



Introduce :



The filling machine adopts high precision metering pump. Multifunctional PLC control system, there are three different filling methods (manual, Fixed point, automatic).

We can change the filling time, waiting time and speed to achieve different filling capacity of different filling methods.

The rotor of the pump is non-contact, has a large pump chamber, can handle such as cherry or olive solid without damage.

They can also be used to handle slurries, pastes and various other liquids. Mild pumping action minimizes product degradation. They also provide reversible flow.

The flow is relatively independent of the change of process pressure, so the output is constant and continuous.

Piston type anti dropping filling valve and servo motor drive are adopted. The air consumption is not more than 0.1m³/min.

Typical Product Applications

BAKERY

Batters; Flavorings; Frostings; Fruit Fillings; Fats & Oils; Sweeteners; Yeast Slurry



BEVERAGE

Beer, Wort, Yeast; Soft Drinks; Fruit Concentrates; Fruit Drinks



CANNING

Baby Foods, Soups, Stews; Tomato Paste; Fruit Puree; Vegetables, Diced, Slurries; Puddings, Jams, Jellies; Salad Dressings, Mayonnaise



CONFECTIONERY

Syrups; Cream Fillings; Chocolate



COSMETICS

Face Creams & Lotions; Hair Styling Gels & Liquids; Essential Oils; Dyes & Alcohols



DAIRY

Cream, Milk; Cheese Curd & Whey; Cottage Cheese; Yogurt



MEAT PACKING

Meat Emulsions; Ground Meats; Pet Foods; Animal Fats



PHARMACEUTICAL

Pill Pastes; Syrups; Extracts; Emulsions; Slurries



CHEMICAL/INDUSTRIAL

Solvents; Fuels; Oils & Lubricants; Paints; Resins & Polymers; Soaps; Sludges

Filling Types

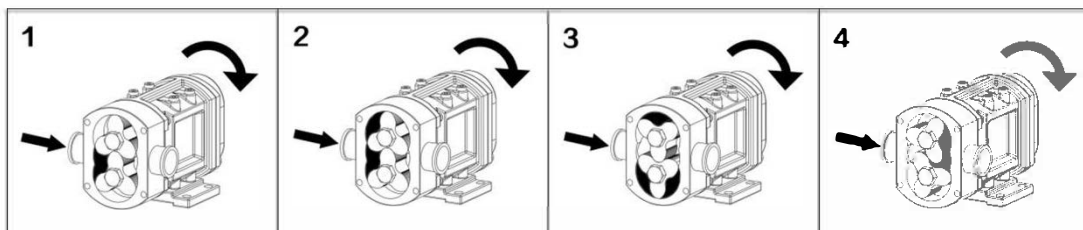
Depending on the viscosity of the medium, the feeding direction is also different.
CM: 8217 filling machine has the following two types:



up in down out

Working Theory

CM: 8217 filling machine is a filling equipment composed of a servo motor and rotor pump head. The pump head is metering with positive displacement structure. The displacement of per revolution is a fixed value, accurate speed control with servo motor to metering filling.





Single head filling machine

Suitable for one station filling work, simple operation, convenient maintenance and other advantages.

Food grade

The pump head is made of 304 / 316L stainless steel, which is suitable for the fields with high sanitary grade in food and medicine industry.



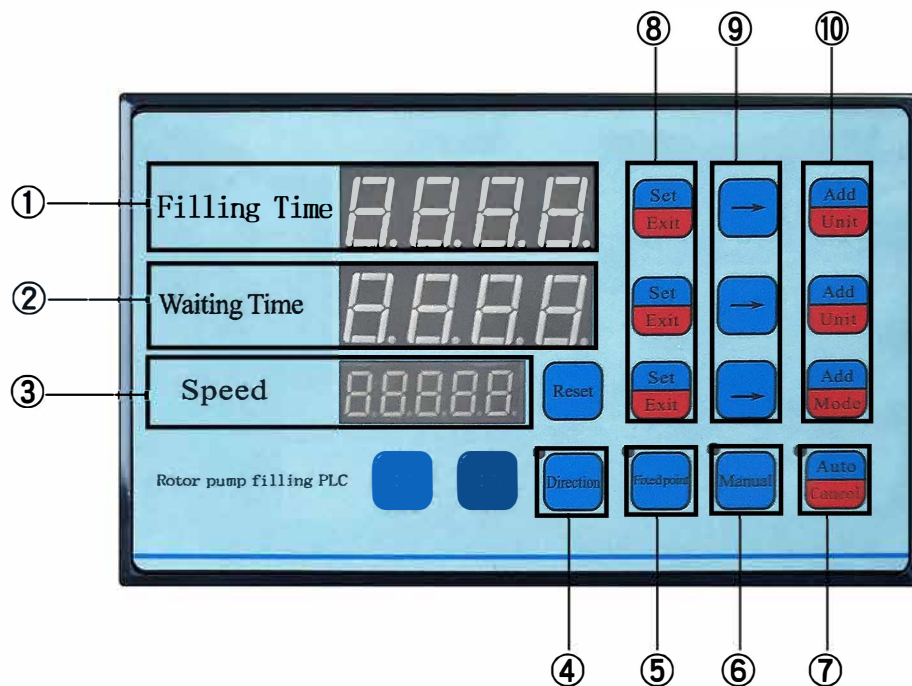
Filling line

The equipment consists of CM: 8217 filling machine, conveyor belt, lifting filling valve and infrared switch. High efficiency, suitable for multi person cooperation.

