

ENSULE

Automatic Capsule Filling Machine



- SIMPLE
- RELIABLE
- EASY MAINTENANCE
- FLEXIBLE
- EFFICIENT
- ECONOMICAL

High Speed - High Performance

ENSULE

ENSULE is a Fully Automatic Capsule Filling machine to fill powder in the form of slug in hard gelatin capsules. These are high speed, high performance machines that incorporate latest international design and is built with precision using most appropriate materials and up-to-date manufacturing systems. Different models are available for various output requirements. This machine is also capable of filling pellets and tablets for flexibility of multiple dosage combination such as powder+pellets+tablet. It is an extremely durable and reliable machine that fills dosages to the highest accuracy and is capable of filling all sizes from #0 to #4 of capsules. It is also easy to clean and meets GMP standards

Operational Functions

Empty Capsule Loading And Separation Assembly

The function of Capsule Loader is to orient the empty capsules with "Cap up and body down" by rectifying mechanism and to load them into the upper segment of Turret. The vacuum under the lower segment separate the capsule body into the lower segment hole from the capsule cap. The capsule cap remains inside the upper segment.



Fully Enclosed Turret Assembly

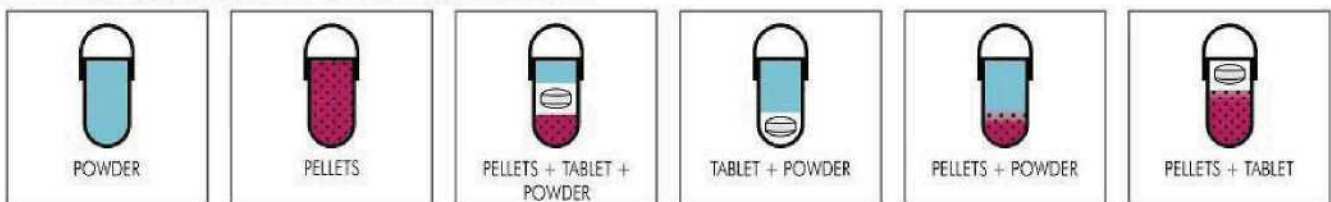
The Turret has a rotating indexing motion. It has 10 pairs of cap and body holder segments with the cap holder segment located above the body holder segment. Function of turret is to transport Capsules from one station to another station. During the dwell period of indexing various operation related to capsule filling are performed. Fully enclosed structure protects moving components from dust contamination,

Fully Enclosed Tamping Type Powder Filling Assembly

Powder from hopper is fed, and its level is maintained, in to the tub of 'Tamping Assembly' by an automated auger. The 'Tamping Assembly' consists of six sets of reciprocating tamping pins and 0 rotary indexed dosing disc. First five sets of tamping pins progressively compress powder in the cavities of dosing disc to form slugs. The sixth set inserts these slugs in to capsule body. Fully enclosed construction ensures minimum wastage.

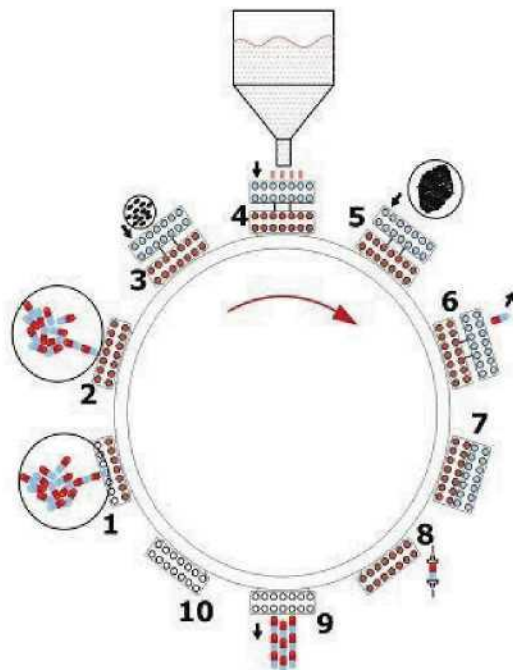


Filling Possibilities & Combinations



Position Wise Functional Sequence

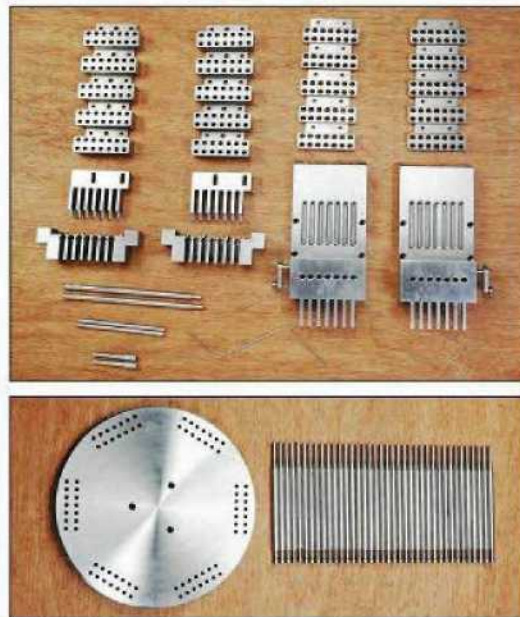
- 1 Empty Capsule loading and separation
- 2 Empty Capsule loading and separation
- 3 Tablet Filling (optional)
- 4 Tamping style Powder Filling (standard)
- 5 Pellet or Tablet Filling (optional)
- 6 Ejection of un-separated capsule
- 7 Idle
- 8 Capsule closing
- 9 Discharge of filled capsules
- 10 Segment cleaning



