

RM Rotary Monoblock

The RM is a rotary monoblock machine that is designed to perform multiple functions. It is currently in use in many varying applications throughout the world. It is designed to provide many years of reliable service while being easy to use and maintain.

Each machine is custom designed for your specific packaging requirements. The Cozzoli Machine Company simple two-piece filling syringes and valve assemblies are designed with easy cleaning in mind. High precision machining of our filling syringes allows each machine to achieve a fill accuracy better than +/- 0.5% by volume.

Filling Principle

The RM has a standard conveyor length of 7' center to center. The conveyor is a raised with a 3.25" wide Delrin chain. Vials may be presented to this conveyor either manually, from a turntable or from a bulk feeder. For plastic vials, we suggest that you consider a bulk feeder. A make up sensor is provided on the in-feed end of the conveyor.

Once on the in-feed conveyor, the vials will be brought into a main star wheel that is used to position vials for all processing steps. While the vials are captured in the star wheel, the machine will index through all the functions required for the application such as, filling, ball placement, brush placement, plugging, cap placement and torquing stations. Upon exit from the star wheel, the vials will be directed to the discharge end of the conveyor. This conveyor length can be made to accommodate your room layout and downstream equipment. To ensure smooth vial handling, a back up sensor will be provided on the discharge end of the conveyor. The maximum container diameter on the RM55 is 3.5", RM110 is 2.25", and RM160 is 1.625".

The RM is a positive displacement liquid filler, operating on a 2" pump stroke, with a maximum pump size of 120ml. The fill range is from 10% of the pump capacity to 100%. Accuracies of +/- 0.5% of fill volume can be achieved by proper sizing of the pistons and fill nozzles. For maximum output and/or foamy products, the machine can be equipped for double or triple dosing, depending on machine formats.

Plugging or Brush Placement

Plugs/brushes will be fed from a vibratory bowl that is located to the rear of the machine. From the bowl, they will pass through a short track to the pick up location. In the pick up location, the plug/brush will be pushed from beneath by a pick up rod that will guide it up into the collet of the plugging turret. The plugging/brush placement collet is spring-loaded and will hold the plug/brush securely until placement in the vial.

The plugging/brush placement design is intended to be reliable and trouble free. The tracks are shortened to eliminate alignment problems.

The RM Rotary Monoblock can handle various container shapes and sizes and a wide range of products from aqueous to heavy oils, suspensions, and creams. RM models permit pre-programming container size and fill volume with visual on-screen data and diagnostic reporting.



Standard Features

Liquid Contact Materials
 Set of SS 316L Custom Designed Nozzles & Holders
 Set of SS 316L Slide Valves
 Tygon Intake and Delivery Tubing

Plug Contact Materials
 304 Stainless Steel Pick Up Rods, Feed Track, Vibratory
 Feed Bowl and Collets

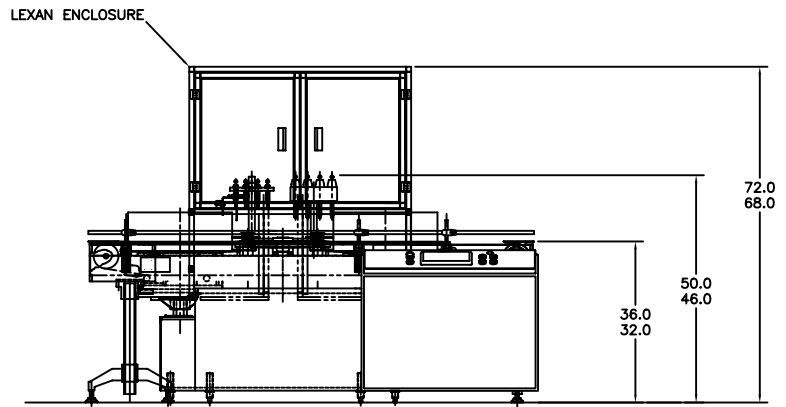
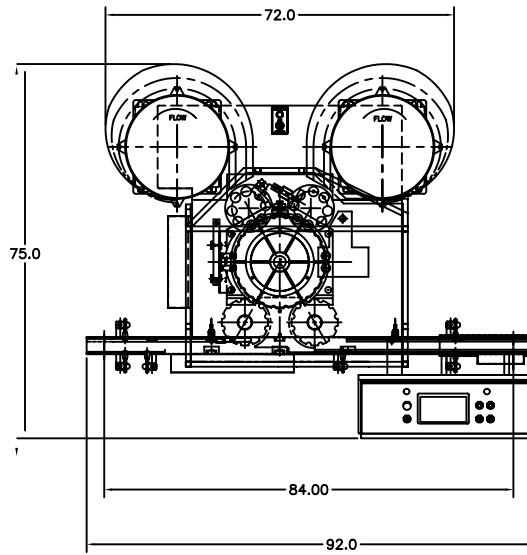
Cap Contact Materials
 304 Stainless Steel Pick Up Rods, Feed Track, Vibratory
 Feed Bowl, Pre-Torque Collet(s) and Torque Collet(s) with
 Non-metallic Inserts

