

Syringe Filling Machine



Manually put the set syringe on the special membrane. Then hang them together on the plate which will put the syringe in order for the next step. The machine will automatically load them in succession into the filling dial which rotates intermittently and completes the filling for once. After that, the filled syringe are inserted into the dial wheel and are transported to the next procedure.

A syringe filling machine is a type of automated equipment used in the pharmaceutical and medical industries to fill pre-sterilized syringes with a specific amount of medication or solution. The machine typically uses a filling pump or a dosing system to accurately fill the syringe barrels, which can range in size from a few milliliters to several milliliters or more.

The syringe filling machine typically includes a conveyor system to move the syringes through the different stages of the filling process, which may include cleaning, filling, stoppering, and capping. The machine may also include additional features such as automatic inspection systems to detect defects or contaminants in the syringes.

The filling process in a syringe filling machine can be controlled by a variety of mechanisms, including volumetric, gravimetric, or piston-driven pumps. The machine may also be designed to handle a range of different types of solutions, such as viscous liquids, suspensions, or powders that need to be reconstituted before filling.

Overall, a syringe filling machine is a crucial piece of equipment in the pharmaceutical and medical industries, as it allows for accurate and efficient filling of pre-sterilized syringes with a high degree of precision and consistency.

Some Sorted Part Among the Working Process of the Syringe Filling Machine:

1. Syringe filling: The dial bring the syringe to the filling part where a single filling needle will be inserted into the syringe and rise itself up as the filling volume gets higher. At the same time, the syringe will be sealed vacuum to make sure the pollution-free of the product. What's more, a special gel ceramic pump is used for the filling pump.
2. The vacuum stopper of syringe: After the syringe is filled, it is rotated to the stopper station via the dial. The rubber stopper is controlled by oscillator and transported through a special track to the top of syringe. Then a rod takes off the stopper, integrating it with a vacuum body while the syringe being sealed and turning into vacuum. At last, combine the robber with the vacuum syringe.
3. Collecting the finished product: After being hanged and slipped via a chute, the final syringe can be picked up manually.

Technical Parameters

Filling Volume	1 ~ 20ml
Capacity	200-1200 bph
Filling Head	1
Capping head	1
Accuracy	± 1%-1.5% Gel rotary valve plunger pump (the greater
	the viscosity, the greater
	the error)
Vacuum pumping rate	80m ³ /hour, close to
Machine size	1250x950x1800 (mm)