BP-8177-ZT

LABORATORY BENCHTOP TYPE TWIN SCREW GRANULATIONLINE/EQUIPMENTCONTROL

The machine is suitable for small batch material mixing, plasticizing and dispersing, with functions of plasticizing homogeneity, color proofing and filling modification and others.

I. BenchTopTwin Screw Extruder/Equipment control

1. Output: according to the raw material process formula
2. Temperature range: ~300℃
3. Temperature accuracy: ±1℃
4. Screw diameter: 20mm
5. Length diameter ratio: 1:25
6. Screw direction: Rodent type, parallel and same direction rotation
7. Screw speed: 0-300rpm frequency control
8. 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.
9. Barrel material: The 4-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
10. 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
11. Heating region: Charging barrel area has 4 aluminum heaters, 1 heater in the handpiece and the outside covered by safety fan cowl
12. Cooling system: 4 groups of multi wing fans with super static forced air cooling
13. Melt pressure: High precision pressure sensor to detect the change of head pressure, interlocking control host running
14. Melt temperature: High precision temperature sensor to monitor the melt temperature change
15. Feeding device: Adopting double screw metering type forced feeding, equipped with a horizontal mixer, the feeding is uniform and stable, and it is not easy to bridge. The feeding speed is adjustable by frequency conversion from 0-50rpm, and a sliding rail type fast discharge device is installed
16. Reduction gearbox: High speed heavy duty hard tooth surface gear transmission, gear reduction and torque distribution box is integration structure, internal transmission parts adopt imported high load bearing and oil seal, oil-immersed splash lubrication, smooth operation
17. Drive motor: Heavy duty gear reduction motor, constant torque power output control
18. 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.
19. Electric control system: PID/LED/RKC intelligent digital temperature control, high precision digital instrument display all extrusion parameters including temperature control, driving, speed, pressure and interlocking and intercontrol function
20. Power supply: 3 ϕ ,AC380V, 50Hz three-phase and five-line
21. Dimension: 1400×800×1120(W×D×H)mm
22. Weight: About 215KG

II. WaterTank

1. Water tank material: 304 stainless steel bath
2. Hanging line rack: 4 groups of guide roller combinations, can adjust water depth and distance
3. Fan: 0.15 kw mute blow dry fan
4. Water level control: Stainless steel water level control valve
5. Dimension: 1250×350×500（W×D×H）mm
6. Weight: 28Kg

III. Pelletizer

1. Strand quantity: 3 strands
2. Cutting length: 1～3mm cutting tools clearance is adjustable
3. Traction speed: 1～25m/min frequency adjustable
4. Cutting speed: 1～20Kg/h adjustable
5. Cutter material: High speed alloy steel
6. Motor: 1.5Kw precision speed regulating motor
7. Power: 3 ϕ ,AC380V, 10A
7. Dimension: 420×670×665（W×D×H）mm
8. Weight: 125Kg

■Information: Manual and Product quality assurance card

Feature

1. The screw diameters are 16 20 25 30(optional), and the length diameter ratio is 10-30 times can be optional.
2. L/Dlength ratio is 32 40 44 48 52 and 60 times optional.
3. 16mm24L/Dtwin screw for powder coating.
4. The barrel is a “clamshell” design that can be split, easy to open for cleaning or observation.
5. Screw elements are a “block-style” free combination.
6. The barrel and screw are made of high-grade tool steel (other materials are optional).
7. Electric heating and water cooling of the barrel section (16mm model is air-cooled).
8. Volumetric feeding hopper, single screw type or twin screw type forced feeding optional.
9. Optional weightless feeding system.
10. Flexible control panel ensures convenient observation at all angles.
11. The observation mirror above the hopper is convenient to observe the material level in the hopper from a distance.
12. Temperature display and control device in each temperature control zone.
13. Melt pressure measurement and display device.

14. Standard single exhaust and optional additional exhaust.
15. Can be connected to the side feeder, equipped with glass fiber port, liquid injection port and other additional openings.
16. Optional LCD computer control, including all parameter settings and storage.
17. It can be connected to water bath and pelletizer to form a laboratory pelletizing line.
18. Can be connected to other downstream equipment to form casting film line, film blowing line, bottle blowing machine, etc