

AIXIN MEDICAL

USER MANUAL

AX-PMU4 Pressure Moulding Unit

Description:

AX-PMU4 Pressure Moulding Unit, independently designed by Aixin Medical in 2012, is a dental equipment frequently used for teeth treatment and whitening. It features

- Computer chip programming: reliable and steady running;
- Digital display: precise timing, ensuring high passing rate of the moulding;
- Touch switch: easy operation and modern appearance;
- Far infrared heating: instant heating, high efficiency, low energy consumption;
- Adopting advanced material and components for automatic control.

AX-PMU4 Pressure Moulding Unit is easy-operating, high-efficient and durable. It adopts positive pressure to process the moulding plate that is already softened through heating. The pressure is far more intensive than the power of vacuum forming, thus achieving better moulding effect, producing braces or mouthguards that fit more tightly to the model, which is a visible improvement compared with the traditional method of vacuum forming.

Specifications:

Power Supply: 220V(or 110V) $\pm 10\%$, 50Hz

Power Consumption: $< 850W$

Heating time: adjustable between 2-120 sec

Pressing time: adjustable between 2-60 sec

Heating temperature: adjustable between 120 °C ~240 °C (to adapt to different moulding plate)

Working pressure: adjustable between 0.3-0.5Mpa (to adapt to different moulding plate)

Applicable moulding plate: diameter 125mm, thickness 0.8mm-4mm

Instructions:

1. Plug in the machine.
2. Plug in the air compressor or pump as gas resource.
3. Press the power switch on the right side of the machine. The green LED power light is on, temperature display is 210 °C (default heating temperature), and time display is 8 sec (default heating time).
4. Adjust heating time according to the material and thickness of the moulding plate (default heating time: 8 seconds). Press "Heating Time" button under the display window, then press "+" or "-" to adjust heating time (one second each time "+" or "-" is pressed). When the setting is finished, wait for two seconds without any operation, the heating time will be saved automatically. We have recommended heating time for different moulding plates, the user can also adjust the heating time according to their own experience.

Adjust heating temperature: Press "Temp- set" button, the heating temperature will appear on the display window. Press "+" or "-" to adjust heating temperature (one °C each time "+" or "-" is pressed).

5. Pressing time

Pressing time has little relation with moulding itself, but is important for the cooling and fixing afterwards (default pressing time: 10 seconds).

Adjust pressing time: Press "Pressure Time" button under the display window, then press "+" or "-" to adjust pressing time (one second each time "+" or "-" is pressed).

When the setting is finished, wait for two seconds without any operation, the pressing time will be saved automatically.

6. Working pressure can be adjusted by the lever at the lower left part of the back of the machine. The pressure is displayed by the pressure gauge on the control panel (default working pressure: 0.4Mpa). The user can adjust the working pressure according to the thickness of the moulding plate.
7. Place the model at the center of the model holder and turn the model holder anticlockwise into the working area.

8. Put the moulding plate on the plate holder and put the ring on it. Turn the plate holder clockwise out of the heating area, press "work" button. The present temperature (starting temperature) will be displayed. The machine will automatically start heating if the starting temperature is below 80 °C , or start air cooling if the starting temperature is above 80 °C . (80 °C is standard preheating temperature.)
9. The temperature will reach 80 °C after heating or cooling, then the machine beeps, the user now turns the plate holder anticlockwise into the heating area (the heating light will be on when the plate holder is completely in the heating area), and the heating starts.

When the temperature reaches the preset heating temperature, heating-up slows down to keep the temperature steady, and countdown of the heating starts. When the countdown reaches zero, the machine beeps, indicating the heating is finished. (If the temperature drops below the preset heating temperature during countdown, the heater starts working again.)
10. Turn the plate holder into the pressing area, the pressing begins automatically (pressure light will be on). The plate holder will be pressed to the vacuum chamber, and pressing will begin in two seconds. When the pressing countdown reaches zero, the plate holder is released, and the machine starts air cooling for the heating tube. When the temperature drops to 80 °C , the machine beeps again, indicating the present moulding process is completed.
11. On the machine, there is a special "work" button designed to avoid misoperation. It must be pressed to start the moulding process, and the button will be released automatically when the whole moulding process is over. The button must be pressed again if the user would like to start another moulding process.
12. It is recommended to have the unneeded part of the model buried in metal granules during the moulding, especially if the moulding plate is of high hardness.

Caution:

The temperature of the heater can be very high during working. Do not touch.

Parts included:

1. Power cord×1
2. ϕ 5x20/5A fuse×2 (for 220V machine)
or ϕ 5x20/10A fuse×2 (for 110V machine)
3. Manual×1

Warranty

Free maintenance: coverage is for the first year, starting from the day the machine is purchased.