

# Hydraulic Coin Cell Crimping Machine Operating Manual

Warning: Do not vacuum the sealer. (If you put it inside the glove box, the antechamber cannot be vacuum to prevent the oil is spilled.)

Model: AOT-HCM-20

## **Product Introduction:**

1. It is mainly used in the laboratory button battery and capacitor materials R&D, for CR20XX series coin cell cases crimping, it can also be used for small batch trial production in factories.

2. Equipped with different molds can be used for battery disassembly, battery electrode pressing, battery powder material tablet making and other operations.

## **Main Feature:**

1. The lower die adopts a high-precision positioning ring limit to control the height of the sealed battery, It is for avoiding the damage of battery and crimping die when the pressure is unstable.

2. The inner cup of the upper mold is provided with a spring mechanism, for ensuring that the battery can be removed when the battery stucked during the crimping, the operation process is pressing the spring mechanism on the top side with a screwdriver.

3. Built-in safety overflow valve, the pressure can be adjusted as needed, and the limited upper pressure can be set to prevent damage caused by excessive pressure (caused by wrong operation), thus ensuring the safe use of the machine.

4. The built-in pressure gauge can observe and accurately control the sealing pressure.

- 5. It is hydraulic type with a pressure of up to 8T. The battery crimping has no vibration and no leakage.
- 6. Specially designed hydraulic structure for saving labor.
- 7. The precise mold design ensures accurate and reliable crimping performance, the solid steel structure

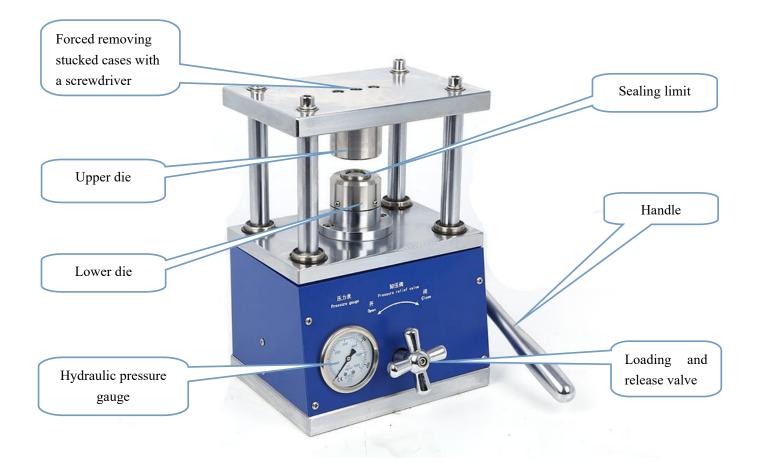
design, which is stable and safe to use.

- 8. Small size, easy to operate, can be placed in the glove box.
- 9. Beautiful appearance, easy maintenance, compact size, easy operation, precise mold, etc.

Website :www.aotbattery.com Email: sales@aotbattery.com Tel :(+86)-592-7161550 Address: No.168, Zhaogang Road, Xiang'an District, Xiamen City, China



# Instructions:



- Battery placement: When the mold is opened, put the battery cases into the positioning groove of lower mold, the negative side faces up, and make it flat. Then hold the oil valve and rotate it clockwise to the limited position.
- Battery sealing: Constantly operate the handle up and down, the lower die will rises and closee with upper die, continuously operating until the pressure gauge is about 80-100kg/cm2, the battery crimping is finished.
- 3. Take out the battery: hold the oil valve and rotate it anticlockwise, the upper and lower crimping die will open automatically. Then the battery can be taken out.(The oil value has a limit point in the direction of bothe clockwise and anticlockwise, which can avoid the excessive rotation and cause the oil leakage)

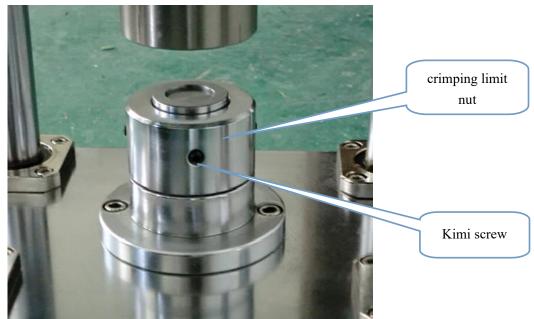
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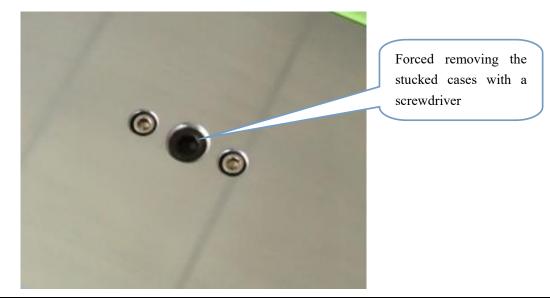
4. Battery crimping height adjustment:

This machine equipped with crimping die which is suitable for CR2032, CR2025 and CR2016. \*Loosen the 4-Kimi screw on the side of the lower die and adjust the height by rotating the nut to find the suitable height for battery crimping(there are marks on the side of mold). After adjusting, tighten the 4-Kimi screw on the side.

\* Another model with no Kimi screw, then you can just rotating the nut to find suitable height for different battery type crimping.



5. Forced remove battery nut: If the battery case is stuck in the upper mold, use a screwdriver to press the center of this screw, and open the mold to remove the battery.



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## **Technical Parameters:**

1. Handle operation force is less than 6kg

2. The normal pressure gauge reading is about 80~100kg/cm<sup>2</sup>, and it has been set at 80~100kg/cm<sup>2</sup> before delivery. If special pressure is needed in special circumstances (maximum pressure 200kg/cm<sup>2</sup> is about 8 Tons of pressure) can be adjusted after consultation with the manufacturer.

3. Imported mold material from Japan

4. Structural material: high-strength chrome steel and alloy aluminum, the surface will not rust after environmental protection plating and spraying treatment.

- 5. Dimensions: 232mm\*170mm\*330mm
- 6. Net weight: 25kg

## Maintenance methods and precautions:

- 1. Wipe the dirt on the guide pillar and other moving parts frequently, keep it clean, and lubricate it to keep it moving smoothly.
- 2. When the machine is not used, keep oil valve loosened to return the moving template(lower die) to the initial position. If the machine do not need to use for a long time, take out the upper die and clean it, then apply oil to keep surface clean and smooth.
- 3. Regularly check the screws, nuts, pins and other fasteners on all parts of the machine to prevent looseness, and prevent the quality accidents and personal accidents.
- 4. During the operation, it is strictly forbidden to put the hand and other body parts to the dangerous place of the guide pillar, slide plate and working area. Two or more people are not allowed to operate it together to avoid accidental injury.

## Solutions for common problems:

- \* The pressure is released during the crimping process or the pressure can not reached to the set value.
- 1. The oil pipe joint components are loosen. Inspect and tighten it.
- 2. Check the seal ring inside the joint. If the ring is damaged, then replace it.
- 3. The hydraulic oil in the jack is lacking. Open the rear cover, keep crimping machine side-lay, take out the cover of fuel filler, and fill with clean hydraulic pressure oil.
- 4. The safety relief valve has a low pressure setting. Set it with higher value.



- \* The button battery has a flaw on the side of the cases.
- 1. There is dirt on the molding surface of the crimping die. Wipe it and the oiling to keep the molding surface smooth.
- 2. The crimping die surface is damaged. Polishing the die or replace it