Touch Screen Semi-automatic Capsule Filling Machine

The characteristics of semi-automatic capsule filling machine:

Introduction to the functions of the main components:

Bag broadcasting mechanism

This mechanism inserts hollow capsules from the hopper into the seeding tube. There is a spring switch below the seeding tube. When the seeding tube is driven by a fan-shaped gear to fall below, the switch releases a row of capsules (7 in rows 1 #, 2 #, and 3 #, and 6 in rows 0 #) under the action of a collision iron. When the seeding tube rises upwards, the switch immediately closes the seeding tube.

The capsule that has fallen under the capsule comb is pushed forward to the turning position by the pushing capsule plate. The capsule is compressed and the capsule head is pushed down and turned at the same time (with the body facing downwards and the cap facing upwards). There is a negative pressure airflow below the mold. When the capsule is compressed and the capsule head is pressed downwards and leaves the capsule comb, the capsule is sucked into the mold by the airflow in the mold hole. Due to a small step in the mold hole that prevents the capsule cap from staying in the upper mold, the capsule body continues to slide into the lower mold space under the vacuum effect, and this mechanism completes the capsule sorting, turning, and separation work.

The mechanism is operated by a separate motor that drives the cam, rocker, and ratchet mechanisms. Every time the cam rotates, the ratchet advances one tooth (i.e. using a mold to advance a row of holes), while the cam drives the rocker to rotate the sector gear for one cycle. The mechanism is equipped with automatic counting control. When the mold is filled with capsules, the mechanism automatically stops. If it needs to be stopped midway, it can also be manually stopped. The speed of the machine is adjusted by the frequency converter knob and buttons on the control panel, and is equipped with an instrument to display the speed.

If some capsules are not completely separated, you can manually move the mold 2-3 times to promote complete separation under vacuum adsorption.

Technical Specifications

Production capacity	10000-20000 capsules/h
Applicable capsule	000#,00#,0#,1#,2#,3#,4# hard and safety-capsules
Total power	3.1KW
Compressed air	0.4-0.6MPa,40m3/h
Power supply	3-phases 4-line (380V 50Hz)
Overall size	1350×600×1500mm
Weight	330kg