



HMPL-SSA Automatic Shrink Sleeve Label Applicator Machine



The Automatic Shrink Sleeve Label Applicator Machine consists of main structure, product transmission belt with guide adjustment, in-feed screw, sleeve former (mandrel), rotary cutter to cut sleeve, Safety acrylic cover, shrink tunnel with cooling fan, motors, sensors, electrical panel, AC drive, PLC & HMI.

Features

- The Shrink Sleeve Applicator machine is manufactured or developed accordance with GMP standards.
- The structure of Shrink sleeve applicator and conveyor are made of SS 304 and internal parts will be MS powder coated / hard chrome plated.
- Rigid vibration free construction for trouble free performance.
- The SS 304 slat conveyor for proper product conveying (For the processes of sleeve inserting and Automatic sleeve shrinking).
- In-feed screw for the positive feeding of bottle.
- The movement of shaft is controlled by servo motor to ensure intermittent flow of the sleeve roll during its travel along the dancing rollers.
- Specially designed cutter device with PLC controlled for cutting of sleeve.
- Total operation of the machine like speed of conveyor, speed of feeder, length of sleeve, cutting speed etc. are controlled by PLC.
- Easy to operate PLC by mean of feather touch HMI

- User-friendly and very less maintenance required because of less usage of mechanical components.
- The construction of machine's electrical panel is in line with the IP 55 standard.
- In case roll gets over, there is alarm notification (buzzer) for indicating the same
- Web guide control to ensure that there is no lateral movement of sleeve laminate
- Gaskets, seals and O-rings are constructed of food grade/ non-toxic polymeric materials only
- All welds are ground finished
- Provision of Photocell sensor to read the eye mark- eye mark distance on the sleeve roll which generates the length of the sleeve suitable as per the bottle size (If printed sleeves are used).
- Separate Stepper Motors for controlling the movement of rotary brushes to ensure that sleeve is properly settled on bottle
- Sensor to indicate the presence of bottle, immediately after which the sleeve should be dispensed on bottle. If there is NO BOTTLE NO SLEEVE will be dispensed
- Unique compact tunnel with minimal power consumption
- The tunnel comprised of pre and post heat shrink zone to shrink the sleeve on bottle
- The heaters are installed at the side of the tunnel to ensure that there is uniform distribution of heat on the sleeve
- Overhead convection fan for precise cooling at output
- Digital temperature controller to ensure that uniform temperature is maintained at the time of shrinking
- The change over time from one SKU to other will take approximately 30 to 45 min
- Cleaning is done manually and all those sections which have to be cleaned are easily dismantled
- Design of equipment with enhanced cleaning feasibility by providing minimum sharp corners, minimum crevices & smooth finished welds joints
- Sleeve feeding controlled by PLC for the accurate feeding of sleeve.
- Specially designed rotary cutter device with PLC controlled for cutting of sleeve.
- Warning stickers on all external & moving surfaces
- Appropriate closure of all the rotation parts
- Emergency stop function on accessible area
- Noise level below than 75 DB
- Power restart will not be automatic and human intervention must be required
- After regain of power the equipment shall start from the step it stopped
- Total operation of the machine like speed of conveyor, speed of feeder, length of sleeve, cutting speed etc. are controlled by PLC.
- Easy to operate PLC by mean of touch screen HMI.
- User friendly and very less maintenance required because of less usage of mechanical components
- Most reliable and proven components such as Festo/SMC make pneumatic and electric/electronic components such as Panasonic/Bonfiglioli/Motovario make AC motor, Delta make AC Drive, PLC & HMI, Sensor LEUZE/BANNER/SICK, MCB & relay "CE" certified.

Technical Data

Bottle Sample	Glass/HDPE/Plastic Bottles
Bottle Size (Ø)	30 mm Ø to 120 mm Ø
Sleeve Length	30 mm to 100 mm
Sleeve Width	40 mm to 170 mm
Sleeve Material	OPS & PVC with 40 to 50 micron & 55% shrink ratio
Output Speed	60 to 200 Bottles/Minute (Speed depends on cut length)
Working Height	850 ± 50 mm Adjustable
Power Consumption	6.5 KW
Power Supply	3 Phase + Neutral + Earthing / 440V AC / 50Hz
Net Weight	550 Kg Approx.
Dimensions	3050 mm (L) x 1200 mm (W) x 2000 mm (H) Approx.