

Our production Freeze Dryer Line

-MADE IN GERMANY-

Our possibilities:

- Round and rectangular drying chambers up to 100m² area
- Two-chamber systems with separation valve
- Hinged doors and sliding doors
- Flexible shelf space up to 70m² and flexible shelf distances
- Material: Stainless steel 304, 316TI, 316L
- Compressor and/or liquid nitrogen cooling up to -150°C
- Ice condenser up to 1000kg/24h, condensers for solvents
- Steam sterilisation system SIP
- Automatic cleaning system CIP
- Possibility to remove samples during the process
- Process visualisation SCADA
- Hydraulic vial closing system
- Loading door „pizza door“
- Product trays
- Ex- protection system according to ATEX 94/9/EG
- GMP conform execution 21CFRpart 11, pharmaceutical applications
- Documentation DQ/IQ/OQ/PQ / Qualification
- Software validation according to GAMP5

Our advantages:

- Complete manufacturing of all plants in Bad Grund/Germany, including shelves and vacuum chambers
- High flexibility, custom made devices
- Special manufacturing of vacuum chambers and shelves to save weight and hence concluding energy
- General use of industrial components of notable German manufacturers
- Fair delivery time
- Worldwide service via phone, email, remote maintenance, service on site
- Direct contact to our customers and personal care

Laboratory Freeze dryer

2, 5 and 10kg condensers for laboratory devices



Vaco 2
6 port Manifold



Vaco 5
With acrylic drying chamber,
inner rack and connections for
round flasks

Pilot-plants

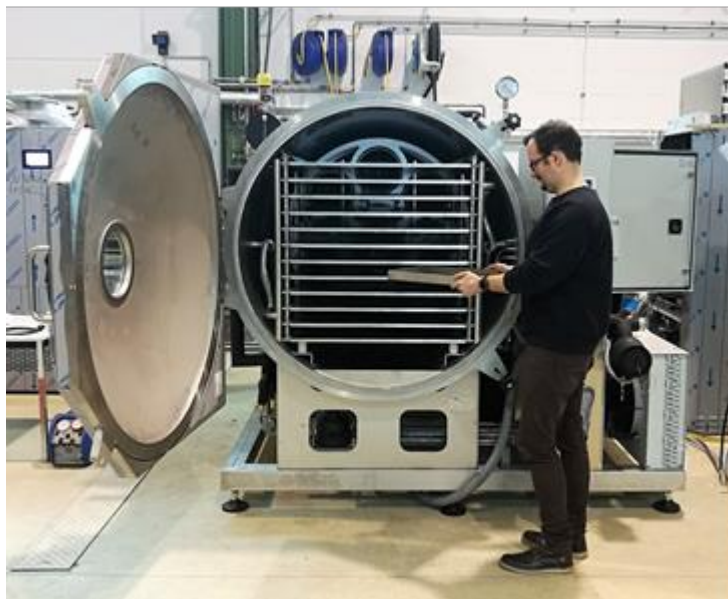
0.12 to 2.0m² shelf capacity for pilot plants



Production plants 2-70m² shelf area
Rectangular two chamber system



Bulk Production plants 1-16m² shelf area
Round, single chamber system



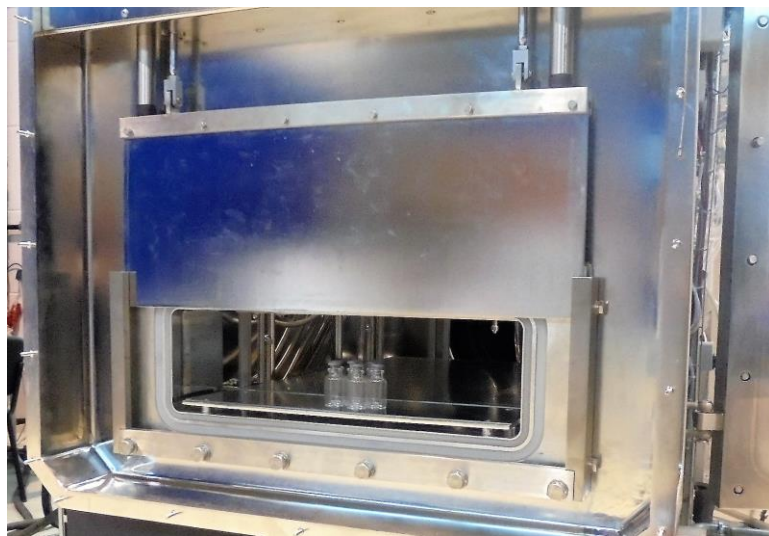
Food Production plants 1-100m² tray area
Round, single chamber system



System Solutions



Freeze dryer <-> Isolator Adaption



Loading doors