

# Mascara Filling Machine

SEMI-AUTO MASCARA FILLER

\*This machine is mainly used for quantitative filling of cosmetic mascara, lip gloss, and liquid foundation (liquid/paste).

\*The quantitative filling method of the piston can accurately set the required volume, and the error value is small, which meets the needs of customers. \*The machine operation mode is simple and easy to clean. Practical and Effective.

#### APPLICATION





#### **Technical Parameter**

Product name	Semi-Auto Mascara Filler
Model	CM-MF-01
Power supply	1P/220V/50Hz
Installation requirements	220V power supply, air source
Power	0.1KW
Cylinder	AirTAC, Taiwan
Air supply	0.5-0.6Mpa
Barrel volume	18L
Barrel pressure resistance	6Kg/cm <sup>2</sup>
Filling range	1~20ml
Production capacity	1200~1800/hour
Body material	Stainless steel (SUS304)
Net weight	80KGS
Dimensions (L*W*H)	410*770*1550mm





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# **User Guide**

## MR-002 Ultrasonic Tube Filling & Sealing Machine



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The ultrasonic sealing machine is a high-quality, high-performance liquid, paste tube filling and sealing machine. Manually put the tube, it could automatically detect the color mark, automatic filling, automatic sealing, automatic cutting. PLC programmable machine uses advanced touch interface, optical tracking, automatic positioning, so that the overall operation more simple, perfect, enable enterprises to improve production efficiency, reduce labor intensity and improve the device of choice for packaging grades. Please read the following instructions to facilitate the device before starting a thorough understanding of the characteristics of the various functions, procedures, and use operations.

We are sure that you will be completely satisfied with practicality, reliability and economic efficiency of the device. However, the structure and operation of the apparatus according to the various uses and characteristics to adapt the contents of the package is installed, in order to better understand the specific different points, as described in this specification is the basic function.

Before shipping the device, each part of the device have been made careful testing and debugging. However, as occurred during shipment to any mechanical failure, or any place in this description is unclear, please contact our authorized sales staff contact.

#### I Machine function and application

1. Use ultrasonic to close plastic soft tube. Do not need any adhesive or filler or solvent when welding, do not consume large amounts of heat, and easy to operate, high welding speed, high efficiency.

2. This machine is widely used in toothpaste, cosmetic, medical product, food and industrial tubes etc.

#### **II** Main parameters

Model	MR-002
Power supply	AC220V/50Hz
Power	2000W
Frequency	20Khz
Tube length	70-210mm
Tube diameter	13-50 mm

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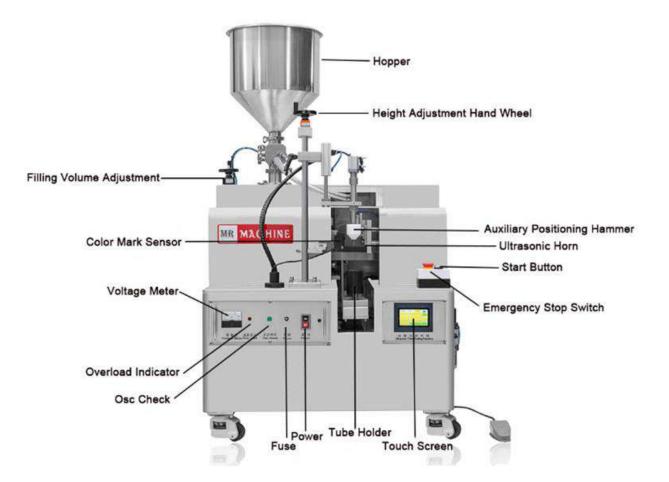


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III Sealing Machine layout



(Remark: Pls check the Front sealing mould screw if it is strong locked, it need to be tighten before sealing. To avoid during transportation, the screw is loose)

#### IV PLC

1. Press to English to next page , and press Auto to manual



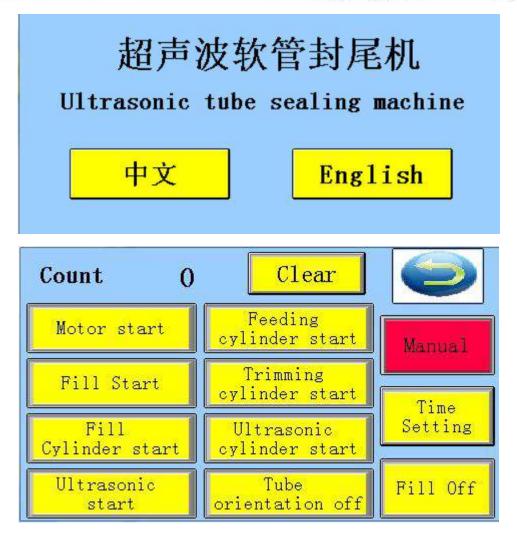




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Motor start: this is for control the Tube holder running

Feeding cylinder start: this is for control the Tube holder feeding

Fill start: This is for control the filling star or stop when in manual mode

Trimming cylinder start: this is for control the cutter

Fill Cylinder: This is for control the Filler head cylinder start or Stop when in manual mode

Ultrasonic cylinder start: this is for control the up mould and down mould working.