Technical Data:

Model	Filling Capacity	Speed (rpm)	Filling Time (second)	Waiting Time (second)	Motor Power (kw)	Inlet/outlet (mm)	Accuracy
8217-900	9L/5rev	1-30	0.01-99	0.1-99	0.75	32	$\leq \pm 1\%$
8217-1800	18L/5rev	1-30	0.01-99	0.1-99	1.0	38	$\leq \pm 1\%$
8217-3600	36L/5rev	1-30	0.01-99	0.1-99	1.5	51	$\leq \pm 1\%$
8217-6000	60L/5rev	1-30	0.01-99	0.1-99	2.3	64	$\leq \pm 1\%$

PLC Operation Panel :



- ① Single filling time (0.01-99 second)
- ② Waiting time is the time between (0.1-99 second) two times filling
- ③ Speed is the rotate speed of pump (1-50)
- ④ Press the Direction key, the direction of rotation of pump will change
- ⑤ Fixed Point
- ⑥ Manual
- ⑦ Automatic/Cancel
- ⑧ Set/Exit
- ⑨ → Press → key to change the selected position
- ⑩ + press + key to change the number (1-2-3-4-5-6-7-8-9-0)

How To Confirm Target Filling Capacity

1. Switch on the power and turn on the control switch. The machine is in standby mode.
2. Set the speed as X(Note: set the appropriate speed according to the following Midium-Speed Table)
3. Set the filling time as 1 second
4. Place a cup under the nozzle, press the manual button, and the liquid will flow into the cup. Then weigh to get the actual filling capacity. Use the following formula to calculate the filling time for the target filling volume.

$$\frac{\text{Target filling capacity}}{\text{Actual filling capacity}} \times 1 = \text{Target Filling Time}$$

5. Set up Target Filling Time as Filling Time on PLC control interface
6. Press Manual Key again, the Actual Filling Capacity is the Target Filling Capacity

Choose the suitable speed for different liquid

Medium	Speed(rpm)	Medium	Speed(rpm)	Medium	Speed(rpm)
Resin	2-6	Honey	5-10	Ketchup	10-20
Emulsion	2-6	Cream'	10-15	Food Oil	10-20
Peanut Sauce	2-8	Chocolate	10-15	Fruit Juice	10-20
butter	6-10	Jam	10-15	cheese	5-10
Paste	4-6	Toothpaste'	10-15	Milk	10-20
Chilli Sauce	5-10	Detergent	10-20	Carrot mud	5-10
Mashed potatoes	5-10	Salad dressing	4-8	Lubricating oil	10-20

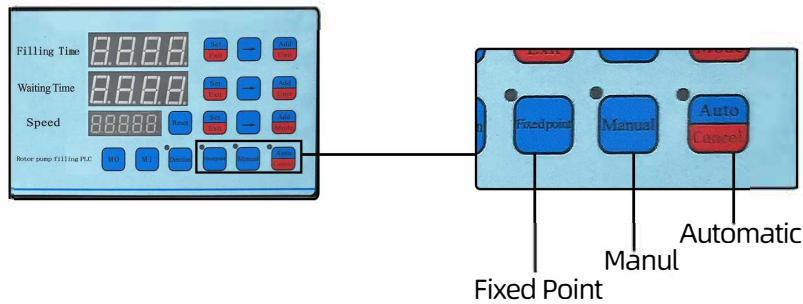
Medium-Speed Table

If you can't determine the viscosity of the material, you can fill at low speed first, and speed up after no shutdown.

Operation:

There are 3 operation modes

Firstly, connect power supply and turn on control switch



1.Manual

Click Manual Key on PLC operation surface;

Set up the filling time of single time (0.01-99 second);

Set up the suitable speed (Max:30rpm)

Connect the Foot-switch well

Each time you step on the foot-switch, the machine work one time as the parameter you set up.

Then you can check the capacity, if it is not you want, adjust the speed and filling time of single time.

2.Fixed Point

Click Fixed Point Key on PLC operation surface;

Set up the suitable speed (Max:30rpm)

Each time you press on the Fixed Point key, the machine work as the parameter you set up until you loosen the press.

3Automatic

Click Automatic Key on PLC operation surface;

Set up the filling time of single time (0.01-99 second);

Set up the suitable speed (Max:30rpm)

Set up the waiting time (0.1-99 second)