

FS212 Asepto-Fill®

Cold Aseptic Filling & Closing Bench

When shelf life is your priority

There is a growing demand for aseptic filling of liquid products into containers without making use of hot fill or using preservatives and still maintaining an extended shelf life. A frequent problem, especially on small scale, is the sampling, packaging and storage of products without introducing risk of contamination. The OMVE Asepto-Fill® includes all equipment and a detailed step-by-step methodology to assist the operators in filling sterile.

Unique features

- Isolated filling chamber with a small controlled over-pressure
- Complete step-by-step instructions to ensure aseptic conditions are maintained
- User controlled operation with PLC supervision
- Works with a wide range of containers and sealing devices
- No chemical sterilization of packaging with risk of contamination

Working Principle

The OMVE Asepto-Fill® comprises a container with packaging, a sealed working chamber and an outlet air-lock. For aseptic processing an entire system must be cleaned and sterilized. The sterilization process is a predefined series of operations, all of which need to be completed to ensure commercial sterility.

Step-by-step

The containers are brought into the container holder and, as a whole, sterilized by gamma radiation treatment (this has to be done at an external company). The sealed container holder can be joined with the working chamber.

The working chamber has first to be cleaned and can then be sealed. The gamma-radiated container holder is attached to the chamber. The working chamber is disinfected manually. All inside surfaces of the chamber are disinfected with ethanol or water peroxide. By introducing sterile air into the chamber and a small controlled overpressure is created to prevent contamination from the environment. The PLC is guarding the sterile air flow and whether all the doors are sealed.

The product line is sterilized by pressurized hot water or steam (e.g. 121°C for 20 min). A by-pass tube is manually fitted from the filling heat to a drainage point outside of the working chamber. The UHT processing system (used to heat treat the product before filling) is set to provide pressurized hot water or steam at the set sterilization temperature. The temperatures at the coldest spot are monitored by the PLC of the Asepto-Fill®.



Ready for production. After cleaning and sterilization the UHT system is switched to product processing (ensuring that the main heat temperature does not drop below sterile limits). Containers are manually removed from the container-holder, placed under the filling nozzle, filled and sealed. These containers are removed via the outlet air lock without exposing the chamber to atmospheric contamination. During this complete procedure the operator is guided step-by-step by the control system.

Standard accessories

- Flow controlled filling system
- Different closing devices
- Nitrogen jet for lower oxygen in the packaging
- Additional container holders

Specifications

Flow direction	Diagonal
Air flow	100 Nm ³ /h
ULPA-Filter	U16 acc. to EN1822
Filling controlled by	Automatic foot pedal
Cleaning / Sterilization suitable	CIP / SIP
Materials	
Product line	SS AISI 316
Dimensions	
LxWxH	1460x1150x1900mm [57.5x45.3x75"]
Weight	270kg [595lbs]
Utilities	
Electrical	200-240Vac /1ph+N+E /50Hz/ 16A or 200-240Vac /3ph+E /60Hz/ 16A
Compressed Air Supply	4-7 bar(g) [58-100psi]
Nitrogen Supply (optional)	Max 3,5 bar(g) [51psi]
Water supply	Max 3,5 bar(g) [51psi]

Equipment Family

- Clean-Fill FS211 Down Flow Filling Bench with CIP & SIP possibilities
- Asepto-Fill FS212 Microbiological Isolated Filling Bench with CIP, SIP, Isolated filling environment & gamma radiated containers.
- Bag Filler FS218 Aseptic Bag Filler with CIP, SIP, Buffer tank and flow control.

Why OMVE

- ✓ Since 1993, we have **specialized** in supplying manufacturing R&D and pilot-plant equipment.
- ✓ OMVE is a **preferred supplier** to leading multinationals worldwide.
- ✓ OMVE systems are designed and manufactured according to the **highest industry standards**.
- ✓ OMVE systems come with a **two-year** warranty.
- ✓ OMVE systems carry **CE certification**.
- ✓ OMVE offers the **most comprehensive service** available on the market.