

DSG-120

Automatic Production Line for Aseptic Eye Drops

➤ DSG-120 Purging, Filling, Plugging and Capping Automatic Production Line for Eye Drops



The purging, filling, plugging and capping integrated unit for eye drops consists of the vial straightening and feeding part, the ion air purging part and the filling, plugging and capping part. It is mainly used for completing the vial straightening, vial feeding, air purging, measurement, split charging, inner plugging, cap placement, capping, etc. for eye drops vials. The whole production process is completed under the protection of 100-level laminar flow and aseptic isolation operation, and each area is isolated for protection to guarantee aseptic production of eye drops products and meet the national GMP requirements(2010). The production line is also applicable to the production of other small-capacity plastic vials.



Features of Production Line for Aseptic Eye Drops:

Mature cutting-edge technology:

- The advanced servo step multi-axis motion control system as well as the human-computer interface and the programmable logical controller(PLC) can realize full-automatic control over the operation. High-precision turnover, air purging, vial feeding, filling, plugging, cap placement and capping are accurate and stable.
- The domestic pioneering straight-line type vial turnover and air purging structure is perfectly integrated with the aseptic preparation production line, so as to guarantee the cleanness. Advanced independent servo precise ball screw transmission mechanism controls the split charging of single ceramic pump to guarantee the filling precision.
- The high-precision splitter is used to guarantee the stability and accuracy of the intermittent vial feeding almost without any noise.
- All main electric appliances, photoelectric optical fibers and pneumatic elements are imported products.
- Each function position of the equipment is running under complete protection of laminar flow and completely meets GMP requirements.

Mature cutting-edge technology:

- The unique vial straightening, purging, filling, plugging, cap placement and capping multi-function integrated machine design reduces the land area of the production line, minimize the purification space and greatly reduces the production purification cost.
- In the operation of the equipment, the application of a large number of servo control systems increases the stability of the process and greatly increases the product qualification rate. The provision of efficient energy-saving frequency converters enables the motors to realize stepless speed regulation and to reduce the energy consumption greatly.
- High-performance polyformaldehyde with good heat resistance, wear resistance, and self lubricating performance is applied to the components contacting packing materials at a large amount, which can effectively reduce the wear during motion and reduce the replacement of wear parts.
- The equipment is provided with switching procedures and certain track heights can be adjusted to adjust the specification and reduce artificial adjusting, cleaning and specification replacement time.
- The starting current starting torque are low, and the power factor within the whole speed range is high.

Safe, reliable and trustworthy products:

- The application of the servo step multi-axis motion control system enables safe and reliable operation, low fault rate and extremely low operation and maintenance costs.
- The overload automatic protection function is provided to automatically shut down the machine in case of any fault. Any fault of the electric appliance part will be displayed on the human-computer interface.
- Switching procedures are provided for the equipment to adjust the specification, avoid artificial pollution of the equipment running environment and effectively realize aseptic operation inside the isolation bin.
- The high-precision splitter is used to guarantee the precision of positioning during running of the equipment.
- The application of completely imported pneumatic elements guarantees the precision of positioning during running of each component.
- The linear action and the non-disordered 100-level laminar flow protection air realize aseptic production effectively.

Technical parameters	DSG-120
Applicable specification	plastic vial, inner plug and outer cap
Production capacity	~120vials/minute
Filling number	4 (secondary split charging)
Press capping number	2
Capping number	2
Measurement precision	≤±0.5%
Plugging qualification rate	≥99.6%
Capping qualification rate	≥99.8%
Pressure of compressed air	0.2MPa
Consumption of compressed air	50m ³ /h
Total power	7.96Kw 380V (220V) 50Hz
Net weight of machine	2650Kg
Size(L×W×H)	4630*1726*1907mm