



厦门嘉利施电子科技有限公司
XIAMEN AOT ELECTRONICS TECHNOLOGY CO.,LTD

Planetary Vacuum Mixer Operating Manual

A. **Model:** AOT-PVM-01

B. **Brief introduction:** This equipment is used in various lithium battery slurry and other types of solvent and powder mixing processes. Small processing capacity, high viscosity coverage, and stirring well are the application characteristics of the equipment.

C. **Working principle:** The equipment adopts the motor as the stirring drive, and drives the stirring rod to stir and mix the slurry in the stirring tank. Other structures and functions such as vacuum and spiral stirrer enhance the mixing effect.

D. **Main features:**

1. The equipment comes standard with a two-axis planetary stirring structure, agitator mixing paddles, and different mixing shaft forms and combinations according to the size of the mixing tank.
2. Designed the positive and negative stirring function, which can achieve high speed mixing of higher viscosity slurry, good mixing uniformity
3. Vacuum environment, effectively remove the bubbles generated by the mixing process, the machine comes with a vacuum system
4. Multi-speed operation, set the stirring speed and time of each section, automatic mixing and shutdown
5. Elastic bracket design for easy operation and safety during vacuum mixing process.



E. Product system composition

This device has the following parts

1. Drive unit (motor);
2. Stirring tank unit;
3. Vacuum unit;
4. Auxiliary organization unit;
5. Control unit;

Appearance (please in kind prevail)



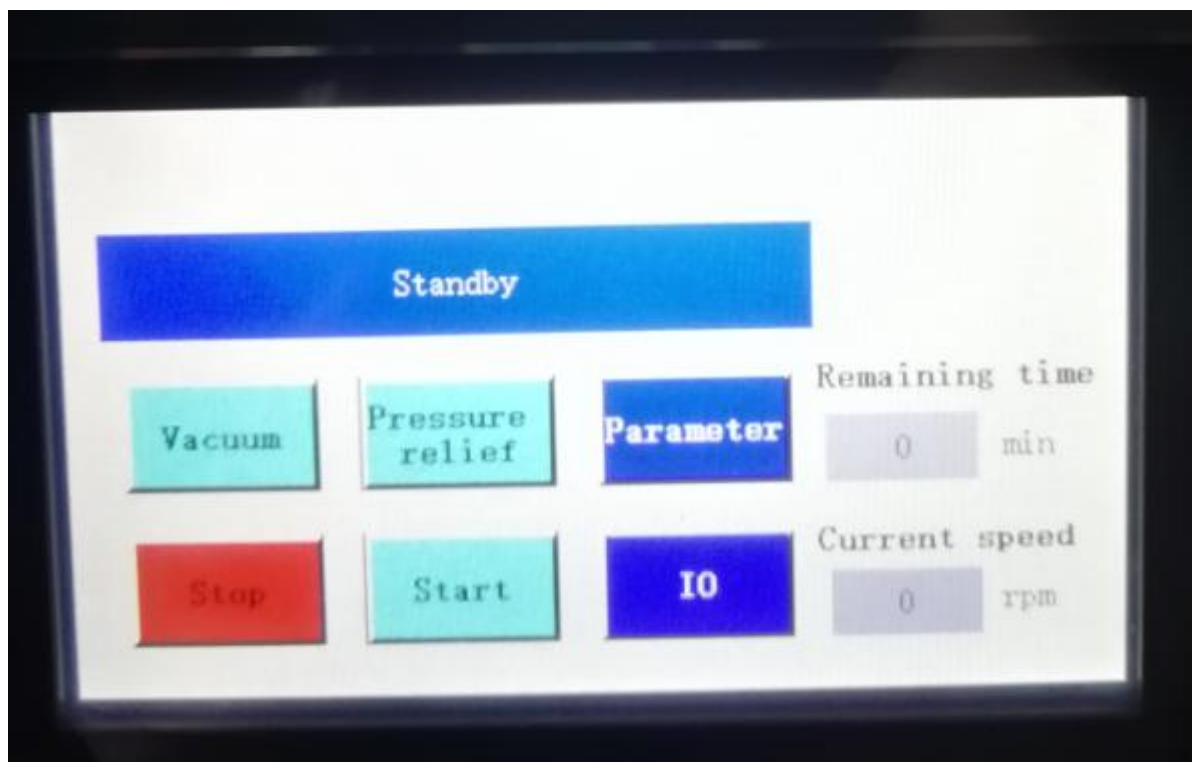
F. Technical Parameters

Power Source	AC110-240V, Frequency 50/60Hz, Power 230W
Operating Environment	Recommended ambient temperature $25\pm 3^{\circ}\text{C}$, humidity 30-90RH, no vibration and electromagnetic interference



