

Oral Liquid Washing-Drying-Capping Production Line



The oral liquid washing-drying-filling-capping production line is composed of the QCL series vertical ultrasonic bottle washing machine, ASMR tunnel hot air circulation sterilizing oven and YGZ series oral liquid filling-capping machine. Suitable for production of oral liquid bottles of 2-25ml, it can complete such procedures as water spray, ultrasonic washing, water filling, gas charging, drying, sterilizing, cooling, filling, capping, and etc.

Features

- ◆ The bottle washing machine adopts mechanical hands to clamp the bottles, suitable for bottles of various specifications.
- ◆ The water-gas spray needles adopt the reciprocating tracking insertion method for bottle washing, featured by excellent washing effect and energy saving. It is also provided with a device that prevents the needle holder from shaking to enhance the accuracy of the spray needle's insertion into the bottle and reduce the occurrence of needle breakage.
- ◆ The water and gas pipes are totally separable from the spray needles, so that cross contamination is avoided and GMP requirements are met.
- ◆ The buffer block is installed before the bottle feeding screw of the bottle washing machine to protect the screw and reduce bottle breakage.
- ◆ Bottle discharging is realized by the integral imported synchronous belt that is connected to the bottle pushing block to convey ampoules, a structure that ensures stable and reliable operation.
- ◆ The oven adopts the infrared heating tube and stainless steel heating tube so that the heating temperature has good evenness.
- ◆ The filling-capping machine can be equipped with the ceramic pump and stainless steel pump.
- ◆ The filling-capping machine is provided with the functions of no filling in case of no bottle and no capping in case of no bottle.

The whole line adopts PLC main control, frequency converter and touch screen control technology with stable and reliable running. The touch screen can display running dynamics of each single

machine, water pressure, air pressure, wind pressure and temperature at each control point. The display of each on-off status and faults, fault self-diagnosis, fault analysis and eliminating methods realizes automatic control during the whole production. The production line is provided with the three-machine automatic control and balancing device to ensure balanced and reliable production.

According to customer requirements, it can also be equipped with the following:

- ◆ Control system of such brands as Siemens, Schneider, Mitsubishi, Delta, and etc;
- ◆ Water pressure, air pressure, water temperature, ultrasonic strength, dust particles and wind speed online inspection, alarming, recording and printing systems;
- ◆ ORABS, CRABS, aseptic isolator system.

Technical Parameters

Applicable specifications(ml)	5-25
Production capacity(pcs/min)	350
Filling accuracy(%)	$\leq \pm 2.5$
Number of filling heads	16
Number of capping heads	20
Qualified rate of capping(%)	≥ 99
Gross weight(kg)	7500
Overall dimensions(mm)	9920 × 2003 × 2150