

*PROVEN
VERSATILITY
AND
RELIABILITY*

VR2 SERIES LIQUID FILLING

The VR2 filler is a reliable, high performance aseptic liquid filling machine, conforming to current cGMPs. This series uses existing overhead laminar air flow to it's fullest - using a straight-line concept and small footprint, effective in maintaining the integrity of a clean room environment.

The Cozzoli simple two-piece filling syringes and valve assemblies are designed for sterile, bacteria-free environments. High precision machining of our filling syringes allows each machine to achieve a fill accuracy of $\pm 1/2$ of 1% by volume, or better. Other fill methods, such as diaphragm, peristaltic, etc. are also available.

Changeover for various container heights and nozzle stroke adjustment is made easy, with simple calibrated hand-wheel features.



VR2/S Monoblock filler/stopper system shown.

FILL PRINCIPLE

Containers are positioned in the machine by a feed screw. A diving nozzle system provides bottom-up filling on a range from 0-4" (101.6mm). This system eliminates the need to change cams and speeds up changeover. A drop control mechanism eliminates a hanging drop at the completion of the fill cycle.

CONTROLS

The PLC controls intermittent container handling through the timing feedscrew.

This feedscrew can be set to multidose, which provides maximum production for large fills, or when running foamy products.



Control panel shown with optional remote umbilical mount

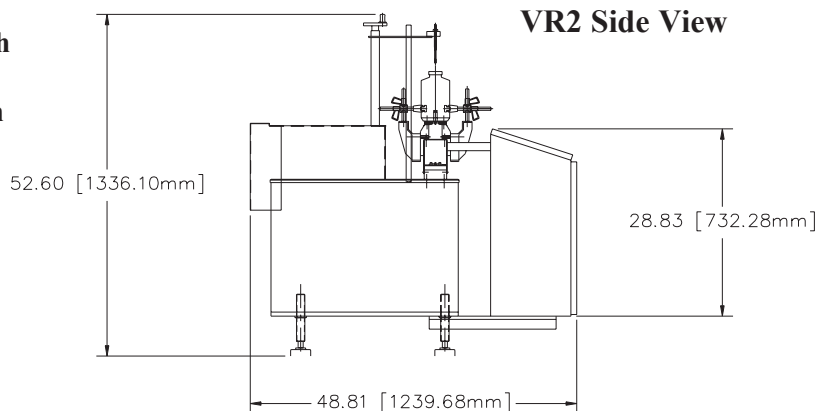
50 Schoolhouse Road
Somerset, NJ 08873-1289
USA



Phone: (732) 564-0400
Fax: (732) 564-0444
Email: sales@cozzoli.com
www.cozzoli.com

VR2 - OPTIONS AND ACCESSORIES

Automatic makeup and backup controls for smooth line operation
 Combination filling & flushing nozzles for nitrogen flushing during filling
 Fine adjustment volume control
 Electronic volume control
 Dual-track filling for higher speeds
 Down vial eliminator
 IQ/OQ/PQ Protocols (written)
 Air/Vacuum cleaning assembly
 Various electrical and controls configurations
 Explosion proof electrical
 Diaphragm pumps for shear sensitive products
 Stainless steel frame
 Centering devices
 Remote operator console



... and more OPTIONS

Full length feed screw or gating
 Flow meter assemblies
 Right to left configuration
 Monoblock configuration (shown below with stoppering)

Standard Specifications

Number of Syringes	2 to 12
Maximum Syringe Size	up to 120 cc
Syringe Stroke	50mm or 2"
Nozzle Elevation Adjustment	76mm or 3"
Container Movement	Intermittent
Cycles per Minute	Up to 30
Containers per Minute	Up to 230
Maximum Container Height	203mm or 8"
Maximum Container Diameter	up to 76mm or 3"
Minimum Container Diameter	20mm or 5/8"

