

HST-SJ-20/40 Conical twin-screw extruder Technical data



Scope of application

It is used to study the thermal stability, shear stability, flow and plasticizing behavior of thermoplastic materials, It can continuously, accurately and reliably measure the rheological properties of the system in a process similar to the actual processing, and can also complete the curing characteristics test of thermosetting materials. The conical twin screw extruder is composed of main control unit and conical twin screw unit, which can simulate the production process of conical twin screw extruder in laboratory. With the help of different molds, it can directly extrude plates, pipes and profiles for experiments.

Technical specification:

1、 Mobile measurement and control host platform

Control mode: Industrial bus

Installation: Split installation

Operating system: Windows 7

Electric motor: Japan Panasonic

Power: 5.0kw

Electric motor speed: 2000 rpm

Electric motor controller: 5.0 kw

Reducer: China Hubei Kefeng

reduction ratio: 10:1

Power output rotating speed: 0.1 ~ 200 r/min

Rotating speed control accuracy: 0.05%F.S

Torque measurement method: Cantilever dynamic torque measurement

Torque measurement range: 0 ~240Nm

Torque measurement accuracy: 0.1%F.S

Dynamic temperature control accuracy: $\pm 0.5^{\circ}\text{C}$

Dynamic temperature control accuracy: $\pm 0.1^{\circ}\text{C}$

Temperature control: 5 temperature measurements, with 4 temperature control channels.

Melt pressure measurement range: 0.1 ~ 100 Mpa

Melt pressure measurement accuracy: 0.5 % F.S

Software: Polymer melt viscosity measurement data processing software

2、Movable cone-type twin-screw extrusion platform

Screw barrel separation structure: Pull out rotary type

Screw type: Two-cone type

Screw material: 38CrMOALA

Screw diameter: 20/40 mm

Heating method: Electric heating

Effective length of screw: 325mm

Double tube screw barrel: 20-40mm

Temperature control system: Taiwan Delta

Max temperature: 350°C

Temperature sensor: T-type thermocouple

Total heating power: 3.2 kW

Heating zone: 4 zones

Type of cooling: Air compression

Feeding adjustment: Manual

Feed method: Volumetric feeder

Output: 1 -10 kg/ h

Mold: Broadband mold: thickness 1.5mm, width 60mm