Microwave Freeze Drying for Food/Pharma/Chemical/Medical & Ceramics

Application:

Ultrafast Microwave Freeze Dryers dry temperature sensitive products

Particular Advantages for Products:

• Cut down drying time from days into hours (saves energy, saves costs, saves space).
• Due to 3D heating sublimation is not only limited to layer-drying like in conventional freeze-drying. Sublimation is taking place throughout the volume, therefore, better textures and structures can be maintained.
• Combined processes in solid and liquid state with ultrafast heat transfer enable to generate new products.

Scale your application easily from lab to production

...from Lab to Production...

Pharma Example:
- Drying Time: 2h
- Max Temp: ≤ 20°C
- Residual MC: 600ppm

Food Example:
- MW-Freeze Drying of complete fruits like strawberries, raspberries, blueberries etc.

PÜSCHNER Microwaves offers Microwave Freeze Dryers from 1 to 30kW Microwave Power in Batch and semi-continuous operation.

www.pueschner.com