## **BP-8172-B**

## ENVIRONMENTAL PROTECTION TYPE LAB INTERNALMIXER / PLC CONTROL

This machine is mainly used for mixing the rubber, plastics, and chemical raw materials, and is also suitable for mixing various low viscosity materials. Specially designed dust-proof patented technology can effectively prevent dust and harmful gases, and prevent environmental pollution and harm.

- 1. Mixing chamber volume: 1L/3L/5L
- 2. Output per pot: 1/3/5kg/ pot
- 3. Temperature range: RT~260°C
- 4. Heating method: Electro-thermal plate
- 5. Controller: PLC programmable color touch screen, man-machine interface operation system, all parameters such as temperature, time, and speed can be set and controlled arbitrarily and the mixing process curve is displayed in real-time
- 6. Mixing time: 0.1S~99M~9.9H. The time can be set, and the buzzer will remind you when it ends
- 7. Refuel method: Rotation
- 8. Rotation angle: 110°
- 9. Rotor speed ratio: 1:1.27
- 10. Mixing shaft type: shear type, hollow shaft with water cooling, graphite wear-resistant sleeves at both ends tightly sealed
- 11. Rotor speed: 0-50rpm frequency converter speed regulation
- 12. Rotor material: SKD chromium-molybdenum alloy, hardness HRC60
- 13. Mixing chamber: Mixing chamber in W-shaped, SKD chromium molybdenum alloy material, inner cavity surface hardness HRC60, mirror hard chromium
- 14. Upper weight: Mixing chamber in M-shaped, SKD chromium molybdenum alloy material, inner cavity surface hardness HRC60, mirror hard chromium. Pour wear-resistant and high-temperature resistant rubber around the weight for tightly sealed
- 15. Pressure: 0.4-0.6Mpa pneumatic pressure material (User provided air compressor)
- 16. Vacuum cleaner: User provided
- 17. Cooling method: 0.2-0.4Mpa tap water cooling
- 18. Gear reducer: heavy-duty fully enclosed oil bath gear reducer
- 19. Main motor: Heavy duty variable frequency speed regulation motor4KW
- 20. Power supply: 3 \( \Phi \) AC380V, 22A, three-phase and five-line power supply (The connection port is provided by the customer.)
- 21. Volume: 1478×786×2134 (W×D×H)mm
- 22. Weight: 925kg

## **Feature**

1. The rotor type of the mixer can be selected from the shearing type and the toothing type, which is suitable for the mixing and dispersion of various rubber materials.

- 2. Three sides of the mixing chamber are independent with mezzanine heating or connecting water-cooling tubes, meeting the process requirements of any milling and refined plastics
- 3. The surfaces of the mixing chamber contacted with the material are adopting high corrosion resistance and high wear-resistant material. With the processing of high frequency, carburization, hardening and tempering, chrome plating and polishing, it becomes hard and durable, hard to wear.
- 4. Strong pneumatic arc pressure mound is matched with the end of mixing chamber. This chamber is of good sealing property, without glue leakage and the mixing can be close to the real working environment
- 5. Thespecially designed patented technology of the mixing shaft and the two ends of the mixing chamber can ensure that the mixed rubber material will not leak for a long time and the sealing performance of the chamber is good.
- 6. The speed motor drive of high pulling torque has an oval mixer shaft with two wings convex edges of lead angle. The angles are dislocated with opposite strength rotating and shearing, excellent mixing effect and efficient performance, significantly shortening the plasticate cycle.
- 7. The human-machine interface operating system of PLC programmable LCD can set and instantly display all the process parameters. The mixing time, mixing temperature, rotor speed and load torque can also be set at will or display instantly, realizing the on-line measurement of mixing performance. Equipped with USB data output interface to connect with a computer for remote monitoring and printing results, enabling online measurement.

