

HMPL-PRE-VFB Automatic Vial Filling and Rubber Stoppering Machine



The Automatic Vial Filling and Rubber Stoppering Machine consist of a main structure covered with SS cabinet safety acrylic cover, laminar air flow, in-feed turntable Machine, peristaltic pump filling Machine, Delrin Slate conveyor, outfeed turn table, vibrator bowl & chute for rubber stopper, pneumatic components and electrical panel, AC Drive, PLC & HMI.

Features

- The machine is made compact & versatile as per GMP norms.
- The structure is made out of MS cladding with SS 304.
- Rigid vibration-free construction for trouble-free performance.
- The contact parts such as filling nozzle, bung disc are made of SS316 L.
- The Pharma grade silicon tubes are used for filling & CIP/SIP.
- Easy to clean the base of the machine.
- There is a special feature called PRIME which is useful to suck the filling material from storage tank to nozzle end very quickly. Moreover, this facility is useful to clean the filling line (silicon tubes) as well as filling peristaltic pump in both directions.
- The machine has a facility of using PRIME function for all the peristaltic pumps together or individual peristaltic pumps also.
- The process of filling is done by specially designed filling peristaltic pump which can serve the purpose of CIP & SIP.
- Individual pumps can be adjusted & calibrated for the desired volume by use of easy to operate PLC.
- Oil-based material can also be run easily without dripping because of specially designed peristaltic pump with the facility of suck back.

- Each filling head can work independently & hence the machine works continuously without sacrificing major production.
- No change parts are required for different size of vials as well as different filling volume.
- There is a very less product change over time due to very less usage of mechanical parts such as syringe set, Teflon seal, gear & chain etc.
- Easy to operate PLC for any kind of volume adjustment or speed adjustment.
- Synchronized filling system for smooth filling purpose.
- Specially designed bung oriental bowl & discharge chute with in-built vibrator. The bung oriental bowl & chute are Teflon coated for use of wet bungs.
- Bungs are held in the specially designed vacuum bung hold disc & the same disc discharge the bung uniformly on the vial. The bung pressing roller presses the bungs uniformly.
- The same Rubber bunging machine assembly can also be utilized for half stoppering.
- For different heights of vials, the whole assembly can be moved upwards & downwards.
- Alarm alerts through PLC for "No Vial, Machine Stop" & No Vial, No Bung".
- Production counter is given with password protection for daily track report and planning for the same.
- The faults can be detected on the PLC touch screen HMI and can be attended easily for the same.
- The machine is supplied with isolated power supply to avoid the adverse effect of electric supply.
- The output speed can be appeared on HMI screen and adjust the same as per appropriate requirements.
- Very less mechanical adjustment required due to the special design.
- User-friendly and very less maintenance required.
- Nitrogen facility (Pre or Post) can be provided as an (OPTIONAL).
- Unique design of rolling conveyor.
- Easy loading of vials to in-feed turntable by loading tray.
- For smaller vials, the speed of turntable can be set individually.
- Filling machine with tray to spillage and connection of drain.
- Conveyor of Filling and cap sealing machine covered with acrylic cover.
- Most reliable & proven mechanical components such as FESTO make pneumatics & CE certified electrical/electronic such as Bonfiglioli make AC motor, Allen Bradley make drives, PLC & HMI Touch screen, Sensors, MCB's, relay etc.

Technical Data

Vials Diameter	25 mm to 55 mm
Rubber Bung Size	13 mm, 20 mm & 32 mm
Output Speed	30 to 400 Vials/Minute
	(Depend upon nature of liquid & size of vials)
Filling Volume	2 ml to 30 ml
Filling Head	4 / 6 / 8 Heads
Working Height	875 ± 50 mm Adjustable
Power Consumption	2.5 KW
Power Supply	3 Phase + Neutral + Earthing/ 415 V AC/ 50 Hz
Air Supply	4 to 6 Kg/Cm ²
Net Weight	650 Kg Approx.
Dimensions	2700mm (L) x 1500mm (W)x 2000 mm(H) Approx.