

## Automatic Gear Pump Paste Liquid Filling Machine



The automatic single-head servo gear pump filling machine is a high-precision and efficient filling device widely used in industries such as cosmetics, pharmaceuticals, food, and chemicals. It is designed for the accurate dosing of liquids, viscous fluids, or semi-fluids. The machine uses a servo motor-driven gear pump to ensure a stable and precise filling process. Below is a description of its main features:

- 1. \*\*Servo Drive System\*\*:** Equipped with a high-precision servo motor that accurately controls the speed and rotation angle of the gear pump, achieving precise control over the filling volume with minimal error and high filling accuracy.
- 2. \*\*Gear Pump Structure\*\*:** The gear pump offers stable flow, durability, and easy maintenance. It is suitable for materials with varying viscosities, especially for filling medium to high-viscosity fluids. The pump is typically made of stainless steel, which is corrosion-resistant and meets sanitary standards.
- 3. \*\*Single-Head Filling\*\*:** Designed with a single filling head, this machine is ideal for small to medium production volumes. It can easily handle various container sizes and types, with quick changeovers and easy cleaning, reducing downtime.
- 4. \*\*Automated Operation\*\*:** The machine is controlled by a PLC system and features a touch screen interface, making it user-friendly. It includes functions such as automatic feeding, filling, and stopping, with adjustable filling speed and volume to meet different production needs.
- 5. \*\*Filling Accuracy\*\*:** The servo-driven gear pump ensures precise filling, minimizing material waste. Filling parameters can be quickly adjusted via the touch screen to accommodate different production requirements.

**6. \*\*Multi-Functional Design\*\*:** This equipment can handle a wide variety of liquids, including low-viscosity fluids (e.g., water, alcohol), medium-viscosity fluids (e.g., oils), and high-viscosity materials (e.g., creams, sauces), making it versatile for different applications.

**7. \*\*Hygienic Design\*\*:** The parts that come into contact with the product are made of high-quality stainless steel, which is easy to clean and meets GMP sanitary standards, making it suitable for industries with strict hygiene requirements, such as food and pharmaceuticals.

**8. \*\*Flexibility and Expandability\*\*:** The single-head design makes it suitable for small-scale production or laboratory use. Additionally, the machine can be expanded by adding more filling heads to meet higher production demands.

This filling machine is compact in structure, simple to operate, easy to clean and maintain, making it ideal for small to medium production volumes that require high precision and efficiency.

## Parameter

|                          |                        |
|--------------------------|------------------------|
| Number of filling heads: | 1                      |
| Filling range:           | 50-2000ml              |
| Filling speed:           | 1800-2400 bottles/hour |
| Measuring accuracy:      | ±0.1%                  |
| Power:                   | 1.5KW                  |
| Voltage:                 | 220V                   |
| Working air pressure:    | 0.6-0.7Mpa             |
| Air consumption:         | 2-3m <sup>3</sup> /min |
| Machine size:            | 2000*600*1500mm        |
| Machine weight:          | 200kgs                 |