

Yihui Casting® 艺辉

气动压模机

Pneumatic Vulcanizer manual

型号 Model: Z.M.YM.YM-2



专注于首饰铸造
Specializing In Jewelry Casting

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- If you meet any problem when using this machine, please feel free to contact our salespersons. We will try our best to give you service.
- We are not responsible for the loss including loss in interest and all indirect damages caused by operations due to rule-breaking operations.
- Without our permission, it is prohibited to copy,disseminate or reprint the whole content of this user manual in any form.
- This manual is subject to alterations without prior notice. If you find any mistake or omission in this manual, please inform the supplier you bought the machine from. We will be very grateful for this.

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一、使用注意事项 Precautions

1. 机器使用注意事项 Precautions when use the machine

- 检查接入外部气压源压力是否稳定；
- 机器应放在平稳通风良好的环境下使用；
- 请勿在运行过程中将手伸入上下模之间及触摸上下模。
- 压模完成后请戴手套将模具取出以防被高温烫伤
- 长时间使用时，注意机箱外部余温烫伤
- Check whether the pressure of the external source of air pressure is stable or not;
- The machine should be used in a smooth and well ventilated environment;
- Do not put your hand between the upper and lower molds , also do not touch the upper and lower molds during operation.
- After finishing making the mould, wear gloves to remove the mold to prevent burns from high temperatures.
- When using for a long time, pay attention to the external temperature and burn of the chassis.

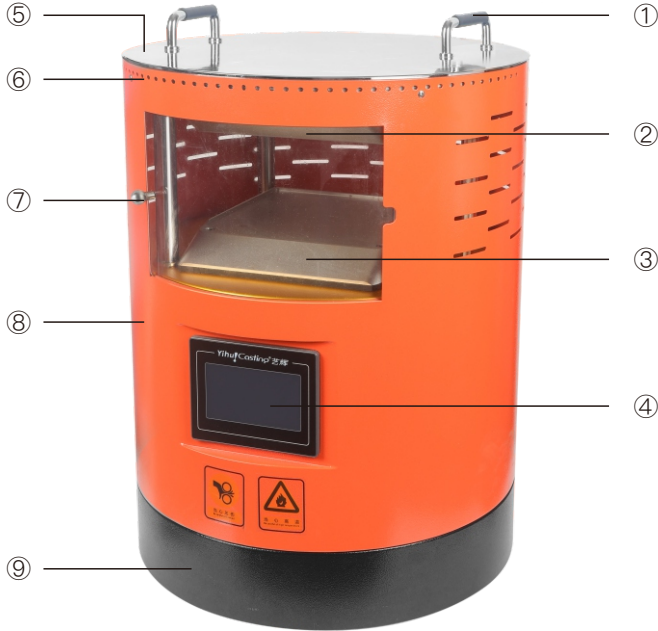
二、机器配置 The machine configuration

1. 机器简介 Machine introduction

YM-2气动压模机为新一代智能型压模机，压模采用气动方式，压模压力与压模时间可根据模具大小进行调节，全程压模位置闭环监控，使压模过程：加温—压紧—闭模—保压—复位的各阶段压力值更智能、合理。图形化界面操作简单，智能化控制更节省了人力并延长设备使用寿命。

YM-2 pneumatic molding machine is a new generation of intelligent molding machine. The compression mold adopts pneumatic method. The pressure of the molding die and the molding time can be adjusted according to the size of the mold. The closed position monitoring of the whole die position makes the molding process: heating. – Compression – closed mold – pressure holding –Reset, The pressure values at each stage are more intelligent and reasonable. The graphical interface is simple to operate, and intelligent control saves manpower and extends equipment life.

