



# Standard spin coater MG-EZ4

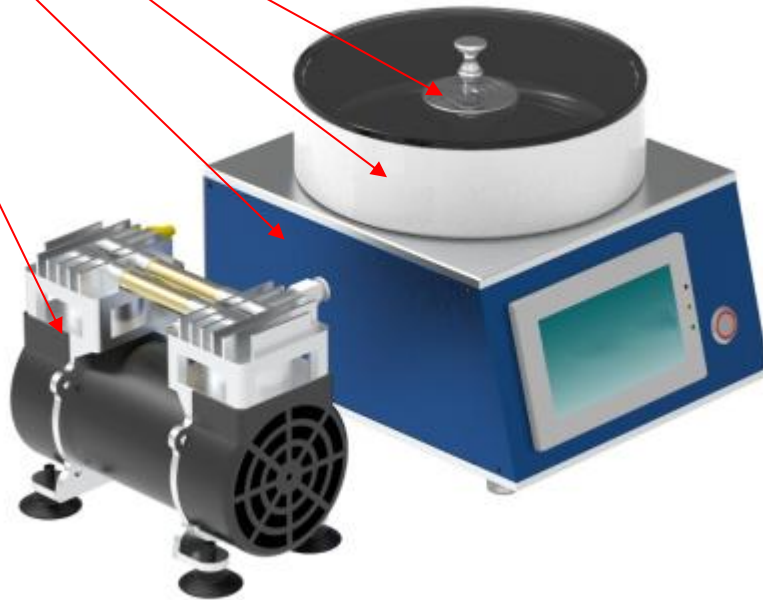
# User Guide

**Technical Description**

**1、 Equipment introduction**

This standard spin coater is independently developed by our company. It is used for wafer and thin film coating. It uses a high-precision, low-noise, brushless motor and is suitable for ( $\leq$ ) 4 inches samples.