Rotate Speed	Max.600rpm
Vacuum	Built-in vacuum pump, vacuum degree 0.08Mpa
Mixing Time	0-600 min can be set
Multi-segment Function	Three segments speed can be set
Applicable Viscosity	Max.10000mpa.S at 600r/min speed
Mixing Tank	150ml/250ml/500ml/1L SUS304 stainless steel optional
Tank Temperature Control	Optional heating and cooling function components
Working Voltage	220V
Dimension	L320mm*W320mm*H560mm
Net Weight	About 30KG

F.1 Touch screen operation overview





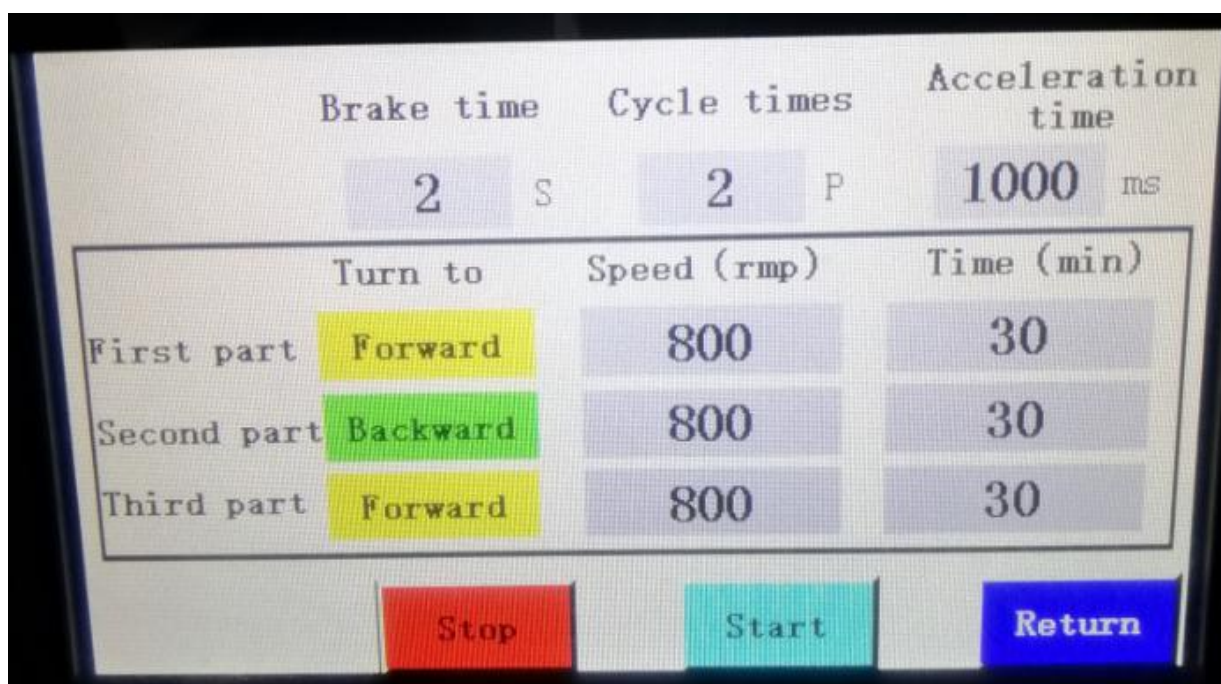
Remaining time: time display for the time to stop, and current motor speed display

Vacuum: Vacuum start button, need to close after the vacuum reaches.

Pressure relief: push this putton to remove the tank.

Standby: Suspend the mixing and the running time.

Start: start stirring



Brake time: the interval time from current segment(is completed) to next segment(start) (value setting ≥ 3 seconds)

Cycle time: set mixing cycles (3 segments is a cycle)

Segment speed setting: speed and time setting for each part,automatic switch to next part when current segment is completed,if you set the time is 0, it means that you don't use this part.

G. Operation process

Start→equipment checking→Ingredients→parameter setting→Mixing→Equipment cleaning→End



▲ Equipment checking:

1. check if the equipment is cleaned, wiped with alcohol, ensure the mixing tank and the stirring rod have no impurities;
2. Whether the equipment parts are complete;
3. The power supply is ready;
4. Whether the equipment is level;
5. Check if the stirring rod is loosen;
6. Check if the coupling is loosen;
7. Check the O-ring of the mixing tank and the O-ring of the mixing vessel for intactness, no damage and deformation;

※ Cautions: Make sure that the stir bar is securely fastened and the screws are not loose.