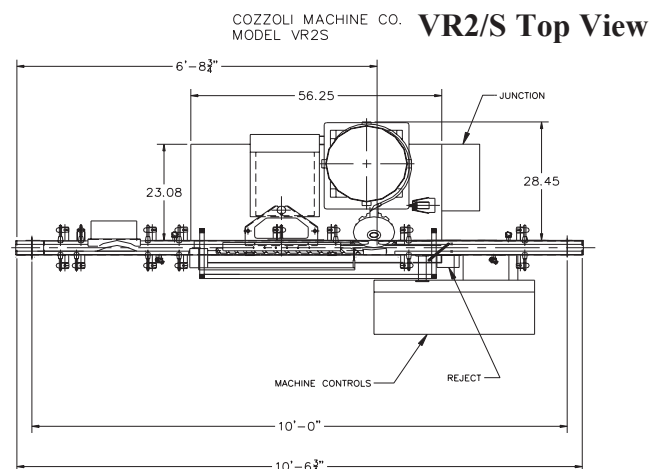
Conveyor Type	Stainless steel conveyor bed with raised 3 1/4" (82mm) Delrin Top
Conveyor Travel	Left to Right
Conveyor Speed per Minute	0 to 18288mm
Conveyor Length Ctr to Ctr	1524mm

Bottle Spacing	Feed screw
----------------	------------

Main Motor Electricals	3/4hp D.C. Motor
Conveyor Motor Electricals	Worm Gear Motor 1/4hp; 115V D.C.; 115V; 60Hz; 1Ph

Approx. Crated Dimensions	
Filler only (WxDxH)	4140mm x 1600mm x 1905mm

Approx. Net Weight	1360 kg or 3000 lbs.
Approx. Gross Weight	1588 kg or 3500 lbs.



Model VR2/S drawing shown above with monoblocked Cozzoli RS400 stoppering system to fill and stopper on one machine.

Cozzoli Machine Company is an international leader in the design, manufacture, distribution, and service of precision cleaning, filling, and closing systems in stand-alone or monoblock versions. Since 1919 the company has been serving the pharmaceutical, biotechnology, diagnostic, cosmetic, and chemical industries.

*PROVEN
VERSATILITY
AND
RELIABILITY*

VR2PP SERIES LIQUID FILLING MACHINE

The VR2PP Series are reliable, high performance aseptic liquid filling machines using peristaltic pump technology. The Cozzoli Peristaltic Pump Filling System utilizes the latest innovations in single-use technology. Advantages include reduced costs, quicker set up, less waste and completely eliminates cleaning process. Designed with Class 100 clean rooms in mind, the VR2PP Series uses a straight line concept with a small footprint and is built for reliability, easy operation and accuracy. The VR2PP models are available with 2 heads, 4 heads, 6 heads or 8 heads.

Changes for various container heights are made with the servo drive height adjustment feature. Nozzle stroke adjustments are also made via servo drive.



Cozzoli Peristaltic Pump with 316L Stainless Steel Supply Manifold



Single Use Filling Path with Plastic Bags



VR2PP-4 model shown.

FILL PRINCIPLE

Containers are positioned in the machine by a feed screw. A diving nozzle system provides bottom-up filling on a range from 0-4" (101.6mm). This system eliminates the need to change cams and speeds up changeover. A drop control mechanism eliminates a hanging drop at the completion of the fill cycle.

A PLC controls intermittent container handling through the machine.

50 Schoolhouse Road
Somerset, NJ 08873-1289
USA



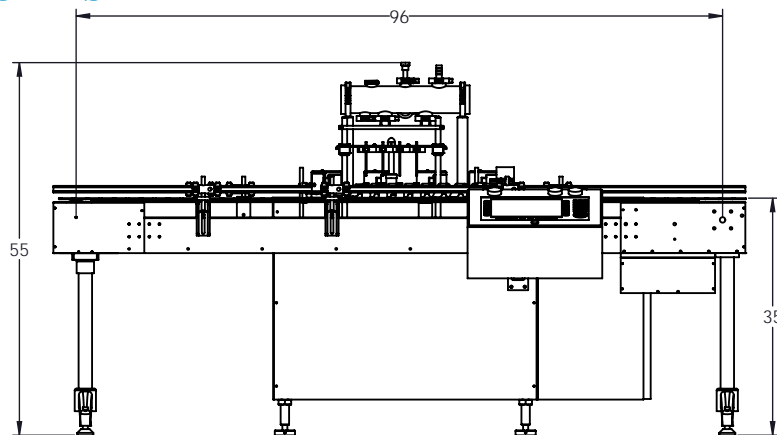
Phone: (732) 564-0400
Fax: (732) 564-0444
Email: sales@cozzoli.com
www.cozzoli.com