(1)、 (2)、 (3)、 (4)、



**2、 Equipment structure**

(1) Vacuum pump (2) EZ4 machine (3) Chamber (4) vacuum chuck

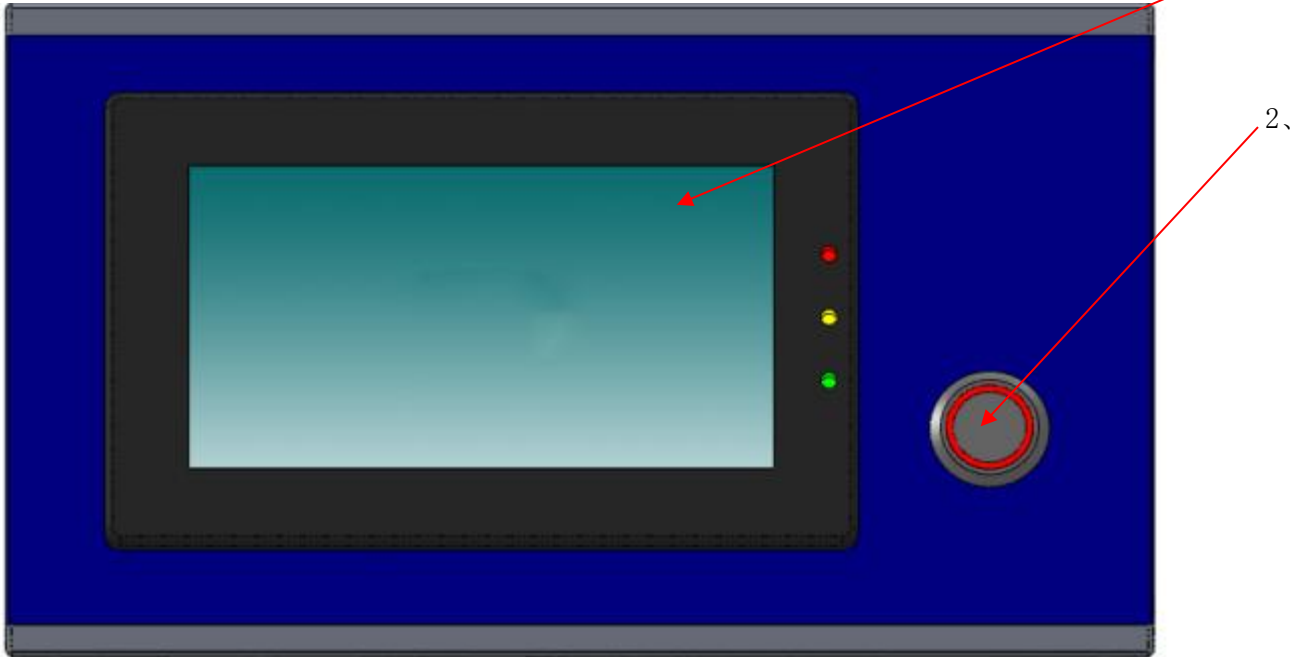
**3、 Technical parameters**

1、 Spindle speed	0-12000RPM	5、 Program segment	5
2、 Speed resolution	1RPM	6、 Power supply	220V/110V、 50 Hz /60 Hz; 500W
3、 Maximum rotation time per step	3600S	7、 Overall size	250x210x220mm (LWH)
4、 Maximum acceleration	30000 RPM/S <sup>2</sup>	8、 Net weight	about 12kg

#### 4、 Operation interface

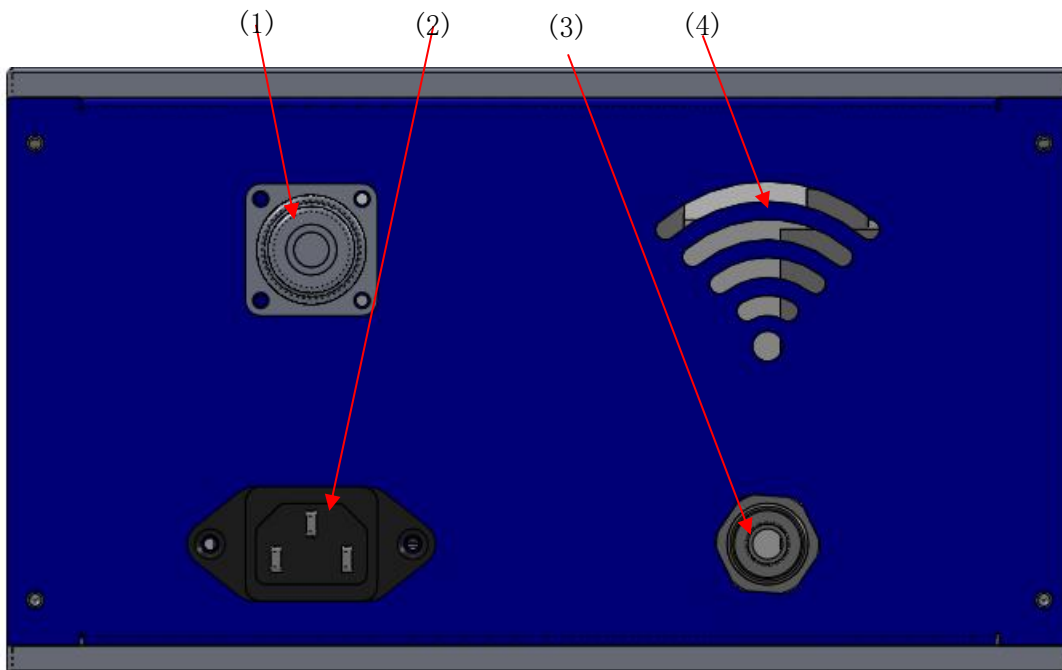
##### 1. Control box

Front:



1、 Touch screen 2、 Power switch

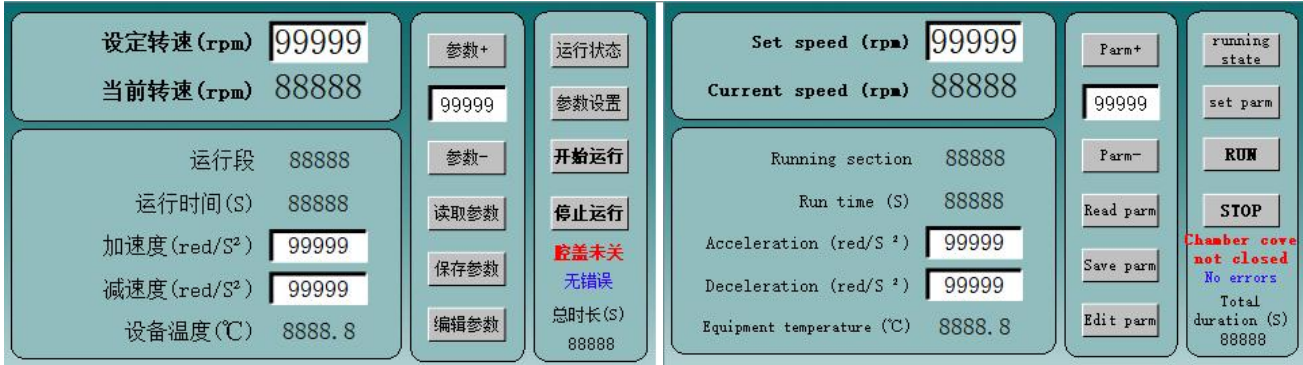
Back side:



- (1)、 Vacuum pump power interface
- (2)、 Equipment input power socket
- (3)、 Vacuum pump air extraction interface
- (4)、 Heat dissipation holes

2. Display interface: The boot display interface; click on the page to enter the status screen. Click Chinese, English to switch between Chinese and English display

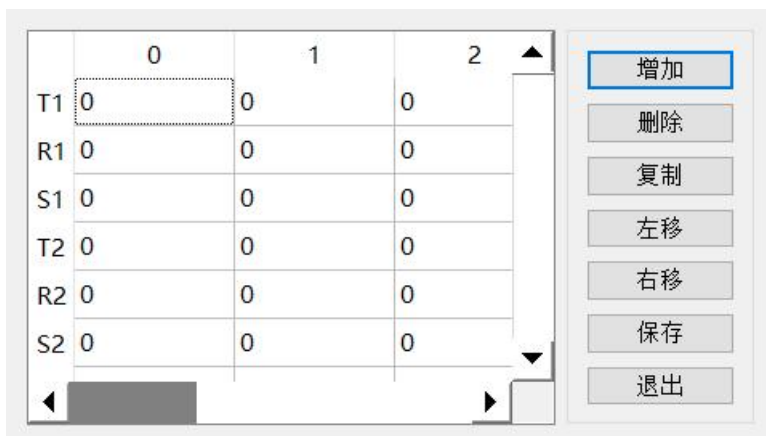
3. Running status: The current screen is in running status. Click on the input box to set the speed, acceleration, and deceleration values to set the corresponding parameters. If the set speed value is set, the equipment will run for an unlimited time. To stop rotating, you need to click Stop Running button.



4. Parameter setting: Click the **parameter +** and **parameter -** buttons to select formula 0~9 parameters. Each group of parameters has 5 sets of data. You can set the time, speed, and acceleration of each step respectively. You can only set any of them during single-step operation. Parameters of one step, click the Start **Run** button, and the equipment starts to run according to the program segment parameters. Click the Read Parameters button to read all parameters of the current recipe number. Click the Save Parameters button to overwrite all parameters of the current recipe number. Click **Edit Parameters** to edit. 50 data for 10 sets of recipes



5. Edit parameters: Click the button on the right to perform corresponding operations on the recipe column.



## 5、 Equipment installation and connection

Please place the device on a flat and stable work surface. It is required that when the equipment is in operation, the area less than 30cm away from the equipment should be marked as a non-safe distance to avoid harm from harmful substances or direct harm to personnel. All interfaces must be inserted correctly before power can be supplied.

**The speed of the spin coater is very high, so be sure to ensure that the work surface is level, otherwise sample eccentricity may occur, or even the sample may fall off and damage the instrument.**

## 6、 Equipment maintenance, after-sales and warranty

1. After daily use of the equipment, a small amount of solvent should be used to clean the inner cavity.
2. When cleaning the vacuum loading tray, turn off the vacuum source first and clean the surface of the loading tray with paper towels or soft cloth. Do not use solvents or cleaning agents to clean the carrier tray when it is installed.
3. If a special solvent is needed to clean the loading tray, pull the loading tray out from the shaft and use a paper towel or soft cloth dipped in an appropriate amount of cleaning agent to remove any residue on the surface of the loading tray.
4. Do not scratch the surface to prevent damage to the contact surface between the substrate and the carrier tray.
5. Warranty: The equipment provides one-year warranty service under normal use conditions from the date of shipment. Damage caused by non-quality reasons of the equipment itself is not covered by the warranty, but paid repairs can be provided.

### Note

1. Verify the power supply voltage before starting the machine, and the ground wire must be connected.
2. When the working environment temperature is lower than 15°C or idle for more than a week, the spindle should run at low speed (30rpm recommended) for about 5 minutes after the equipment is started to prevent the lubricating oil from condensing and burning the motor.
3. The equipment needs to be adjusted before use.
4. Tighten the screws when using a 50mm pallet

### Prohibited items

1. It is prohibited to place the equipment under conditions such as high temperature, high pressure, corrosion, open flame, etc.!
2. Please close the cavity cover when the motor is running!
3. It is forbidden to touch the spindle and pallet with your hands when the motor is running!

Note: Our company will not be responsible if an accident occurs due to violation of prohibited items.