## BP-8170-D

## PLATE VULCANIZING PRESS/PLC CONTROL/ ELECTRIC HEATING WATER COOLING TYPE

This machine applies to the compression and moulding of rubber, plastics, resins and other polymer materials. The machine is equipped with PLC programmable LCD display, which can set pressure, temperature, time, exhausting frequency and the number of seconds. Human-machine interface operating system, real-time display and monitoring of vulcanization process (vulcanization curve), and fully automatic completion of molding program. It has the characteristics of simple structure, wide application and high efficiency.

- 1. Capacity: 50T-100T
- 2. Working mode: Manual and automatic modes
- 3. Temperature range:  $RT \sim 300^{\circ}C$
- 4. Temperature accuracy: $\pm 4^{\circ}$ C
- 5. Controller: PLC programmable color touch screen, man-machine interface operating system, vulcanization curve interface intuitively, dynamic display and monitoring of mold pressure process, can control all mold pressure circulation.
- 6. Heating method: Electro-thermal tube
- 7. Heating-up time: Normal temp.~200°C, about 35min
- 8. Cooling method: Tap water cooling(Water connection port supplied by customer)
- 9. Working layers: It consists of two layers. Upper-layer mould pressing plate heating and lower-layer mould pressing plate cooling
- 10. Size of heating pressure plates: 300x300mm/400x400mm/500x500mm, other sizes can be customized
- 11. Size of cooling pressure plates: 300x300mm/400x400mm/500x500mm, other sizes can be customized
- 12. Distance of pressing plates:150mm
- 13. Material of pressing plate: SKD chrome molybdenum alloy
- 14. Surface of pressing plate:HRC60 surface chromium plating
- 15. Sensor: 0-25 Mpa Specially configured
- 16. Valve plate in special type: Specially configured
- 17. Double proportional valve: Specially configured
- 18. Gradient pressure: 2 stages, 1st and 2nd stage pressure can be preset
- 19. Exhausting frequency: $0 \sim 10$  times can be set
- 20. Exhausting pause : Yes
- 21. Oil pressure system: The proportional hydraulic flow valve circulation control system has the functions of automatic pressure compensation, pressure maintaining and oil pump delayed shutdown. Dual speed working mode, which uses high approach speed for low pressure and low approach speed for high pressure. Multiple exhaust times can be set to ensure that the template pressure reaches saturation.
- 22. Oil pressure media: Mobil 32# anti-freezing hydraulic oil (provided by the customer)
- 23. Cylinder speed: 11~50mm/s with two-speed working mode: close the mould

quickly and lock it slowly

- 24. Dimension: 1500\*1000\*1650(W\*D\*H)mm
- 25. Weight: 1.5T
- 26. Power supply: 3 ∮ , AC380V , 21A, three phases and five-line power supply (Customer-supplied power connection port)
- PLC programmable controller function introduction:
  - This machine has two modes: manual and automatic.
    - 1) Standard automatically mode:
      - Set the required parameters for the molding action:
  - $\rightarrow$ Heating temperature and cooling temperature;
  - $\rightarrow$ The first stage pressure (pre-pressure) and the second stage pressure (pressurization);
  - $\rightarrow$ The time of the first pressure operation and the time of the second pressure operation;
  - $\rightarrow$ Exhaust number N and exhaust time S.
  - 2) Standard operating procedure:

Start the program (only when the temperature rises to the requirement)  $\rightarrow$  the mold plate is automatically clamped  $\rightarrow$  the first stage of pressure (pre-pressure) starts  $\rightarrow$  this period of time is reached  $\rightarrow$  automatic exhaust (the number and time of exhaust can be arbitrarily set)  $\rightarrow$  the second section pressure (supercharging) starts  $\rightarrow$  this period of time is reached  $\rightarrow$  water cooling  $\rightarrow$  cooling time is reached  $\rightarrow$  the molding plate is automatically opened, and the operation is over.

3) Time setting: vulcanization time is in minutes, exhaust time is in seconds, both have optional functions

## Feature

- 1. Fast rising, slow locking, fast falling function of the moving template, fast turning slow of the mold closing and fast turning slow of the exhaust can be adjusted respectively.
- 2. The oil circuit configuration is more reasonable and reliable. When the product is vulcanized and formed, the oil pump motor stops working and has automatic pressure replenishment function and oil pump shutdown delay.
- 3. The deflation time, deflation frequency, heating temperature, and vulcanization time can all be set, making operation convenient. It has two working modes: manual and semi-automatic.
- 4. To meet the process requirements of special rubber materials, there are two programming modes: Program I, the working mode of the conventional plate vulcanization machine; Program II, the working mode of transferring mold.
- 5. The seal ring of original imported hydraulic cylinder, reliable sealing, long service life.
- 6. The electrical system adopts full computer control, which is more convenient, accurate and reliable. Users can choose PLC control imported from Siemens in Germany or Japanese PLC control touch screen.
- 7. Adopting original imported high-pressure oil pump and proportional pressure flow compound valve control, with low noise and low energy consumption.
- 8. The fuel tank adopts an open fuel tank with a flap plate structure, which saves time and effort in maintenance and is more user-friendly.

