



MIC-ZF8 Liquid Filling Machine

(Speed 4000 Bottles/H)

Type: Liquid Filler

Make: MIC

Model: MIC-ZF8

FEATURES

Introduction:

In the realm of manufacturing, efficiency is key, and the Liquid Filling Machine stands as a beacon of optimization. This sophisticated equipment seamlessly integrates precision engineering with automation, revolutionizing the process of filling liquid containers. In this comprehensive guide, we'll explore the features, applications, and mechanical principles of the Liquid Filling Machine, shedding light on how it enhances productivity and quality in various industries.

Product Characteristics:

The Liquid Filling Machine boasts a plethora of features tailored for precision and efficiency. Crafted from high-quality materials and engineered with precision, it ensures durability and reliability in demanding production environments. Equipped with state-of-the-art dosing systems, customizable settings, and intuitive interfaces, this machine offers seamless operation while maintaining control over liquid filling processes. Its adjustable controls accommodate a wide range of viscosities, guaranteeing consistent and accurate fills for each container. With anti-drip mechanisms and secure sealing, it preserves the integrity of liquid formulations, delivering products of unparalleled quality.

Product Applications:

The applications of the Liquid Filling Machine span across industries, catering to diverse liquid filling needs. From pharmaceuticals to cosmetics, food and beverage to chemical manufacturing, this versatile machine excels in filling various types of liquids with precision and speed. Whether it's bottling pharmaceutical solutions, packaging cosmetics, or filling beverage containers, the Liquid Filling Machine streamlines production processes, reducing waste and maximizing efficiency. Its adaptability allows for seamless integration into existing production lines, making it a valuable asset for businesses of all sizes.

Mechanical Principle:

At its core, the Liquid Filling Machine operates on advanced mechanical principles designed for precision and reliability. Utilizing precision dosing pumps, conveyor systems, and filling nozzles, it accurately measures and dispenses precise quantities of liquid into individual containers. Temperature controls ensure optimal consistency, while integrated sensors and programmable logic controllers oversee the entire process. This precision minimizes errors, reduces downtime, and maximizes throughput, resulting in enhanced productivity and cost-effectiveness for manufacturers.

In conclusion, the Liquid Filling Machine represents the epitome of efficiency and precision in liquid filling operations. Its exceptional features, versatile applications, and robust mechanical principles make it an indispensable asset for manufacturers seeking to streamline their production processes. By embracing this innovative technology, businesses can elevate their productivity, reduce costs, and deliver high-quality liquid products that meet the demands of today's competitive market.

This machine is suitable for filling a liquid and cream products, especially for high viscosity materials, lube oil, car oil, motor oil, butter, honey, tomato sauce. the effect is obvious.

1. Adopt PLC programmable control system with touch screen interface.
2. Automatic bottle feeding, automatic filling, automatic bottle.
3. Adopt servo motor drive, double screw-rod drive, Control the movement of the piston rod to ensure the stability of the filling.
4. Adopt double-ball screw rod filling the filling nozzle drive
5. It can be used with capping machine, labelling machine supporting the formation of the production line
6. It combines optical, mechanical, electrical, gas in one. It is easy to operate a filling machine.
7. Having a stable and reliable operation, high production efficiency, strong adaptability.



Servo motor

This filling machine adopts servo motor drive, servo motor high efficiency, small volume and relatively high power, can drive the machine more stable, smooth filling.

In addition, the servo motor operation noise is small, will not cause too much noise burden to the workshop.



Drip-proof air cylinder

For filling some materials that are easy to hang on the wall or sticky, the drip proof cylinder can effectively prevent the residual material inside the filling valve from dripping onto the bottle, keep the bottle clean and facilitate the labelling work later.

The working process is mainly as follows: after filling, the filling head moves upward, and the drip proof plate controlled by the drip proof cylinder extends out just below the filling head to catch the material left by the filling head



filling head

The oil is put into the material cylinder, the piston to pump the oil into the measuring cylinder. Then the piston moves up to send the oil to the filling pipe. At the same time, when the bottle enters the filling machine through the conveyor belt, the filling head moves down to start filling. After filling, the conveyor belt will automatically send the bottle to the capping station.

(Filling process without drip leakage, the number of filling head can be customized according to your needs and diameter of filling head basis on the diameter of your barrel'



Conveyor belt

When the bottle is placed on it, the conveyor belt takes the bottle into the filling machine and starts filling. After filling, it is sent out through the conveyor belt. The whole process is convenient to save time .

This conveyor belt can be different size of bottle,The width between the two pipes can be adjusted according to your container,ensure smooth bottle safely from the conveyor belt moved.

on the side of the conveyor is equipped with sensors that can automatically identify when the bottle to go out or, in order to send signals to filling station of screw cap



Measuring cylinder

The function of measuring cylinder is mainly quantitative filling, its use can make your filling accuracy higher, driven by servo motor, control the movement of the piston rod, the Piston moving down extract the material from the material cylinder to the measuring cylinder, and then the piston moves up to the dose of the cylinder in the material to the filling pipeline.

(The size of dose cylinder can be customized according to your needs)

Model	MIC V01	MIC-ZF4	MIC-ZF6	MIC-ZF8	MIC-ZF12	MIC-ZF16	MIC-ZF20
Application	High Viscosity Materials, Butter, Mayonnaise, Honey, Tomato Sauce, Cream, Liquid soap , oil product ,Lotion And So On						
Packing Type	Metal Cans, jar, Glass Bottle, Bag, Plastic Bottle Etc						
Speed (basis on 50-500ml)	1500 B/h	2000B/h	2500B/h	3000 B/h	4000B/h	5000 B /h	6000 B/h
Filling Arrange	10-20ML. 25-250ML. 50-1000ml, 50-500ML.100-1000ML.250-2500ML. 1000-5000ML 100ml-5L.(10ml-5l)						
Power	30W	3.5Kw	3.6kw	3.7kw	3.8kw	3.9Kw	4.0Kw
Size	1000*480*700 mm	1400*1450*2270 mm	1400*1450*2270 mm	1700*1450*2270 mm	2000*1450*2270 mm	2300*1450*2270 mm	2600 *1450*2270 mm
Weight	35 Kg	500kg	600kg	700kg	800Kg	900 kg	1000 kg

PARAMETER	
Filling head	20 heads
Filling volume range	200ml-2500ml
Production speed	≤4000 Bph basis on1L bottle
Voltage	220V/380V
Power	3.0Kw
Suitable bottle's diameter	Φ40mm-Φ100mm
Filling error	≤±3‰
Work pressure	0.55Mpa-0.65Mpa
Size	2800mm × 1400mm× 2500mm
Weight	1000 kg

CONFIGURATION	
Touch screen	Canada xinjie color
PLC	Schneider
Solenoid valve	Taiwan Airtac
Optoelectronic system	OPTEX
Micro differential pressure switch	Netherlands
Servo motor	Taiwan TECO
Air source treatment	Taiwan Airtac
Button and low voltage electric appliance	Schneider
Ball screw	Taiwan
Reducer	Taiwan VGM
Switching power supply	Taiwan meanwell
Material	Contact with the material parts of the 316 materials, and the rest of the 304 stainless steel