VR2PP SERIES - OPTIONS AND ACCESSORIES

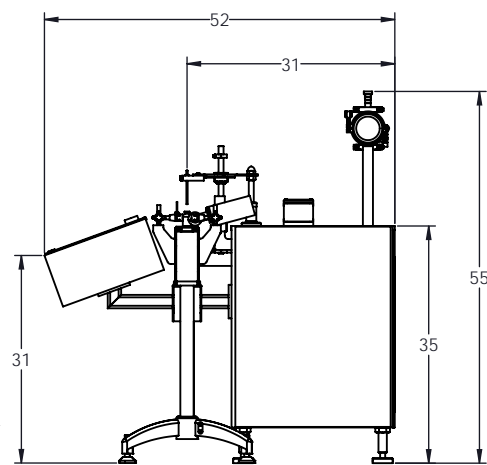
Automatic makeup and backup controls for smooth line operation
 Combination filling & flushing nozzles for nitrogen flushing during filling
 Down vial eliminator
 IQ/OQ/PQ Protocols (written)
 Air/Vacuum cleaning assembly
 Various electrical and controls configurations
 Remote operator console
 Lexan Enclosure with laminar flow hood

Standard Specifications

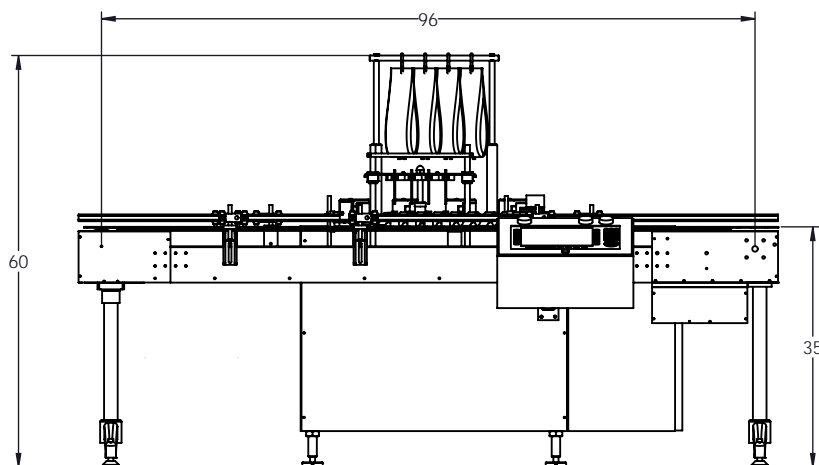
Stainless steel frame	(STD)
Conveyor Type	Sanitary type stainless steel conveyor bed with raised 3 1/4"
	Delrin Top
Conveyor Travel	Left to Right (STD)
Conveyor Length Ctr to Ctr	8 feet c to c
Number of pumps	2 to 8
Fill Size	See tubing chart below
Nozzle Elevation Adjustment	Up to 4"
Container Movement	Intermittent
Cycles per Minute	Up to 30
Containers per Minute	Up to 240
Maximum Container Height	203mm or 8"
Maximum Container Diameter	Up to 76mm or 3"
Minimum Container Diameter	16mm or 5/8"
Bottle Spacing	Feed screw
Electricals	115V 60Hz/1 Ph



Model VR2PP-4 shown with tank, front view.



Model VR2PP-4 shown with tank, side view.



Model VR2PP-4 shown with bags, front view.

Tubing			
ID [inches]	OD [inches]	Fill Rate *Min. [ml/s]	Fill Rate *Max. [ml/s]
1/64	5/32	-	2
1/16	3/16	.8	8
3/32	7/32	2	16
1/8	1/4	5	32
3/16	5/16	12	64
1/4	3/8	30	-

*Min. and Max. Fill Rates based on a typical fill time range of 0.5 to 1.0 seconds

Cozzoli Machine Company is an international leader in the design, manufacture, distribution, and service of precision cleaning, filling, and closing systems in stand-alone or monoblock versions. Since 1919 the company has been serving the pharmaceutical, biotechnology, diagnostic, cosmetic, and chemical industries.