

Aseptic Filling with Automatic Decontamination

FS213 Asepto-Fill® & FS214 Asepto-Fill®

Semi-automatic isolator fillers

There is a growing demand for cold aseptic filling equipment for nutraceuticals, functional beverages, and pharmaceutical alternatives on a laboratory scale. Suitable for both the food and pharma markets, the FS213 & FS214 aseptic filling cabinet

combines SIP and chemical sterilization using both the isolator principle and a down flow of sterile air. By automating the chemical sterilization of the outer surface of the bottles, risks of contamination when transferring the bottles into the filling are eliminated. A bottle transfer cabinet connected to the filling cabinet enables the use of various sizes & styles of packaging. During production both cabinets are fully conditioned to prevent operational errors.

The semi-automated un-capping, filling and closing option, facilitates accurate volume dosing at line capacities up to 100L/hr. The FS214 is configured with 2 filling points, allowing glove access by 2 operators.

The sterility of the machines has been validated according to the ISO 11138 standard. This means that this packaging station has been proven to meet the highest standards for aseptic operation as required in the pharma and food industries. Consequently, this unique cabinet is suitable for filling a large number of sterile samples for any application, regardless of the pH-level.



Features & Benefits

- Sterile Isolation: A positive pressure filling chamber with sterile air downflow prevents contamination.
- Validated Sterility: Meets ISO 11138 standards for reliable disinfection and sterility assurance.
- Traceability: Critical Control Point monitoring with data logging of SIP cycle for traceability & quality control
- Automated Decontamination: H₂O₂ or PAA fogging system eliminates manual cleaning risks.
- Semi-Automated Filling: Integrated un-capping & capping devices enable efficient filling
- Precision Control: Automated volume dosing ensures consistent accuracy for every sample.

Applications

- Dairy & plant based alternatives
- Non carbonated beverages
- Juices and concentrates
- Tube feeding formulation
- Functional beverages
- Nutraceuticals

Working Principle

The OMVE Asepto-Fill® consists of 3 interconnected cabinets: the packaging cabinet, the main filling cabinet, and an outlet box. The packaging cabinet is sterilized by a fogging system or connected with a pre-sterilized bag with packaging (depends on the execution). The main filling cabinet is pre-sterilized via an automated fogging cycle and a SIP procedure for the connected filling lines. Both the packaging cabinet and outlet box are operated as hygienic locks. This allows loading and unloading of packaging materials into the main cabinet while maintaining process sterility. The filling points in the main cabinet have CIP and SIP capabilities.



Optional Accessories

- Different closing devices for PET packaging
- Nitrogen jet for lower oxygen in the packaging
- Heat sealer (non-aseptic)

Specifications

Product code	FS213 Asepto-Fill®	FS214 Asepto-Fill® ++
Flow direction	Downward	Downward
Air flow	0.45m/s	0.45m/s
Operators required	One	Two
Type of decontamination	Automated fogging	Automated fogging
PET bottle loader w/ automatic decontamination	No	Yes
HEPA-Filter	ULPA U17 in compliance with EN1822	ULPA U17 in compliance with EN1822
Filling controlled by	Volumetric control	Volumetric control
Cleaning/ sterilization suitable	CIP/ SIP	CIP/ SIP
Materials		
Product line	SS AISI 316	SS AISI 316
Weights & Dimensions		
Weight	270kg [595lbs]	600kg [1323lbs]
L x W x H	1460 x 1150 x 1900mm [57,5 x 45,3 x 75"]	2800 x 1050 x 2100mm [110,3 x 41,3 x 82,7"]
Required utilities		
Electrical supply	200-240Vac/ 1ph+N+E/ 50Hz/ 16A or 200-240Vac/ 3ph+E/ 60Hz/ 16A	200-240Vac/ 1ph+N+E/ 50Hz/ 16A or 200-240Vac/ 3ph+E/ 60Hz/ 16A
Compressed air	4-7bar(g) [58-100psi]; 5Nm/hr	4-7bar(g) [58-100psi]; 5Nm/hr
Nitrogen supply (optional)	Max. 3,5bar(g) [51psi]	Max. 3,5bar(g) [51psi]
Water supply	Max. 3,5bar(g) [51psi]	Max. 3,5bar(g) [51psi]

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FS213 Asepto-Fill®	FS214 Asepto-Fill®
Microbiological isolated filling bench with CIP, SIP capabilities. Packaging insert through an air lock from a stainless steel storage cabinet or bag with flange.	Microbiological isolated filling bench with CIP, SIP capabilities. Packaging insert through an air lock from a stainless steel storage cabinet or bag with flange.