



Automatic Cartridge Filling and Capping Machine

Model AVFC-4



Features:

1. Servo application

- Chain drive for cartridge/cap conveyance
- Piston up and down motion, piston rotation motion
- Cartridge tray X axis, transfer Y axis
- Cap tray X axis, Cap transfer Y axis
- 4 screw capping heads

2. Filling

- Filling is a rotary piston pump, and the filling range of the pump is up to 1.5ml.
- The filling amount can be changed by adjusting the vertical stroke distance of the servo motor on the touch screen.
- Filling accuracy is within $\pm 2\%$
- Nozzle outer diameter 1.2mm
- As the piston rotates by servo drive, a fixed amount of solution is sucked and discharged into the cartridge.
- It responds to the viscosity of various solutions regardless of PG (Propylene Glycol) or VG (Vegetable Glycerin).

3. Capping

- Choice of screw capping or press fit
- Select capping types on touch screen
- 4 screw capping heads driven by servo motors
- In screw capping, the clamp opens and closes to hold the cap, and then rotates to torque it.
- In press fit capping, the cap is put on the cartridge and at the same time it is fitted by pressing with the upper plate and pin.

4. Safety function

- Safety door interlock - stop operation when the door is opened
- An area sensor is installed in the section where empty trays are retrieved, and new trays are placed. When motion is detected while the machine is running, the machine stops.

5. Cartridge Dimensions

- Diameter range: 10-11mm (3/8-7/16 inch)
- Height range: 25-50mm (1-2 inch) without cap
- When using cartridges of different heights, it is necessary to make a tray to fit the size.
- Considering the turnover and efficiency of the operation, 3 cartridge trays and 3 cap trays are required each
- If a manufacturer often uses cartridges of different heights, the manufacturer may consider adding the ability to adjust the height of the machine.

6. Cap (mouthpiece) Dimensions

- Diameter range: 10-11mm (3/8-7/16 inch), not exceeding 12mm (1/2 inch) with silicone cap
- Height range: 25-30mm (1-1.2 inch) with silicone cap
- When using caps of different heights, it is necessary to make a tray to fit the size.
- Considering the turnover and efficiency of the operation, 3 cap trays are required
- If the shape or design of the cap is different from the general case, prior consultation is required.

7. Tank capacity

- Can be selected to fit the batch size
- Connect the compressed air to pressurize the tank (about 1 bar, 14.5 psi)

8. Compressed air

- Air pressure: 6 bar (87psi)
- Air consumption: 240NL/min (8.5 cfm)

9. Power

- Electricity: 220V, 1ph, 60hz
- Power Consumption: 4kW

Specifications:

- Estimated Output (based on 1ml fill with screw cap): 40-50 Vapes per minute (2,400-3,000 Vapes per minute)
- Dimensions: 2040 (W) x 1540 (D) x 1890 (H) mm or 6' 8" (W) x 5' 1" (D) x 6' 3" (H)
- Weight: 840kg or 1850 lbs.