Automatic Monoblock Dry Syrup Powder Filling with eight head ROPP cap Sealing Machine SBPF-MR100


SBPF-MR100 Automatic Monoblock Dry Syrup Powder Filling with Eight Head ROPP Cap Sealing Machine is a Compact machine used for filling and sealing of Dry Syrup in bottles.

## Operation :

The incoming dry container (sterilized and siliconised) are fed through the infeed Turn Table with suitably guided on the moving delrin flat conveyor belt at the required speed for feeding to the feed worm for correct spacing between two bottles and get enter into the infeed starwheel, which will be transferred below funnel, 16 nos. of funnel is mounted on round plate and powder filling head is mounted from center pipe, which gives the flexibility to adjust position of wheel as per requirements and consumes less space on machine. Machine will be having a lifter assembly on base of bottom plate, when bottle come below funnel, bottom platform will lift the bottle and insert the bottle tight fit inside funnel. The sterilized powder is stored in to powder hopper is agitated by pair of mechanical agitators for maintaining consistency and uniform bulk density, powder wheel rotates at the pre-determined speed below the powder hopper with practically no clearance. Powder wheel consist of Piston in each port and behind the powder wheel and vacuum plate is provided there is no clearance between powder wheel and avacuum plate due to back spring pressure. Precise volume of powder is sucked in to the port of powder wheel during vacuum according to the piston length different fill size can be achieved.

The excess powder is doctored off by a doctor blade, now doctor blades can be adjusted from outside also without removing powder hopper, When powder wheel indexes further and remain
in the port due to the vacuum till it reaches just vertical position. The time dose of Compressed air, sterilized low pressure air or Nitrogen Gas sequentially flushes out powder from the port of powder wheel in to the funnel. Funnel will be equipped with square rod to break the solid slug of powder and powder will start to fill inside bottle, which is moving along with funnel. In this model Bottle is getting around 5 to 6 second filling time. Bottles further move with funnel and reaches to exit starwheel, which is infeed starwheel for eight head ROPP cap sealing machine, while rotating with startwheel bottle picks up the cap from exit end of chute, ROPP caps kept in orientation unit, automatically orient caps in right direction before entering into delivery chute. And Bottle is entering below the sealing head, consisting of total four rollers, Two rollers properly Skirts, Spins and Seals the cap and simultaneously another two roller performs perfect threading according to bottle neck diameter. After sealing operation, sealing head moves upward with help of cam and bottle enters into exit starwheel. Move further on conveyor belt for next operation.

## Salient Features

- High Production Capacity in High Filling Quantity also.
- M.S. Moulded structure duly powder coated to avoid any vibration with adjustable Screws to adjust conveyor height as per infeed tunnel.
- Total Compact Monoblack cGMP model.
- All parts and assemblies coming in contact with powder are made of S.S. 316
- "NO BOTTLE, NO FILL" System eliminates wastage of costly powder.
- Spring loaded Teflon top seal for powder hopper reduces the friction between and top seal and avoid chance of white particle shading during production.
- Doctor blade and wiper blade can be adjusted from outside also without disturbing any production, which saves lot of time, powder wastage and chances of area condition disturbance.
- All assemblies under top plate are positioned as for easy cleaning or maintenance.
- All driving is through High quality imported Gear motor.
- Machine speed can be adjusted through A.C. Frequency drive, which is time saving.
- Machine is provided with delrin conveyor belt to avoid sticking of bottle on conveyor.
- Special clutch devices are provided on Star wheels for safety purpose.
- Air filter will be of S.S. 316 housing with Nylon cartridge for proper removal of particle of 0.22 micron having 10" length.
- Vacuum filter will be of PVC transparent material with nylon cartridge having length of 10 of 5 micron.
- Machine can fill 10 grams to 50 grams powder in single stroke.


## Utilities :(To be Provided by Buyer)

| Pneumatic Air | Filtered, oil free, sterile low pressure AIR at $4 \mathrm{~kg} / \mathrm{cm}^{2}(4 / 6 \mathrm{bar})$ |
| :--- | :--- |
| Vacuum line | 20 HG. (Pump will be supplied) |

## Basic Machine :

- Imported Gear Motor for Main drive.
- A.C. Frequency drive for Main drive.
- Pure air filters for Air and Vacuum.
- "No Vial, No Filling" System.
- Infeed Turn Table of 36" Diameter.
- Dust Collection Unit.
- Vacuum pump.
- Acrylic Cabinet with Imported Aluminum Structure for Machine.

Technical Specification of Monoblock Dry Syrup Powder Filling Machine

| Model | SBPF-MR100 |
| :--- | :--- |
| Direction | Left To Right |
| Production Rate. | Up to 100 TO 120 Bottles / Min. |
| Fill Capacity | 10 grms to 50 grms. Single Dose (with Change Parts) Fill range <br> depending upon Bottle opening And bulk density of powder. |
| Accuracy | $\pm 2 \%$ depending upon consistency and the Uniformity of bulk density <br> of powder Under controlled level of Humidity (i.e. 35\%) |
| Electrical Supply | 2.00 HP For Main Drive. |
| Power Requirement | 440 Volts, 3 Phase (4 wire System) 50 Hz. |
| Height of Conveyor | Adjustable from 900 to 950 mm |
| Dimensions | $2400 \mathrm{~mm} \mathrm{(L)} \mathrm{x} 1506 \mathrm{~mm} \mathrm{(W)} \mathrm{\times 2163mm} \mathrm{(H)}$ |
| Net Wight | 1700 KGS. (Approx.) |
| Gross Weight | $2200 \mathrm{KGS}$. (Approx.) |

## Input Specifications:

| Bottle Diameter | 25 mm TO 60 mm Maximum. |
| :--- | :--- |
| Height | 55 mm TO 110 mm Maximum. |

Note: (1) Right of technical improvements \& modifications reserved.
(2) All illustrations and dimensions are shown for information only.

