

Pressofiltro[®] Steam Sterilizable Filter Dryer

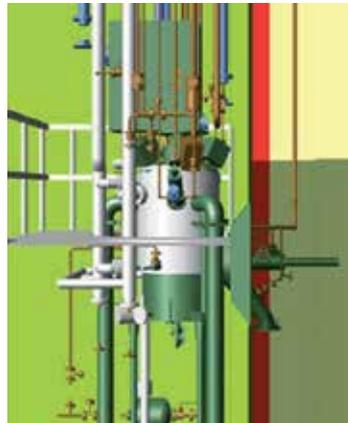


Pressofiltro[®] agitated Nutsche filters / filter dryers in steam sterilizable design.



- With Cleaning-In-Place (CIP) and Sterilization-In-Place (SIP) systems designed for the automatic cleaning and disinfecting of the equipment.
- The steam sterilizable filter dryer design assures **steam reaches all parts** of the filter dryer in contact with the product and **air is not trapped** in the unit during sterilization.
- In compliance with **cGMP** and **FDA** guidelines, with vessel interior and all associated piping designed to prevent product adherence and to facilitate cleanability, **fully drainable** for clearance of condensate during the heating process, with **aseptic design** for flanges, seals, valves etc.
- With steam traps, CIP waste discharge and temperature sensors for SIP endpoint detection located at the end of all drainage lines.
- Double mechanical seals, externally interchangeable, dry running with debris well, steam sterilizable.
- Ancillary items such as discharge valve, sampling valve, heel break up and heel removal systems all designed for steam sterilization.
- Additional temperature sensors to monitor the sterilization process located in areas difficult to reach for steam within the vessel and piping, assuring these areas are equally sterilized.
- Clean room exterior design with forced ventilation for drive unit enclosure.
- Other design criteria as per the pharmaceutical design Pressofiltro[®] agitated Nutsche filters or filter dryers.

Pressofiltro[®] Steam Sterilizable Filter Dryer



Applications for the Pressofiltro[®] steam sterilizable agitated Nutsche filter dryers

Steam sterilizable Pressofiltro[®] agitated Nutsche filter dryers are designed to maintain full sterility during the entire process, from inerting through slurry feeding through filtration, washing and drying until and including the discharging of the dry product.

CIP and SIP provide a very effective, safe and convenient form of sterilization, easy to automate and validate. COMBER Pressofiltro[®] steam sterilizable agitated Nutsche filter dryers are increasingly being used for biotechnological and pharmaceutical filtration and drying tasks in aseptic environments.

Steam sterilizable filter dryers allow for full validated sterility during the filtration and drying process in production lines for API's, intermediates and fine chemicals.

Typical design parameters for Pressofiltro[®] steam sterilizable Nutsche filter dryers

Filter area:	0.03 bis 6 m ²
Slurry volume:	8 – 6.000 liters
Operating temperature:	–10 to 151°C (15 to 300°F) or per requirements
Operating pressure:	–1 to +4 bar (g) (FV to 60 psig) or per requirements
Product wetted materials:	Stainless steels, Nickel based alloys such as Hastelloy C 22 or Alloy 59, Titanium, etc., Sealing materials: PTFE gaskets, O-Rings in FFKM or FEP encapsulated
Area classification:	EC type examination certificate 03ATEX0245X per the 94/9/EC directive, or with electrical components UL approved for operation in a Class I, Division I or 2, Groups C&D environment
Heated areas:	All product wetted components, including agitator
Accessories:	CIP/SIP system, dust filter with automatic back cleaning, sampling valve, sight glass with vessel light, vacuum system with condenser, heating and cooling unit etc.
Controls:	Control cabinet with PLC, HMI with touch screen, MCC, interface for DCS

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