



ZS-1 Fully-Automatic Suppository Filling and Sealing Machine



ZS-1 laboratory automatic suppository filling and sealing machine is our company digested and absorbed abroad advanced technology and bond internal suppository producing practice to manufacture and develop.

The equipment is made of four parts:

1. Suppository belt machine (forming machine),
2. Suppository filling machine,
3. Suppository condensation tunnel,
4. Suppository sealing machine,

It can complete making shell, filling, cryo-stereotypia and sealing. The machine is made of PLC, HMI, because of its full-featured, small volume, low production, so it is used for research institutes and hospital preparations.

Machine Details:

In order to meet the requirement of university, research institute or any company at lab scale production, we developed the ZS-1 automatic suppository machine. This unit is composed by four parts which are shell forming part, cavities filling part, suppositories cooling and condensing part and sealing part. The whole process operates automatically and controlled by PLC. The working process is illustrated as below: PVC, PVC/PE sheet-----welding-----pre-heating-----knurling-----blowing and forming-----filling-----cooling and condensing-----pre-heating-----sealing-----embossing-----trimming -----counting and cutting-----finished products

Working Principle:

Bundles of PVC or PVC/PE sheet are transformed into shells ready for filling by shell forming machine. These shells are then moved into the station for filling. The well blended liquid medicine is injected into the shells controlled by a high accuracy measuring device. Plug in filling is employed to make sure no air bubbles, spilling or leaking. After filling, the belts will enter into the cooling boxes. The liquid medicine will move along a special curve and cold circulating water is used for cooling. The liquid medicine will transform to solid state after this stage. The cavities containing the solid suppositories are then moved to sealing station. After sealing, products will be conveyed to the embossing station where information such as batch number, date of manufacture and expiry will be embossed. After embossing, the belts will go for cutting. Products can be cut by any number according to customer's requirement.

Technical characteristic:

Production capacity	1000-2000 pieces/h
Dosage per granulation	0.5-4ml
Filling error	-0,05
Suppository form	bullet form, torpedo form
Center distance	17.5mm
Number of mould	1 granulation
Packing material height	58mm, thickness 0.14mm+-0.01mm
Volume of barrel	10L
Height of hopper	1500mm
Voltage	380V, 50HZ, 3P
Power	7kw
Air pressure	0.55-0.65mpa
Air consumption	1.0m ³ /min
Size	2700x1000x1800mm
Weight	1500kg