**Ultrasonic start:** This is for start the ultrasonic welding.

Tube Orientation on : this is for control the Sense off/on

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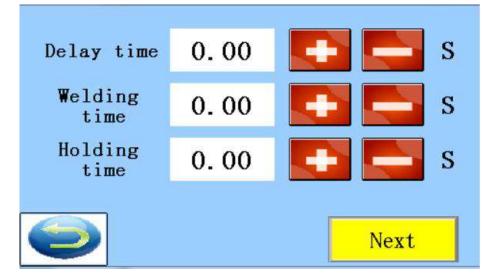


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Fill Off: This is for turn on or off the filling function

When you press Time Setting, you will have the time setting screen as below:



**Delay time:** 0.60 (usually does not need to change this time, it is pre-set in factory, it is for the delay time to wait the sealing moulds close together, then to ultrasonic)

**Welding time:** For set the welding/sealing time of tube, and please find below a reference parameter setting for common diameter tubes. (Different thickness and material tubes need different time)

Tube Dia 20, the time will about: 0.20,

Tube dia 30, the time will about 0.40

Tube dia 40, the time will about 0.50

Tube dia 50, the time will about 0.7

Holding time: 0.35 (this is for the holding time after welding to cool down a little bit and make

the weld format nice)

Press next and you will have the 2nd time screen as below:







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Down time	0.00	S
Feeding time	0.00	S
Mark Speed	0	P/S
Mark Angle 400/Circle	0	P

Down time: Time for the tube press cylinder from home limit to go down to press tube

**Feeding Time:** the time counted from tube press cylinder goes back to home limit and feeding cylinder goes into the sealing station

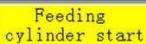
Mark Speed: Speed of the color mark sensor orientation stepping motor, usually could set 400

for the speed.

**Mark Angle (400/circle):** The rotary angle of the mark sensor after detecting the color mark on the tube. One circle is 400, you could set 198-202 so the tube could be rotated to the opposite side so that the date coding is on the color mark side of the tube. Default is 1, then the color mark rotary motor will stop once the sensor detects the mark on the tube, at this time, the date coding is in the front of the tube.

#### **V** Operation process

- 1. Connect power and compressed air correctly (suggest 0.5MPa).
- 2. Turn on the power supply and set the machine to manual mode.
- 3. Place the tube in the tube holder. Move the tube between the front and rear moulds by pressing



handle wheel (recommended 2-3 mm higher than the cutter) and then press same key to return the tube to its original position.



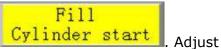


Innovation Accelerates Production

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3. Loosen the handle, adjust the filling to make it reach the top, press

the "filling height adjustment" so that the filling nozzle positioning hammer touches the tube. Lock the handle and press the same key to return the filling nozzle to its original position.

4. Turn the tube color mark to the beam of the color indicator sensor, and make the beam right on the tube color mark. Hold on the color label sensor "ON" for 2-3 seconds, turn the tube so the beam goes to the other parts of the tube, press the color label sensor "OFF" for 2-3 seconds. Then turn the tube, when the beam is on the tube color mark, the lamp at the rear of the color indicator sensor lights up, indicating that the setting is correct.

5. Adjust the "filling volume adjustment" to set the required filling volume. Material weighing according to filling start (filling speed self-regulation)

6. Set the machine to an automatic mode. If the tube color mark sets the electric eye to an automatic mode, otherwise close the electric eye.

7. Place the tube to be sealed on the tube holder

8. Press "Start button" and the machine can automatically complete the process of sealing and cutting

#### VI Failure and remedy

Failure	Cause	Remedy
Machine doesn't work	No power or compressed air	Connect power and compressed air
or work abnormal	Low compressed air pressure	Enhance air pressure
Plastic overflow or not good after welding	Two moulds too closed or too parted	Adjust the gap between two moulds
Rough edge after	Cutter blunt	Sharpen cutter or replace sharp one
Cutting	Cutter has large gap between back mould	Make cutter touch back mould

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