三、机器外观 The appearance of the machine

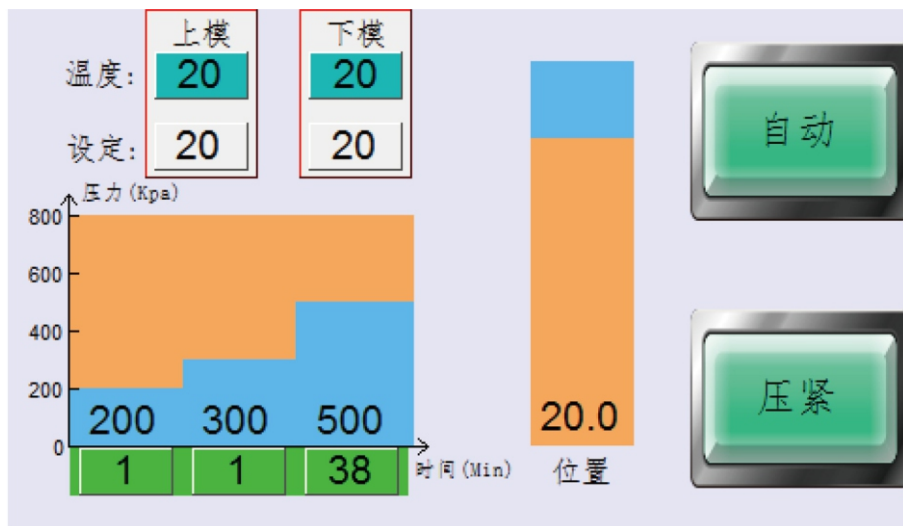


- ① 拉手(搬运时使用)handle (used when transported)
- ② 上压模板(固定不动, 注意高温)Pressing the template (fixed, pay attention to high temperature)
- ③ 下压模板(活动板, 注意高温及被挤压)
The down template (moving plate, pay attention to high temperature and being squeezed)
- ④ 操作屏(可视化参数设定) operation screen (visual parameter setting)
- ⑤ 上盖uppercover
- ⑥ 显示灯(提示各个运行状态)displaylight(prompteachoperatingstate)
- ⑦ 安全门(带感应监测)Securitydoor(withinductionmonitoring)
- ⑧ 主框架mainframe
- ⑨ 底框架bottomframe

机器规格 The machine specifications

型号Model	Z.M.YM.YM-2
电压Voltage	110/220V,50/60HZ
功率Power	1.2KW
压模尺寸Mould size	200*200*100mm
最大气压Maximum Pressure	0.8Mpa
温度范围Temperature Range	20-200°C
外形尺寸Outer size	φ405*570mm
重量Weight	68kg

四、功能说明 Function description



温度一用于显示上、下模当前温度值；

Temperature – used to display the current temperature values of the upper and lower molds.

设定一用于显示上、下模设定温度值；

Setting – used to display the upper and lower die set temperature values；

位置一用于显示当前模具厚度尺寸位置；

Position – used to display the current mold thickness, dimension and position；

偏移—用于校准压模位置；
Offset – used to calibrate the die position；

柱状图Y轴—用于调整三段压模的压力；
Histogram Y-axis – used to adjust the pressure of the three-stage making the mould；

柱状图X轴—用于调整三段压模的时间；
Histogram X-axis – used to adjust the time of the three-stage making the mould；

自动—用于开启压模程序；
Automatic – used to open the making the mould program；

压紧—用于上、下压模板闭合，快速升温；
Press tightly – used to close the upper and lower pressure plates and heat up quickly；

五、操作前准备 Preparation before operation

接通电源前的检查 Inspection before the power supply

输入气压必须大于设定压力值，且不能小于100kpa
The input air pressure must be greater than the set pressure and not less than 100kpa.

六、压模流程 Casting process

- 1.关门(带传感器监测)
- 2.打开电源开关。
- 3.设置上下模设定温度。
- 4.按下压紧键等待上下模达到设定温度。
- 5.按下分离键上下模分开。
- 6.调整好压模气压及时间参数。
- 7.开门，将填好硅胶的金属框放在下模发热板上再关门。
- 8.按下自动键上下模压紧，根据所设定好的压力及时间开始运作
- 9.等待压模完成后上下模自动分开。
- 10.等到气缸回位完成时，开门取模。

1. Close door the door (with sensor monitoring)
2. Turn on the power switch.
3. Set the temperature of upper and lower molds .
4. Press the compression button to wait for the upper and lower molds to reach the set temperature. 5. Press the split button to separate the upper and lower molds.
6. Adjust the pressure and parameters of time.
7. Open the door and place the metal frame filled with silicone on the lower mold heating plate and close the door.
8. Press the automatic button to press the upper and lower molds and start working according to the pressure and time which have set.
9. Wait for the upper and lower dies to be automatically separated after the die is completed. 10. Wait until the cylinder return is complete, open the door and take the mold.

