

Automatic Rotary Dry Syrup Powder Filling Machine with Screw/ROPP Capping Machine PRMF-120



Automatic Rotary Dry Syrup Powder Filling Machine with Screw/ROPP Cap Sealing Machine (Monobloc) is compact machine used for filling and sealing of the Dry Syrup in the bottles and is most ideal for wide application in Pharma Industries. It is built on strong and robust powder coated M.S. Angle frame Pipe Structure encompassed with S.S. coverings with matt-finish. The dry powder filling and sealing machine is a highly efficient equipment, capable of attending up to 4000-6000 containers. It has an accuracy of $\pm 2\%$ that proves the capability of the machine to perform precise operations. With number of heads being 16 x 8, the dry powder filling and sealing machine has the competence to give high yield consuming less amount of time. By changing the parts of syrup filling machine, fill size can vary from 3 gms to 50 gms. The main machine, conveyor, and the vacuum pump requires an electric supply of 3 HP and 415 volts. The syrup filling machine has a sturdy structure and is offered at a very attractive price range.

Operation of Dry Syrup Powder Filling & Sealing Machine:

The dried, sterilized and siliconized containers are fed through the Infeed Turn Table on to Infeed Delrin slat conveyor belt at required speed to the feed work for correct spacing between two bottles and get enter into the infeed star wheel. The infeed star wheel transfers the container below the funnel. The funnel plate with 16 nos. funnel mounted on it and the powder wheel is mounted on the center pipe, which allows flexibility to adjust position of wheel as required and occupies less space on the machine. The dry syrup powder filler and sealer machine has a lifter assembly on the base bottom of the plate. When the container comes below the funnel, the bottom platform lifts the bottle whereby the bottle gets inserted tight fit inside the funnel. The powder stored into the powder hopper is agitated by pair of mechanical agitators for maintain consistency

and uniform bulk density, powder wheel rotates at the pre-set speed below the powder hopper with no clearance. Powder wheel consist of piston in each port and behind the powder wheel vacuum plate is provided and there is no clearance between powder wheel and vacuum plate due to back spring pressure. Precise volume of powder is sucked into the port of powder wheel during vacuum according to the piston length. The different fill volume can be achieved. The excess powder is doctored off by a doctor blade and now doctor blades can be adjusted from outside without removing power hopper. When powder wheel indexes further and remain in the pot due to the vacuum till it reaches just in 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 into the funnel. Funnel equipped with square rod to break solid slug of powder and power will start to fill inside the bottle which is moving along with funnel. The bottle is getting filled in around 5 to 6 seconds. The bottles further move with funnel and reaches to exit star wheel which is infeed star wheel for eight head ROPP cap sealing machine with Dry Syrup Powder Filling Machine. While rotating with the star wheel, 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 entering below the sealing head consist of total four rollers. Two rollers properly skirts, spins and seals the cap and simultaneously another two rollers performs perfect thread according to the bottle beck diameter. After sealing operation, sealing head moves upward with help of cam and bottle enters into exit star wheel and move further on conveyor for next operation.

Technical Specification:

Model		PRMF-120
Output/Hour*		4000-6000 containers
Number of head		16 x 8
Fill Size***		3 Gms to 50 Gms (with the help of Change parts)
Accuracy		± 2 %
Electrical Specifications**	Main Machine and Conveyor	3 HP / 415Volts / 50 Hz.
	Vacuum Pump	3 HP / 415Volts / 50 Hz
Pneumatic Air		Filtered, oil free, sterile low pressure Air at 4 kg/cm ² (4/6 bar)
Vacuum Line		20 HG
Dry Syrup Filling & Sealing Machine Dimensions**		2500mm (L) x 1250 mm (W) x 2150 mm (H)
Case Dimensions		2700mm (L) x 1450 mm (W) x 2350 mm (H)
Net Weight		2250 Kgs.
Gross Weight		2600 Kgs.