

Alfa Laval Astepo PTAF system

Aseptic pilot filling system for bag-in-box and bag-in-drum duties



Introduction

The PTAF filler is a filling system for filling of a wide range of food and beverage products into appropriate containers under aseptic conditions.

Application

The PTAF filling system has been designed for use in laboratory and pilot applications as well as for taking sterile samples in aseptic industrial plants.

Benefits

- Alfa Laval Astepo fillers are proven solutions based on 30 years of experience in aseptic processing.
- A fail safe system continuously controls the sterile conditions.
- In case of an unexpected risk of sterility loss the equipment aborts production and notifies the operator.
- The PLC allows for return to production mode only after all the parameters necessary for sterility have been reset successfully.

Design

The PTAF aseptic pilot filling system is designed for 1–20 litre (1/2–6 gallons) and 200 litre (55 gallons) sterile flexible bags of the bag-in-box type.

The PTAF system is available with a 2 inch filling valve for food products that contain pieces and particulates, and/or 1 inch

valve for liquid products, dense and viscous. It is also ideal for use with low-acid products (typically those of the dairy type).

The system is also available with a sterile chamber in the hot version (using steam) and/or cold version (using an appropriate disinfectant).

The machine can be fitted with wheels so that it is easy to move from one place to another.

Standard equipment

- Frame made of AISI 304 stainless steel
- Filling valve 1 inch made of AISI 316 stainless steel
- Volumetric dosing by magnetic flow meter
- Steam control group and aseptic head steam sterilization controlled by independent thermo-regulator
- Sloped and adjustable roller conveyor table made of AISI 304 stainless steel, with an air-fill piston for small 1–20 litre (1/2–6 gallons) bags
- Removable idle roller conveyor 1200 mm (47 inch) for filling 200-litre (55 gallons) drums.

Options

- Filling valve 2 inch made of AISI 316 stainless steel.
- Weight dosing by balance.
- Spout and aseptic head with chemical disinfection.
- Clamps to support bags and removable idle roller conveyor.

The system can be equipped with a printer, so customized adhesive labels can be placed on the samples.

Working principle

The dosing of the product is carried out by an electronic balance or by volume with a magnetic flow meter, and the system is managed by a PLC.

The PTAF system is sterilized with steam and CIP sanitized automatically.

Technical data

Steam consumption at 6 bar	50 kg/hour (110lb/hour)
Deoiled air at 6 bar	10 NI / 1"
Electrical supply	220V – 50/60Hz – 1kW
Dimensions (LxWxH)	1100x1292x2200 mm (43.3x50.9x86.6 inches)
Weight	450kg (992lb)

