

Injectable

Multi Column Distillation Unit



SALIENT FEATURES:

- All contact parts are of SS 316 / 316 L qualities and are electro polished.
- All fittings, sanitary tri-clover type.
- Double safety provided in the first column as boiler steam is present there.
- PLC based fully automatic panel board provided with printer.
- The design is compact & economical.

AUTOCLAVE (Steam Steriliser)

SALIENT FEATURES:

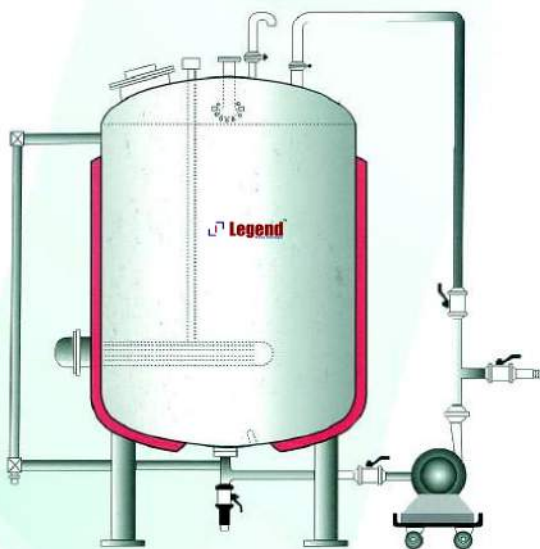
- Unique jacket design to maximise safety.
- Standard & double door models.
- Temperature uniformity in fastest time.
- Fully stainless steel construction.
- Direct steam operated and inbuilt boiler operated models.
- MOCSS 304/316.
- In compliance with cGMP.



Distilled Water Storage Tank

SALIENT FEATURES:

- Design as per client's requirement.
- No stagnant point to avoid bacterial growth.
- It is polished to high degree of finish and electro polished to the Ra value of 0.28.
- Insulation with SS 304 welded cladding.
- All contact parts will be of SS 316 / SS 316 L qualities.
- Spray ball will be provided for CIP & SIP.
- SS 304 control panel provided with level indication & digital temperature indicator cum controller.
- Provided with flush bottom valve & 0.2 μ vent filter.
- Load cell (Capacitance Type) will be provided to display the volume inside the tank in terms of litres (OPTIONAL)
- If required, tank can be provided with loop system with recirculation of WFI water
- In compliance with cGMP





Sterility

SALIENT FEATURES:

- Available in single/three/six stations.
- Three/six stations provided with SS stand & piping.
- All contact parts are SS 316/316 L and mirror polished.

Membrane filter holder

SALIENT FEATURES:

- Available in 142 mm & 293 mm size.
- Bubble test arrangement can be provided.
- All contact parts are SS 316/316 L and mirror polished.
- In compliance with cGMP.

Semi automatic powder filling machine for inject able

SALIENT FEATURES:

- "No Vial – No Filling" system eliminates wastage of costly powder.
- Overload Relay for any overload accident.
- Flexible to suit from 5 ml. to 30 ml. vials.
- All Contact Parts are S.S 316L.
- Quick change over with minimum use of tools.
- Contact parts are removable for mandatory autoclaving.
- In compliance with cGMP.
- Pure Air Filter(optional).
- Vacuum Pump(optional).
- Oil Free Air Compressor(optional).

