
100AT Generic small automatic aerosol filling assembly line

Usage and features

HDC-100AT Aerosol Machine is a relatively complete aerosol filling solution which is developed on the base of 100A series. There are specific machines covering all the aerosol filling needs: liquid filler, valve inserter, sealer and gas filler(propellant). We use auto conveyer and pusher to make bottle moving ahead without manual help.

This aerosol machine can work in two mode, you many choose manual intermittent filling or auto intermittent filling. And the interval time can be varied according to your adjustment.

As other fundamental aerosol machines, the 100AT is extendable with other aerosol machines like can arranger, nozzle presser, capping machine and can printer. Other functions can also be customized on demand.

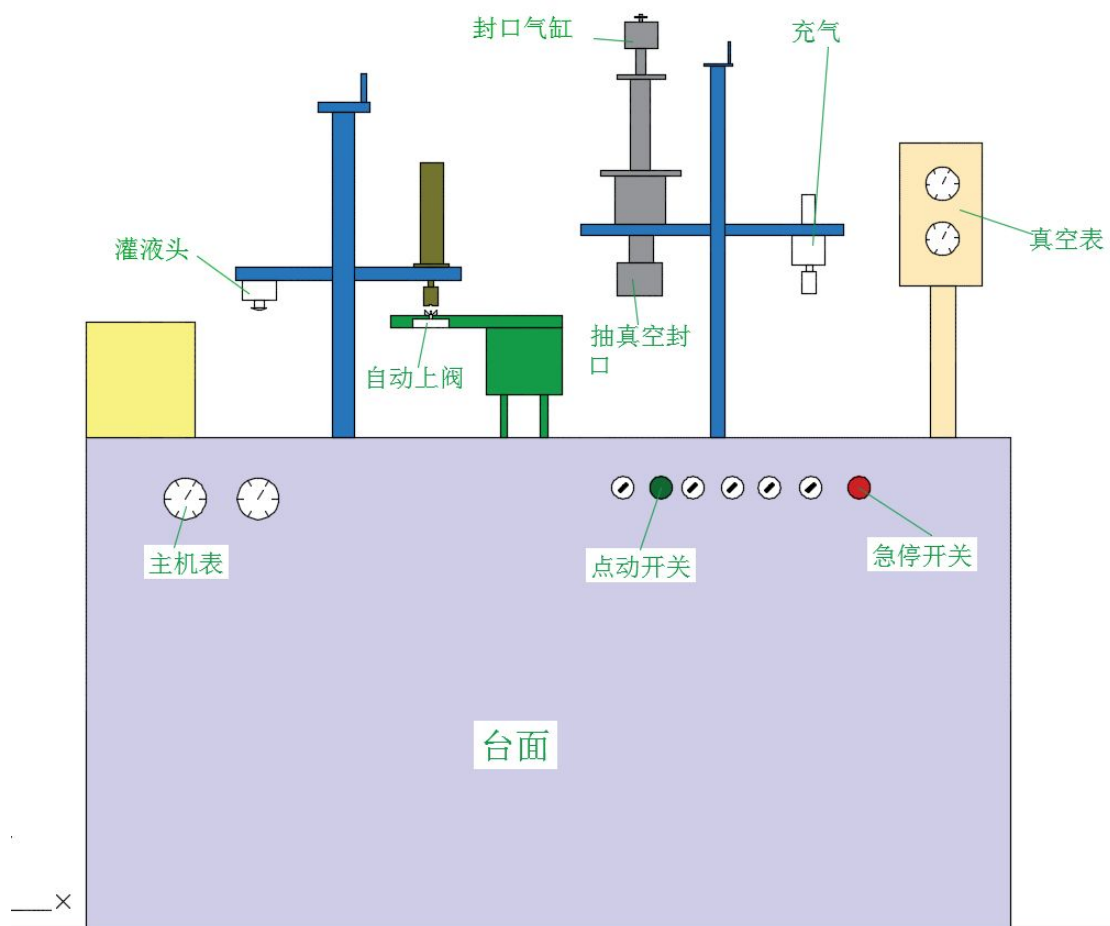
Equipment components and main parameters

Outline size (length*width*height)mm	1200*800*2000
Production speed/hr	800-1800
Liquid volume(ml)	10-1000
Gas volume(ml)	10-750
Filling accuracy	+/_1%
Applicable aerosol can diameter (mm)	35-65
Applicable aerosol can height (mm)	70-330
valve(mm)	25.4(1 inch)
Air source(Mpa)	0.75-0.9
Max air consumption(m ³ /min)	1.3

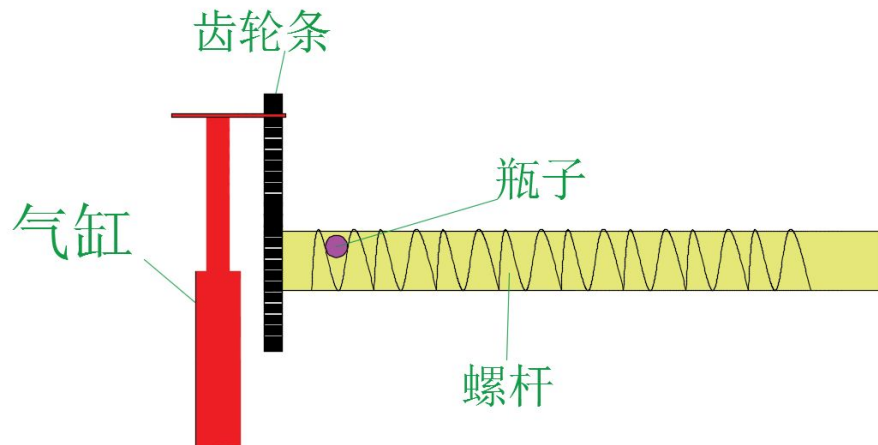
Basic structure and working principle

Because flammable products often used when producing, this machine adopts full pneumatic structure models to eradicate unsafe factors caused by electricity spark, so as to prevent explosion.