Machine Features

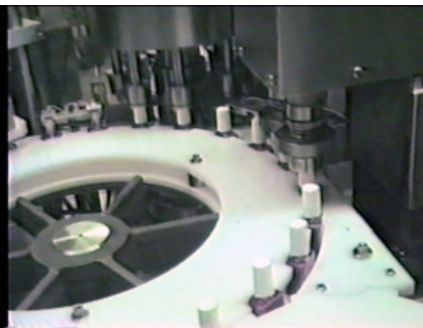
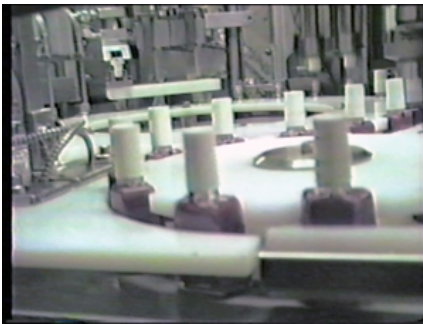
One Set of Container Handling Changeparts
 303/304 Stainless Steel Exterior
 7' Long Sanitary Conveyor
 Main Control Console Component Box
 Allen-Bradley SLC 503 PLC with Panel View 600 HMI
 1 Hp DC Drive
 Plug and Cap Make Up and Back Up Detection
 Plug Vibratory Feed Bowl
 Cap Vibratory Feed Bowl
 No Plug No Cap Detection
 Left to Right Container Flow
 Operation and Maintenance Manual

Optional Features

Electronic Digital Vial Counter
 Remote Access Programming
 Right to Left Container Flow Feature
 Spare Parts Kit
 Down Vial Eliminator
 Reject Station
 Container Make Up and Back Up Detection
 Front-Panel Electronic Fill Volume Adjustment
 Filler Bypass System
 Servo Driven Torqueing Heads



Approximate Dimensions W x D x H (set-up) 92" x 75" x 50" (2336mm x 1905mm x 1270mm) (Does not include enclosure)
 Approximate Dimension W x D x H (Crated) 113" x 82" x 58" (2870mm x 2082mm x 1473mm)
 Approximate Weight (Gross) 4500 lbs. (2045kg)



Machine Model	RM55	RM110	RM160
Functions	Fill – Plug – Screw Cap		
Filling Nozzles	1	2	3
Fill Volume Single Dose	Up to 120ml	Up to 120ml	Up to 120ml
Fill Volume Multiple Dose	Up to 360ml	Up to 360ml	Up to 240ml
Maximum Nozzle Elevation	Up to 3" (75mm)		
Closures Handled	Wipers –Plugs – Eye Dropper – and others		
Minimum Closure Diameter Cap	5/16" (8mm)	5/16" (8mm)	3/4" (19.05mm)
Maximum Closure Diameter Cap	1 1/2" (38mm)	1 1/4" (32mm)	1 1/4" (32mm)
Minimum Closure Diameter Plug	5/16" (8mm)	5/16" (8mm)	5/16" (8mm)
Maximum Closure Diameter Plug	1 1/8" (29mm)	1 1/8" (29mm)	3/4" (19.05mm)
Closure Feeding	Vibratory bowl		
Containers Handled	Straight-sided Round – Oval – Rectangular		
Containers per Minute Output	UP to 55	Up to 110	Up to 150
Machine Cycles Per Minute	Up to 55		
Container Movement	Intermittent		
Container Spacing	5" (127mm)	2 1/2" (64mm)	1 5/8" (41.27mm)
Conveyor	3 1/4" (83mm) Delrin Raised Sanitary/84" (2133mm) Long		
Main Motor Electricals	230V, 1 Ph., 50/60Hz, 1 HP		
Controls Electricals	PLC		

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