



ROTARY PISTON FILLING & SEALING MACHINE (MONOBLOCK)

NRPM - 6/6



Empowering Liquid Packaging

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DESCRIPTION

Automatic Rotary Piston Filling Cum Sealing Machine is versatile, self-supported on stainless steel leg with height adjustable adjustment system. The machine is precision built on sturdy welded steel frame completely enclosed in stainless steel sheet and doors are provided to facilitate the servicing of machine, work on volumetric principle with rotary motion. The unit is made compact, versatile and enclosed in stainless steel elegantly matt finish body. No container No filling & No Sealing system arrangement is standard features of the machine.

The main drive of the machine, conveyor drive & cap-feeding bowl consist of A/c Motor with synchronized variable A/c Frequency Drive.

OPERATION

Containers moving on SS Slat conveyor, feed below the filling nozzles through feed worm & in-let star wheel, Filling station consist of volumetric filling head and a central rotating liquid reservoir tank. This reservoir tank fed continuously with the liquid by external source. In-feed liquid controlled automatically by sensing the liquid level in the reservoir tank with the help of floating level switch to actuate pneumatically operated solenoid valve. Fill volume adjustment can be done by a screw, which changes the volume of all the syringes simultaneously. Fine adjustment of individual syringe is possible with the help of mechanism provided on top of the individual syringe.

After filling star wheel bringing the container below the sealing head in the subsequent indexing part, mean while the bottle pickup a cap from the delivery chute of cap feeding bowl, where the body and the neck of the container are positioned below the rotating head, where the sealing head is performing perfect operation of threading & sealing.

TECHNICAL SPECIFICATION

Model	NRPM-6/6	NRPM-8/8	NRPM-12/8	NRPM-16/8
Output/Hour	2500 to 7500 Bottles	4000 to 10000 Bottles	6500 to 12000 Bottles	7000 to 14500 Bottles
Number of head/syringe	6	8	12	16
Number of head/sealing	6	8	8	8
Direction of Movement**	Left to Right			
Fill Size**	30 ml. to 200 ml.			
Electrical Specification**	Main Machine	3 HP / 415 Volts / 50 Hz.		5 HP / 415 Volts / 50 Hz.
	Oriental Bowl	0.25 HP / 415 Volts / 50 Hz.		0.5 HP / 415 Volts / 50 Hz.
	Conveyor	0.5 HP / 415 Volts / 50 Hz.		0.75 HP / 415 Volts / 50 Hz.
Height of Conveyor **	910 mm to 960 Adjustable			
Machine Dimensions **	3050 mm (L) x 1400 mm (W) x 2200 mm (H)		3660 mm (L) x 1700 mm (W) x 2400 mm (H)	
Case Dimensions	3250 mm (L) x 1600 mm (W) x 2200 mm (H)		3850 mm (L) x 1900 mm (W) x 2400 mm (H)	
Net Weight	2500 Kgs.	2650 Kgs.	4200 Kgs.	
Gross Weight	3000 Kgs.	3250 Kgs.	5000 Kgs.	
Change parts required	(A) Container: Star Wheel, Back guide, Feed Worm, Nozzle (B) Cap: Die, Delivery chute, bowl. (C) Syringes (If volume higher/lower then above specification)			

Input Specification

ROPP Cap Specification	Diameter**	19 mm to 38 mm**
	Height**	15 to 18.3 mm
Container Size**	Round Shape	Ø 22 mm to Ø 100 mm *** Height 58 mm to 240 mm*** (Height option for other bottle height available)
	Flat / Square	15 mm to 100 mm (Length) Respectively 10 mm to 50 mm (Width) Respectively Height 58 mm X 240 mm (Height option for other bottle height available)

* Depends on size, shape and neck dia of container, fill volume and nature of liquid.

** Can be supplied as per customer's requirement. *** With help of change parts.

SALIENT FEATURES

- ◆ 'GMP' Model based on advanced technology.
- ◆ Single operator for two operations.
- ◆ Less floor Area -as both the sections driven by one motor.
- ◆ No contamination as immediate sealing of filled bottles.
- ◆ Accuracy \pm 1% due to piston dosing principle.
- ◆ Centralized volume adjustment system.
- ◆ No Bottle No Fill for individual head, hence no spillages.
- ◆ Placing of cap feeder outside monoblock-avoid entering of dust in it.
- ◆ Less caps in chute, automatically stop the machine.
- ◆ Additional sensors for minimum and maximum Level of cap in chute which automatically starts and stops rotary cap feeder to avoid damage of caps during rotation and wastage of energy.
- ◆ Better finish imported polished, laminated S.S. sheet used.
- ◆ Electronic liquid level controller and pneumatically controlled control valve.
- ◆ Drip trays under the conveyor.

- ◆ Self lubricating UHMW- PE guide profile for low friction wear surface, smooth and noiseless conveying.
- ◆ Universal coupling for quick and easy setting of In-feed worm.
- ◆ Safety guard for operation and protection.
- ◆ Electronic sensor at out feed for bottle jamming.

OPTIONAL FEATURE

- ◆ Motorized height adjustments.
- ◆ Automatic chain washing system for conveyor belt.
- ◆ In-built pre-inspection.
- ◆ Nitrogen flushing.
- ◆ Cap elevator to feed caps to the cap feeding bowl.

UTILITY REQUIREMENT

- ◆ Electrical supply : 3 Phase + Neutral + Earthing
- ◆ Electrical load : 3 KW
- ◆ Air Pressure : Minimum : 6 bar pressure 0.5 CFM

NOTE:- Technical detail, specifications & design is subject to change without any prior notice.

Accessories shown in picture are not a part of standard design.

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