Features

- PLC & Touch Screen controlled machine
- Product handled: powder as standard. Pellet and tablet feeding devices optional
- Compact, sturdy and meets cGMP standard
- Suitability for capsule size 0, 1, 2, 3 and 4 - with size changeover
- Dosing System: Tamping (slug formation through progressive compression)
- Quick & easy fill weight adjustment
- Tamping System for powders ensures accurate and better fill weight
- Fill weight accuracy of $\pm 2\%$
- Powder sensor maintains constant level of powder in the dosing chamber
- Audio alert on capsules running, low in hopper
- Variable speed AC drive for main motor ensures speed adjustment

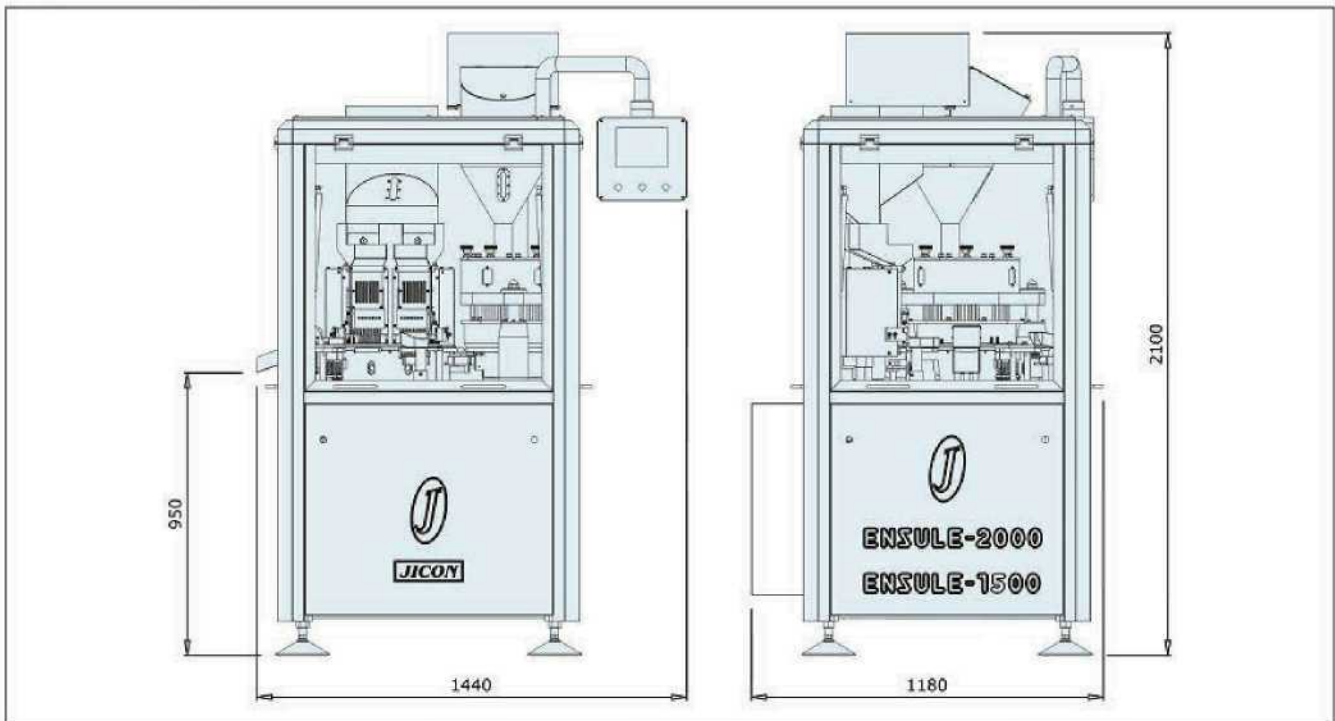
Change Parts



Technical Specifications

Model	scorns- [®]	SG3SEHkS3-1l@@@	SC»lk l-§R®©
Rated Output (powder)	45,000 per hour	90,000 per hour	120,000 per kmr
Rated CVpu! (pellets)	35,000 per houj-	70,0W per hew	95,000 f*f to
Electrical Connection	415 V, 3 Ph AC + N + Earth (other voltages on request)		
Power Consumption (iflusi'e of dfive, vacuum pump & ADU)	6.5 kw	8 kw	8 kw
Compressed Air Requirement	200 LPM @ 4 bar pressure		
Overall Dimension!	850x 1000 «2}00 (H)	1 ISOx 1440*2100 (H)	1180x1440x2100 (h)
Net Weight	1000kg	1 400 kg	1450 kg

Layout Diagram



Filled Capsule Polisher And Sorter

CAPSULE POLISHER uses rotating brush principle to clean capsules on continuous basis. Capsules are fed into the polishing chamber from the in feed hopper/The spiral brush pushes the capsules towards the delivery chute against the force of gravity. During this process, the capsules undergo a rubbing action against the nylon bristles and surface powder gets removed,

SORTER : This optional filled capsule sorter unit is integrated with polisher unit and is engineered to remove empty, broken, un-separated and half-filled capsules.

Technical Specifications

Capacity upto 120,000 capsules/hour	Motor: 0.25 kw
Dimensions 1000 x 700 x 950	Weight 50 kg



Dust Collector Unit

Dust collector unit or air displacement unit is used for removal of un-separated capsule powder dust. It has been kept on trolley and is advised to keep away from capsule filling machine in separate room.

Technical Specifications

Flow : 2800LPM	Motor: 3.0 kw
Dimensions :850x550x1250mm	Weight: 120 kg



"Innovation and improvisation is a constant process of Jicon and thus features and specifications are subject to change without notice."
"Accessories shown may not be part of standard supply."



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