

## MELT FLOW RATE TESTER/EQUIPMENT CONTROL

The tester used to fusion viscosity lower thermoplasticity plastic quality control, the test method is under prescribe temperature, load and piston in the cylinder and so on condition, use time test method measure fusion plastic through prescribe length and diameter hole speed, to evaluate the uniformity of the polymer flow rate.

### Standards:

- ASTM-D1238: Standard test method for thermoplastic melt flow rate.
- ISO-1133: Determination of thermoplastic melt mass flow rate (MFR) and melt volume flow rate (MVR).
- GB/T3682: Thermoplastics melt mass flow rate and melt volume flow rate measurement

1. Measuring method: Quality method/volume method
2. Measure scope: 1.0~100g/10min, 0.01~350cm<sup>3</sup>/10min
3. Temperature control scope: 100~450℃
4. Temperature control precision:  $\pm 1^{\circ}\text{C}$
5. Temperature recovery time: <4min
6. Cutting method: Auto/Key cutting materials
7. Timing accuracy: 0.01s
8. loading method: Manual
9. Display method: PID control liquid crystal display (LCD)
10. Weight: 1000g, 2160g, 3800g, 7160g, 10000g, 12500g, 21600g (equipped with one of them)
11. Cylinder:  $\text{Ø}9.5504\pm 0.0076\text{mm}$
12. Piston:  $\text{Ø}9.4742\pm 0.0076\text{mm}$
13. Hole: Out diameter  $9.5\pm 0.02\text{mm}$ , Inner diameter  $2.0955\pm 0.0051\text{mm}$ , length  $8.00\pm 0.02\text{mm}$
14. Power: 1  $\phi$ , AC220V, 3.5A
15. Dimension : 620×560×895 (W×D×H) mm
16. Weight: 68kg

### ■ Accessories

- 1) 1 cleaning brush
- 2) 1 cloth cleaning rod
- 3) 1 tamping rod
- 4) 1 observation mirror
- 5) 1 electric wood feeding funnel
- 6) 1 pressurized weight rod
- 7) 2 measuring gauges for fine hole molds

8) Mercury temperature: 150 °C, 200 °C, 250 °C, 300 °C (one can be selected)

### **Feature**

This machine has a full color touch screen, the bilingual operation interface with a tight and attractive structure and a steady and reliable control system.

The control software can realize parameter setting, constant temperature, cutting, measurement, calibration, auto loading weights, timing, result display and melt density calculation. Data can be inquired and printed after finishing test.

It has a fast heating-up speed, low starting value and high precision of constant temperature. It can rapidly restore to the constant temperature state after adding materials. It has temperature upper protection, promptings of constant temperature and restoring sound.

The software system has the function of storing test parameters and can store multi-group of test parameters like quality method and volume method. One machine has multiple functions: timing ,cutting, auto-printing loading result.