This machine adopts Straight screw push system, avoid the trouble of manually pushing the bottle, improve capacity. Table divided into liquid filling, automatic valve inserting, vacuum, and gas filling system.

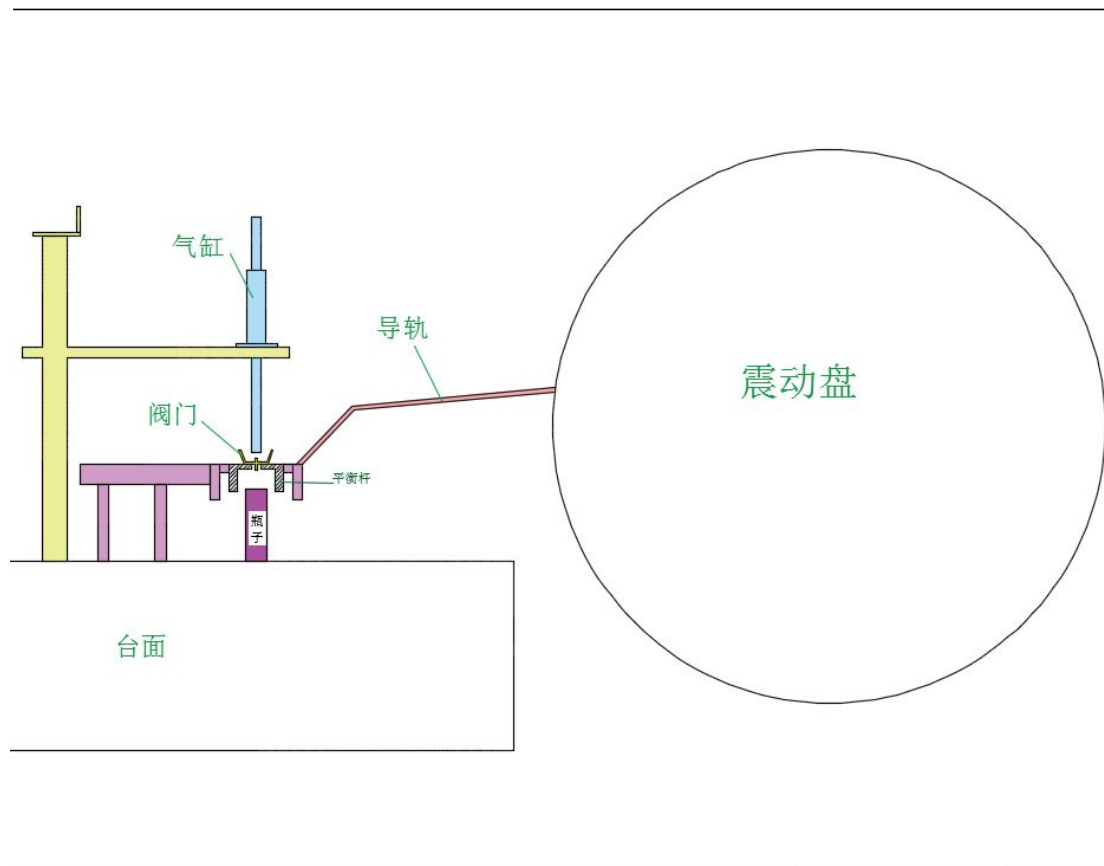


Working principle: gas cylinder back and forth, drives gear turning, gear drives the screw rotate so as to push the bottles inside the screw forward. As shown:



Liquid filling: open liquid filling switch, press jog mode, the liquid metering cylinder pneumatic control valve changes direction, liquid filling head is opened, while the power cylinder's piston down presses liquid cylinder, liquid fills into the aerosol cans through filling head, the power cylinder piston touches signal valve, the filling head valve closed, metering cylinder is reset, and the same amount of liquid is sucked for repeated filling. You can spin the handle on top of the metering cylinder to adjust the height of piston, thereby changing the piston track to eventually change the amount of filling.

Automatic valve inserting: vibration plate shaking, the valves inside the plate shaken, and sorted slipped from rail to the automatic valve machine, when the bottle moved under the machine, the gas cylinder down presses valve, the valve fall into the bottle.



Sealing and vacuum: open the switch, sealing machine lifting and gas cylinder falling, sealing jaws pressed valve cover, vacuum machine starts vacuum, after vacuuming the lifting cylinder presses, making the valve and bottle fits, then the sealing cylinder presses so as to achieve sealing.

Gas filling: booster pump will automatically inhale the propellant gas, the propellant gas is pressurized to a high pressure liquid, and be put into gas metering cylinder. By adjusting pressure the booster pump can control liquid propellant's pressure. Open the gas filling switch, step on the foot valve, the nozzle will automatically open. While the liquid propellant fills into the sealed bottle through the filling head. At this time, the power cylinder touches the signal valve making the filling head and metering cylinder reset, the same amount of gas is sucked from the cylinder for repeated filling. You can spin the handle on top of the metering cylinder to adjust the height of piston, thereby changing the piston track to eventually change the amount of filling.