BP-8177-ZB

TWIN-SCREW EXTRUDER/SIDE FEED/VECTOR FEED

This machine adopts PLC programmable controller weighing material system, which can accurately measure the addition ratio of color masterbatch, toner and additives to ensure the consistency of extrusion product performance.

1. Temperature range: ~300℃
2. Screw diameter: Φ20 mm
3. Length diameter ratio: 1:40 optional
4. Screw direction: Rodent type, parallel and same direction
5. Screw rotation speed:0-280rpm
6. Screw material: The mandrel is made of 40CrNiMoA chromium-molybdenum alloy tool steel, and the threaded components are made of W6Mo5CR4V2 wear-resistant alloy steel, with a hardness of HRC60, with conveying blocks, mixing blocks, shearing blocks, banburying blocks, kneading blocks, countercurrent blocks, building block series components, and the mandrel is gradually splined and can be combined according to any material ratio to meet the needs of different extrusion processes
7. Barrel material: The 5-section barrel is made of 45# nitriding steel forgings, lined with a301 wear-resistant alloy sleeve, with hardness of HRC60, and treated by nitriding, quenching and tempering and ultra precision grinding, with surface roughness Ra ≤ 0.4 μm. Wear and corrosion resistance
8. Combination method: The combination mode of the screw suite is building block spiral and the machine barrel is multi-section type, with self-cleaning function
9. Heating zone: 5 cast aluminum heaters fixed at barrel, 1 heater at handpiece, each section with 1 kw heating power, external covered with safety protective wind hood
10. Cooling zone: The entire section of the barrel adopts a soft water circulation cooling system, each segments of cooling water flow rate is adjustable, equipped with self-priming circulating water pump, 304 stainless steel water storage tank, inlet and outlet water pipes and the electromagnetic valve components,etc. Can implement independent temperature control and cooling for each section of the barrel unit
11. Vacuum zone: Water circulation vacuum degassing device, equipped with water ring vacuum pumps, vacuum gauge, regulating valve and other components, forming a non-clogging dehumidification exhaust system
12. Main feeder: Single component vector weighing feeder, accuracy ± 5%, feeding speed 0-50rpm variable frequency adjustable
13. Side feeder: Fiberglass feeding port, using a single component vector weighing feeder with an accuracy of ± 5%, feeding speed 0-50rpm variable frequency adjustable
14. Reduction gearbox: High speed heavy duty hard tooth surface gear transmission, with an integrated structure of gear reduction and torque distribution box, internal

transmission parts adopt imported high load bearing and oil seal, oil-immersed splash lubrication, smooth operation

15. Main frame: The overall frame is welded with steel, which is sturdy and not easily deformed. The bottom of the frame is equipped with movable and brake casters, making it easy to install and move
16. Safeguard: Safeguard functions include: Melt pressure is interlocked with the host for overpressure alarm protection; Melt temperature is interlocked with the host for startup and shutdown protection; Feeding and host interlocking for startup sequence protection
17. Electric control system: PLC programmable color touch screen, man-machine interface operation system, extrusion process can be displayed and monitored dynamically, including temperature control, driving, speed, pressure, interlocking and intercontrol function
18. Power: 3 ϕ , AC380V, 50Hz Three-phase five-wire
19. Dimension: 1950×500×1500（W×D×H）mm
20. Weight: About 285Kg

Feature

1. The screw diameters are 16、20、25、30（optional）, and the length diameter ratio is 10-30 times can be optional.
2. The material of the screw and the charging barrel is 40CrNiMo special tool steel which is hard and wear resistant and has been processed through nitriding, tempering, chromeplate and super-precision grinding.
3. The twin screw adopts the compound mode of build block, including the conveying building block of screw thread, kneading building block, shear building block and remilling etc. The screw suite consisting of these kneading blocks of different alternate angles and width can meet different shearing forces and mixing effects required by multi materials production and can carry out the craft scheduled combination in accordance with any material.
4. The twin screw component combination has the self clean function like mutual cleaning up etc. At high-speed rotating, reducing material wastes during the experimental process and saving clean-up time.
5. The charging barrel is heated by the cast copper heater which is simply maintained and easily installed and costs little heating time and high heat rate, ensuring the required temperature. The charging barrel adopts soft water circulation cooling with a good cooling effect.
6. The host machine transmission box and torque divider are put into one of tight structure, steady operation and large torque, appropriate for any output of power of high shear rate.
7. The handpiece is equipped with a quick converter and a high precision melt temperature and pressure transducer, the pressure of the detecting handpiece being accurate and reliable. The interlock joint control intelligent pressure control system has the function of automatic alarm and automatically-controlled stop.
8. PLC programmable color touch screen, man-machine interface operation system, can dynamically display and monitor extrusion process, including temperature control, driving, pressure, interlocking spreading function. The software interface is intuitive and has a USB data output interface, which is easy to input and print.