer to the thin layer of solids.

When evaporating a solvent or volatile organic compound, a heated nitrogen gas stream runs counter-current to the solids flow, picking up the evaporated solvent and carrying it to a condenser for recovery.



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