

# VFL - VERSA-FILL AUTOMATIC ROTARY TIME/PRESSURE FILLING MACHINE

The Versa-Fil Time/Pressure filler is suited for filling heavy viscosity food products such as mayonnaise, peanut butter, and relish, as well as personal care products, gasket sealers, etc. The very latest developments in nozzle design technology allow efficient filling of lighter products such as saline solutions, cough medicines, and barbecue sauces.

This machine can be equipped with 4 to 24 spouts, with a maximum container diameter from 3.14" to 8.50." It can be designed to handle fill volumes as small as 5 cc and up to imperial gallons. All models can be teamed with our Mono-Capper for a synchronized filler/capper combination.



#### FLEXIBLE AND RELIABLE

The Versa-Fil employs either a selector star or optional timing screw to evenly space containers into an infeed starwheel. They are transferred onto a rotating plate and centered directly under the filling nozzles. Containers are then filled and transferred by a discharge starwheel back onto the automatic conveyor.

High-precision positive displacement pumps feed product into the filling slots of the metering plate and through the nozzles into a container as it passes under the filling slot.



- Pump and machine drives are electronically phase loop synchronized to insure filling accuracies to +/-.5% with most products.
- Fill quantities are rapidly adjusted by varying the speed of the product supply pumps in relation to the machine speed.
- Optional lift platforms provide a bottom-up fill to eliminate air entrapment and minimize product disturbance.

#### STANDARD FEATURES

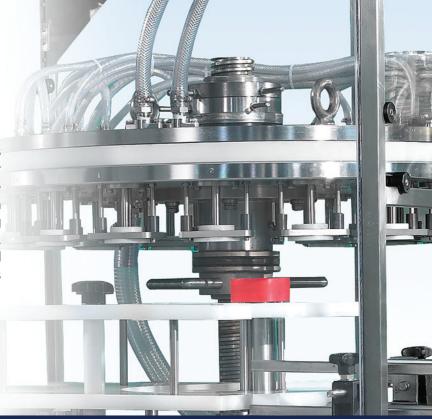
- Time/pressure fill principle utilizing sanitary positive displacement pumps
- Pump and machine drive electronically phase loop synchronized
- · Accuracies of +/- .5% attainable on most applications
- Wetted contact parts of type 316 stainless steel and FDA approved virgin Teflon
- Suitable for high temperature filling
- Type 316 stainless steel straight down nozzles
- Built-in safety devices to shut off machine in the event of a jam
- · Fills both rigid and flexible containers
- Selector infeed mechanism to space containers into infeed stars
- · Rapid container changeover

- Nozzles, upper head, and pumps quickly disassem-bled for ease of cleaning and sterilization.
- · All drives enclosed; no exposed belts or pulleys
- · Centralized lubrication
- · Left to right operation
- Stainless steel conveyor frame synchronized with machine driven 4.5" Delrin chain
- Stainless steel cabinet guarding
- Stainless steel lower rotating plate complete with flowthrough holes for top filling and ease of cleanup
- · LED readout in containers per minute
- · Electronic programmable logic controller
- · Container jam protection with clutch on spiral



#### FILLING PRINCIPLE

Product is pumped from positive displacement pumps into slots of the stationary metering plate. The lower disc and nozzles rotate as an assembly under the non-rotating upper disc and metering plate. Holes in the lower disc pass under the slots in the metering plate and transfer product to the filling nozzles. Quantity of the product depends on the pump speed in relation to the machine speed which determines the time that the nozzles are under the slot.



#### **OPTIONAL FEATURES**

- NEMA 4 watertight; NEMA 7 explosion proof electrics
- Other NEMA classification available to meet specific requirements
- Multi-stage fill for two or more products into one container
- · Nitrogen purge
- · No containers-no fill upper head design
- High capacity fill head for use with chunky products and/or large fill volumes
- Divert valves on head assembly with photo electric sensors for valve activation
- Vacuum suckback system
- · Stainless steel product reservoir
- Motor driven paddle-style agitator\Special materi-als for product contact parts
- · Custom designed nozzles
- · Stainless steel centering devices for unstable containers
- · Spiral timing screw

- Tangential discharge, internal star, large discharge star for higher speed operation
- Star safety clutches
- Stainless steel structural parts
- Stainless steel lift platforms feature flow through design, equipped with safety devices to prevent break-age or damage to containers or nozzles
- Specially designed lift cam with stainless steel lift rods and hardened cam rollers
- · Sanitary steel conveyor and stainless steel flush pan
- Stainless steel hoist to easily remove upper head plate for machine disassembly
- · Right to left operation
- Polycarbonate barrier guarding around upper machine turret, with interlocking guards
- Photoelectric or proximity sensor activated no containermachine stop
- · Filler-driven Mono=Capper
- Drive synchronization with other machinery



### **SPECIFICATIONS**

Model	Max Container Diameter	Speeds (cpm)	Diameter to Nozzle Center	Pitch Diameter of Stars	Horsepower Requirements	Net Weight Approximate	Crated Weight
VF SF-4	216 mm 8.5"	60	406mm 16"	305mm 120"	1 HP	1135 kg 2500 lbs.	1360 kg 3000 lbs.
VF SF-6	182mm 7.15"	90	406mm 16"	269mm 10.6"	1 HP	1135 kg 2500 lbs.	1360 kg 3000 lbs.
VF SF-8	150mm 5.87"	120	406mm 16"	305mm 12"	1 HP	1135 kg 2500 lbs.	1360 kg 3000 lbs.
VF SF-12	102mm 4.0"	180	406mm 16"	269mm 10.6"	1 HP	1135 kg 2500 lbs.	1360 kg 3000 lbs.
VF MF-8	165mm 6.5"	120	533mm 21"	267mm 10.5"	2 HP	1215 kg 2700 lbs.	1440 kg 3200 lbs.
VF MF-12	130mm 5.12"	180	533mm 21"	267mm 10.5"	2 HP	1215 kg 2700 lbs.	1440 kg 3200 lbs.
VF MF-16	98mm 3.87"	240	533mm 21"	267mm 10.5"	2 HP	1215 kg 2700 lbs.	1440 kg 3200 lbs.
VF MF-20	79mm 3.12"	300	533mm 21"	267mm 10.5"	2 HP	1215 kg 2700 lbs.	1440 kg 3200 lbs.
VF LF-12	165mm 6.5"	180	762mm 30"	381mm 15"	3 HP	1360 kg 3000 lbs.	1590 kg 3500 lbs.
VF LF-16	143mm 5.62"	240	762mm 30"	381mm 15"	3 HP	1360 kg 3000 lbs.	1590 kg 3500 lbs.
VF LF-20	114mm 4.5"	300	762mm 30"	381mm 15"	3 HP	1360 kg 3000 lbs.	1590 kg 3500 lbs.
VF LF-24	95mm 3.75"	360	762mm 30"	381mm 15"	3 HP	1360 kg 3000 lbs.	1590 kg 3500 lbs.
VF LF-30	76mm 3.0"	450	762mm 30"	381mm 15"	3 HP	1360 kg 3000 lbs.	1590 kg 3500 lbs.

## **Dimensions**

	VF SF	VF MF	VF LF			
А	3048mm	3048mm	3048mm			
	120"	120"	120"			
В	1473mm	958mm	825mm			
	58"	37.75"	32.5"			
С	940mm	1130mm	1397mm			
	37"	44.5"	55"			
D	635mm	958mm	825mm			
	25"	37.75"	32.5"			
Е	1066mm	1143mm	1485mm			
	42"	45"	58.5"			
F	863mm – 940mm 34" – 37"					
G	G 1700mm 67"					