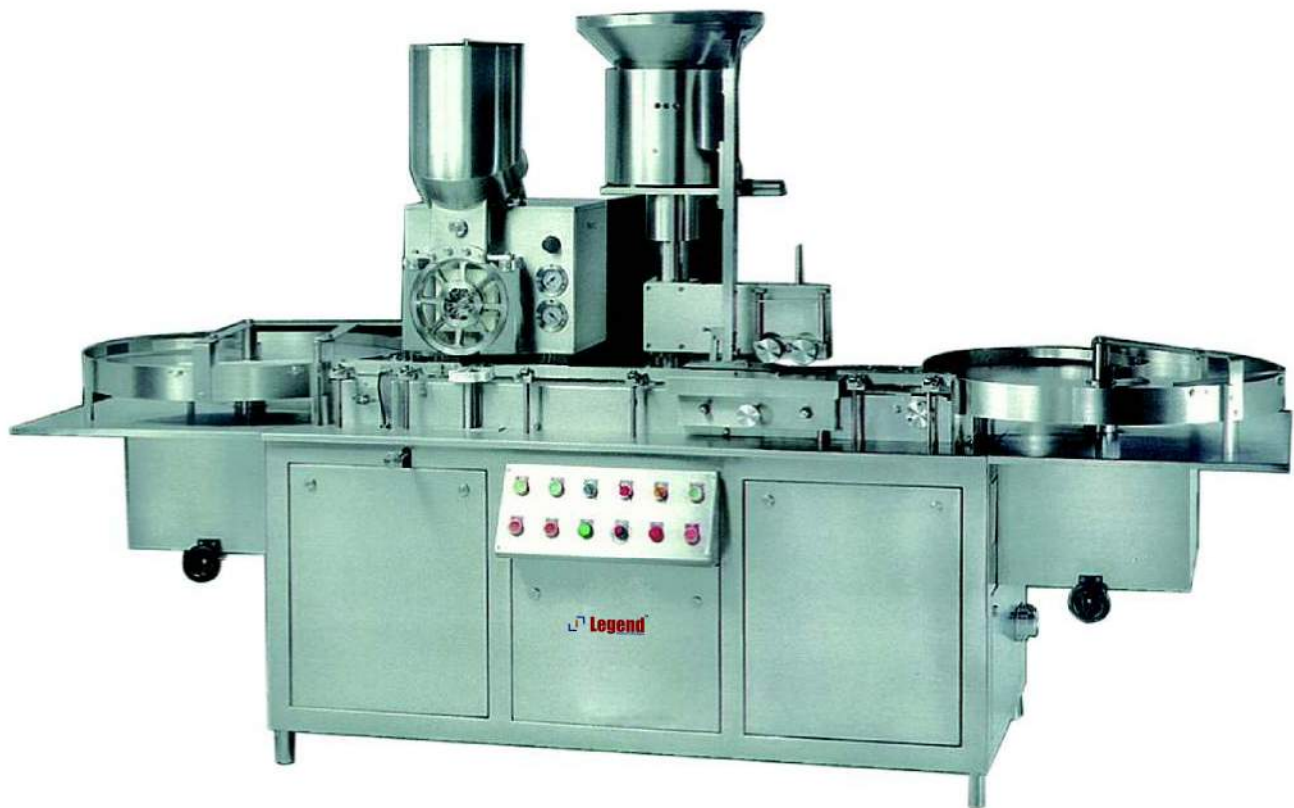


TECHNICAL SPECIFICATION:

- Production Rate : 40 fills/ min. for Single Dose, 20 fills/ min. for Double Dose, 12 fills/ min. for Triple Dose, 10 fills/ min. for Four Dose.
- Power Specifications: 0.5 H.P., 230 Volts, 1 Phase.
- Accuracy : $\pm 1\%$ depending upon consistency and uniformity of bulk density of Injectable Powder under controlled level of

humidity (below 28% RH).

- Overall Dimensions : 525 mm (L) X 600 mm (W) X 650 mm (H)
- Net Weight: 250 Kgs.
- Gross Weight: 310 Kgs.
- Compressed Air: Max. 2 Kg/Cm² Oil Free.
- Vacuum : 25" Hg. @ 300 LPM displacement.
- Relative Humidity : Below 28%.



Automatic high speed powder filling for inject able with rubber stoppering machine

SALIENT FEATURES:

- "No Vial – No Filling" system eliminates wastage of costly powder.
- Automatic Machine Stoppage during Vial toppling.
- Flush Mounted Gauge & Regulator for easy setting.
- Individual drives for Scrambler & Un - scrambler to match the speed of filling and sealing.
- Separate D.C Controller for Vibratory Rubber Stopper System.
- All the contact parts are made of S.S 316L.
- All Motors are provided with appropriate Contactors and Relays for the protection against any overload or jamming.
- Multiple Dosing system.
- Safety clutch system to avoid vial breakage.

- VFD for speed control.
- All contact parts are easily removable for autoclaving / sterilization.
- Pick & Place Rubber Stoppering System will be provided as an option.
- In compliance with cGMP.
- Plc control(optional).
- Pure Air Filter(optional).
- Vacuum Pump(optional).
- Oil Free Air Compressor(optional).
- Online Pre – Media Filling Arrangement(optional).
- Pre & Post Gassing Arrangement(optional).
- Polycarbonate Cabinet covering full machine with S.S. structure (optional).

TECHNICAL SPECIFICATION

- Production Rate : 60 fills/ min. for Single Dose, 30 fills/ min. for Double Dose, 20 fills/ min. for Triple Dose, 15 fills/ min. for Four Dose.
- Power Specifications: 1.5 H.P, 440 Volts, 3 Phases, 4 Wire Systems, 50 Hz.
- Fill Capacity: 50 mg. to 1.5 gm. in Single Dose with the help of extra Change Parts.
- Accuracy : $\pm 1\%$ depending upon consistency and uniformity of bulk density of Injectable Powder under controlled level of humidity.

- Net Weight : 650 kg.
- Gross Weight : 950 kg.

Input Specification:

- Container Dia.: 25 mm to 38 mm.
- Container Height: 36 mm to 75 mm max.
- Rubber Stopper : 20 mm Butyl.

Utility:

- Compressed Air: Max. 2 Kg/Cm² oil free.
- Vacuum: 25' Hg. @ 300 LPM displacement.
- Relative Humidity : Below 28%.



Automatic high speed continuous motion injectable liquid filling machine

SALIENT FEATURES:

- Rigid vibration free construction for trouble free performance.
- In feed Turn Table and out feed Conveyor for first in first out principle.
- Co – eccentric nozzles allows very quick and precise setting and making unit compact and manageable.
- Elegant and easy reach control panel for total control and operation.
- Crafted S.S. Holders, Lapped Glass as well as S.S. Syringes, Piston and precision built valve system for achieving very high accuracy in Fill Size and Drip Proof Performance.
- Precise setting and accuracy can be easily adjusted on the machine itself.
- Each important individual part which required for autoclaving /sterilization can be removed easily.
- Machine can run Dry as well as Wet Rubber Stoppers size.
- “No vial – No Filling – No Rubber Stopper” system saves costly liquid.
- All contacts parts are 316/316L
- High precision manufactured syringes to achieve high accuracy in Fill Size and Drip Proof Performance.
- Minimum Change over time from one size to another fill or container size.
- Machine height can be adjusted to match with other machine to synchronize with Tunnel and Capper.
- In compliance with cGMP
- PLC based control panel (optional)
- Syringe: LEST 5 , LEST 10 , LEST 50(optional)
- Volume Range: 1 ml to 5 ml, 2 ml to 10 ml, 10 ml to 50 ml (optional)

TECHNICAL SPECIFICATION:

- Production Rate : 7200 /hour
- Fill Accuracy : $\pm 1\%$ On Single Dose

Input Specification:

- Fill Size : 2 ml To 100 ml (with the help of Change Parts)

- Rubber Stopper : 13 mm / 20 mm / 32 mm – Plain / Slotted Stoppers with the help of Change Parts
- Container Dia. : 16 mm to 52 mm
- Container Height : 75 mm