

PRESS RELEASE

Applications: small-scale liquid filling for the pharmaceutical, animal health and biotech industries



NEW P1540 LIQUID FILLER HANDLES PRE-STERILIZED STOPPERED VIALS Increasing Productivity, Reducing Costs and Easing Operations for Small-Scale Filling Operations

M&O Perry Industries introduces the new P1540, the industry's first standardized automated filling system that handles pre-sterilized stoppered vials. Ideal for pilot plants, R&D facilities and biotech companies looking to automate small-scale liquid filling operations, the P1540 improves labor utilization and increases productivity, filling up to 45 vials per minute. Compared to other automated fillers, the P1540 simplifies operations by eliminating the need for on-site cleaning and sterilizing of vials and stoppers.

Unlike other filling systems on the market, the P1540 handles pre-sterilized stoppered vials, which are available, double wrapped, from suppliers. The outer wrap is removed inside the cleanroom that houses the P1540 and the inner wrap is removed inside the P1540's Class 100 enclosure, which contains the entire machine. The automated system removes the stopper immediately before the filling station and later replaces the stopper into the same vial from which it was removed, maintaining sterility and product integrity throughout the process.

Pharmaceutical, animal health and biotech companies using M&O Perry's P1540 eliminate the equipment costs and processing challenges associated with cleaning and sterilizing vials and stoppers. Capital investment in equipment is reduced and the coordination of vial/stopper preparation with production scheduling is eliminated with pre-sterilized stoppered vials that are always ready for use. Additionally, this new approach to filling allows companies to shift component certification to the "Certified Clean Sample Container" supplier.

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Pre-sterilized, pre-wrapped stoppered vials are transferred to the infeed rotary table of the P1540 after the outer wrap has been removed. The inner wrap is removed inside the P1540's Class 100 enclosure, allowing the sterile stoppered vials to be transferred to the unscrambling table. Vials are automatically fed into the pocketed conveyance system and transferred to the first process station where the stopper is removed from the vial. Liquid is filled into the vial using a diving needle filling mechanism. The stopper, held by an indexed rotating arm, is then re-inserted into the same vial from which it was removed. The stoppered vial then passes through the mouse hole of the partition wall between filling and capping suite of the machine and enters the crimp side of the system where an aluminum seal is applied and closed. Vials then exit the machine onto a rotary discharge table.

Page Two: New P1540 Liquid Filler Handles Pre-Sterilized Stoppered Vials

The destoppering/restoppering function of M&O Perry's P1540 is a revolutionary new capability, never before available in a filler. The unique mechanical design assures precise operation through a rotary valve that has jaws and a plunger on each of its four stopper removal/replace ports. The jaws physically grab and lift the stopper from a given vial. When the stopper is replaced, the jaws release and the plunger pushes the stopper into the vial. This mechanical jaw/plunger system achieves optimal machine performance to maximize product quality while minimizing operator intervention within the Class 100 cabinet area.

The P1540 handles vial sizes ranging from 15 to 55mm in diameter, 32 to 100mm in height with neck finishes of 13 to 20mm.

M&O Perry designs and builds the P1540 to pharmaceutical (cGMP) quality standards. Contact surfaces on the P1540 are either 316 stainless steel or FDA approved synthetic materials. Tubing frame and side panels are 304 stainless steel. The tabletop is manufactured from aluminum and sheathed with a 316 stainless steel skin.

About M&O Perry

M&O Perry designs and manufactures high quality, precision powder fillers and liquid fillers as well as isolation technology for pharmaceutical, biotech and medical devices manufacturers worldwide. In addition to its standard filling systems, M&O Perry designs and manufacturers custom equipment, including specialty machines for filling and assembling devices or unstable containers from microcentrifuge tubes to syringes. M&O Perry offers complete product support including system validation, installation, setup, operational training and comprehensive product documentation.

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