注意： Note：

1. 输入气压必须大于设定压力值，且不能小于100Kpa；气压低于设定值时，比例阀会出现嗒嗒的响声，时间久会造成比例阀会损坏。
2. 在开门的情况下按下自动或压紧键操作无效，屏幕提示“请关门!”。
3. 气缸不处于回位位置时，此时开门机器处于暂停状态气压输出0MPa，一直亮黄灯，屏幕提示“请关门!”。关闭提示后3秒会再次提醒，直到关门机器继续运行。
4. 当机器出现故障时，一直亮红灯，屏幕弹出相应的故障提示，并在刚出现故障的时候蜂鸣器高频工作5秒后停止。

1. The input air pressure must be greater than the set pressure and not less than 100Kpa; when the actual air pressure value is lower than the set value, the proportional valve will rattle, and the proportional valve will be damaged over time.
2. Pressing the auto or hold button in the case of opening the door is invalid, and the screen prompts "Please close the door!".
3. When the cylinder is not in the return position, the door opening machine is in the pause state. The air pressure output is 0 MPa, and it always lights up yellow. The screen prompts "Please close the door!". 3 seconds after the prompt is closed, it will be reminded again until the machine is closed.
4. When the machine malfunctions, it will always show red light, the corresponding fault prompt will pop up on the screen, and the buzzer will stop after
5. seconds of high frequency operation when the fault occurs.

七、报错报警代码说明 Error and Warn description

报错代码 Error code	屏幕显示 Screen prompt	解决办法 Solution
ERR01	驱动无响应 The driver is not responding	检查通讯线是否断路，电路板是否损坏 Check if the communication line is open and the board is damaged.
ERR02	上模热电偶未连接 The upper mold thermocouple is not connected	检查上模热电偶是否损坏，线路是否松动及断开 Check if the upper mold thermocouple is damaged, the line is loose or disconnected.
ERR03	下模热电偶未连接 The lower mold thermocouple is not connected	检查下模热电偶是否损坏，线路是否松动及断开 Check if the lower mold thermocouple is damaged, the line is loose or disconnected
ERR04	上模发热板损坏 The upper mold heating plate is damaged	更换上发热板 Replace the upper heating plate
ERR05	下模发热板损坏 The lower mold heating plate is damaged	更换上发热板 Replace the upper lower heating plate
WARN01	请关门 please close the door	关门 closethedoor

八、灯光及蜂鸣器介绍 Introduction of light and buzzer

空闲状态：绿灯长亮，蜂鸣器不工作。

警告状态：黄灯长亮，蜂鸣器不工作。

运行故障：红灯长亮，蜂鸣器高频工作5秒后关闭。（机器故障）

运行结束：绿灯闪，蜂鸣器低频工作，气缸回位后回到空闲状态。（压模程序完成）

Idle state: The green light is on and the buzzer is not working.

Warning status: The yellow light is on and the buzzer is not working.

Operation failure: The red light is on and the buzzer is turned off after 5 seconds of high frequency operation. (machine malfunction)

End of operation: the green light flashes, the buzzer works at low frequency, and the cylinder returns to the idle state after returning to the position. (compression molding process is completed)

九、日常保养 Daily maintenance

1. 清洁压模室，把上、下压模板和外部渗漏余胶清理干净
Clean the die chamber, and clean the upper and lower pressing templates and the external leaking residual glue:

2. 机器维护拆解方法

A. 先把门把手M3螺丝拆解；

B. 在把边围4颗M3螺丝拆解；

C. 而后把底部4颗M6螺丝拆解，同时把黑壳上
5个M4螺丝拆掉；

D. 把显示屏连接线、主气管及主电源线拔掉；

E. 最后把机壳抽出；

2. Method of Machine maintenance and disassemble

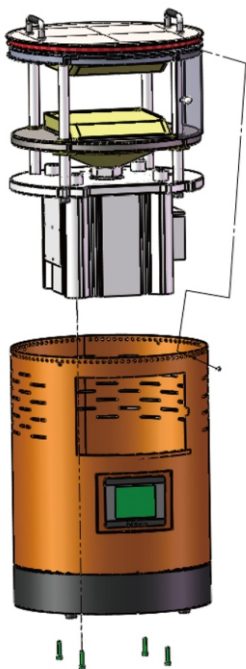
A. First dismantle M3 screws of the handle;

B. Dismantle the four M3 screws in the edge;

C. Then dismantle the four M6 screws at the bottom, while dismantle the five M4 screws on the black case;

D. Unplug the display cable, main air pipe and main power cable;

E. Finally, pull out the case;



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