▲ Ingredients:

1. Mix the slurry according to the specifications;
2. Pour the slurry into a stirred container;

※ Cautions:

- a. Ensure that the mixing vessel is clean and that there are no impurities or oil leakage at the bearing insulation plate before pouring the slurry!
- b. Make sure that the slurry does not exceed the allowable range of the equipment (tank 2/3)!
- c. There is no impurity and residual slurry on the end of the mixing vessel to ensure reliable sealing of the sealing ring!

▲ Mixing:

1. Push the lever to the bottom of the slot, place the mixing tank in the center of the tray, and align the coupling with the motor shaft;
2. Check that the vacuum leakproofness is in good condition;
3. Push vacuum button to start, and stop it after the vacuum is reached;
4. Push the start button and start stirring;

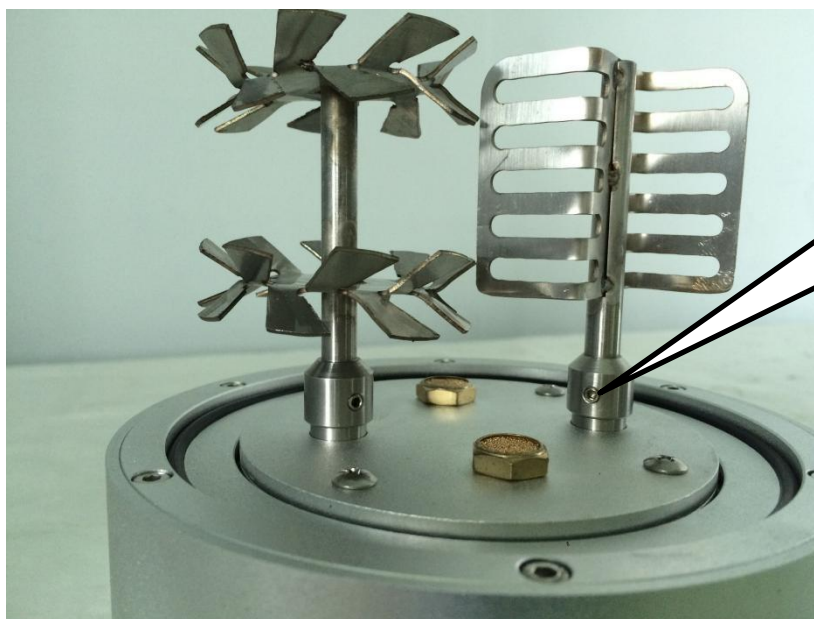


※ **Cautions:**

- a. Please note that the mixing tank should keep upright without deflection, ensuring that the stirring tank O-ring is well sealed!
- b. Make sure that the coupling groove is aligned with the motor shaft boss!

▲ **Equipment Cleaning:**

1. Take off the tank after release the vacuum
2. Turn off the power
3. Clean the mixing tank
4. Clean the operating area of the equipment, wipe the periphery of the mixing tank and clamps with alcohol to ensure that it is not corroded by solvents;



Unscrew the M4
Kimi screw and
remove the mixing
blade to clean

※ **Cautions:**

- a. When cleaning the mixing tank, it is forbidden to penetrate the slurry and water into the stirring top cover gear! Avoid corrosion of unseparated parts, it will affect equipment use and life!
- b. Make sure that the stirring paddle is clean and free of residual slurry!



H. Maintenance methods and precautions

1. It is forbidden to stir the slurry volume beyond the allowable processing range of the equipment;
2. When the equipment is not equipped with a mixing tank, it is forbidden to touch the mixing hole with your hand;
3. The stirring rod and the coupling must be fastened;
4. Pay attention to the abnormal noise caused by impurities and other reasons after the equipment is operated for a long time and stop the inspection and treatment in time;
5. The mixing rod is cleaned after use, no solvent residue is allowed, no dry material is generated, and the fastening state is checked regularly;
6. The mixing tank is cleaned after use to keep the surface clean;
7. Regularly (depending on the frequency of use, generally 90 days) check the seal cover for any residue and clean it in time;
8. Regularly check the screws, nuts, and other fasteners of each part to prevent loosening and prevent quality accidents and personal accidents.

I. Quality assurance and after-sales service

1. Lifetime maintenance, one year warranty.
2. After the expiration of the warranty period, the seller only charges the working hours and transportation expenses for the repair of the equipment, for purchasing the relevant accessories of the equipment, the seller only charges the cost.