

FFS VIAL SEPARATOR WITH SCREW CAPPING MACHINE :

This machine consists of two units mounted on a single frame.

- a) Vial Separator unit.
- b) Screw Capping unit.

a) Vial Separator unit

It consists of a rotary vial separating system after deflashing of the cards.

The vial cassette to be loaded manually in the inlet conveyor.

Vials are separated by means of a star wheel and are fed into the inlet conveyor of the Screw capping machine.

It has No vial – No operation arrangement to avoid vial damage.

b) Screw Capping unit.

It consists of rotary screw capping system which consists of the following features.

An infeed star wheel picks up the vials from inlet conveyor.

As the infeed star wheel rotates, the vial picks up the cap which comes from the vibrator through chute and feeds it into the main star wheel.

As the screw capping head comes down, the fingers of the capping head hold the cap, straighten it and then screw it properly till the piercing tip inside the cap touches the top of the vials by applying required torque.

As the capping head goes up the star wheel releases the vial and take up star wheel transfers it into the output conveyor which is mounted at the outlet end.

i) GENERAL SPECIFICATIONS:

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|-------------------------------|---------------------------|
| 1. Type | RSC-150 (GMP Model) |
| 2. No.of heads | 12 (Twelve) |
| 3. Speed | 150 vpm . |
| 4. Cap feeding | By vibratory bowl feeder. |
| 5. Bottle feeding | By endless conveyors. |
| 6. Bottle transferring | By star wheels. |
| 7. Capping | By rotary capping head. |
| 8. Feed height of the machine | 800-850mm.(Adjustable) |
| 9. Power required | 1.5 KW max. |



ii) GENERAL ARRANGEMENTS

This machine consists of the following arrangements:

- i) Inlet conveyor --SS Slat
- ii) Vial separator -- Al. wheel
- iii) Infeed Starwheel. -- Delrin
- iv) Vibratory Bowl Feeder for Cap. -- SS304
- v) Cap Dispenser. --- Delrin feeder wheel
- vi) Main Star wheel. ---Delrin
- vii) Capping Head. ---- SS304 with PU Bush
- viii) Cam Assembly. --- EN-8 with H.Cr.
- ix) Guide -- Delrin
- x) Outlet starwheel -- Delrin

iii) DRIVE ARRANGEMENTS:

The whole machine is driven by a single motor except the inlet and outlet conveyors.

A.C variable drive is used to adjust and match with the online speed.

- 1.Main motor ----- 1 h.p/A.C/ 50HZ/1400rpm.Crompton/Siemens.
- 2.Gear box ----- A287 / Ratio-20:1/ Make Greaves/Shanthi
- 3.Conveyor Motors. ----- 1/8 HP /20RPM/ Worm reduction /1ph.
- 4. Drive transmission ----- Gears and Sprocket with ROLON chain.

iv) CONTROL PANEL DETAILS

- 1. Main Motor ----- 1 H.P A.C Variable speed MOTOR ON/OFF/INCH
- 2 I/R SENSOR -1 ----- Intermittently sensing the flow of bottles and switching off the AC motor if there is no bottle on the conveyor for set time – 2seconds
- 3. I/R SENSOR -2 ----- Intermittently sensing the flow of bottles and switching off the AC motor if there is no bottle on the conveyor for a set time – 2 seconds.
- 4. I/R SENSOR -3 ----- Intermittently sensing the flow of caps and switching off the machine if there is no cap on the chute for a set time - 2seconds with ALARM.
- 5. 1ph. AC /1/8 H.P motor for Inlet conveyor. ----- ON / OFF
- 6. Vibrator Controller ----- ON/OFF
- 7. 24 V/DC single coil SOLENOID VALVE -----In ON position when the machine is ON.
In OFF position when the machine is OFF.
- 8. Emergency Off and Door Interlock

Product Specification. 5 & 10ml LDPE (FFS) vial .

Note. Change parts are required if cap will change.