

UBO

UP-6178A Lab Filterability Testing Machine



Description:

This machine is suitable for the mixing and processing of engineering plastics, modified plastics, masterbatch, titanium dioxide and other high polymer. It has the characteristics of even dispersion, plasticizing and coloring, filling and modification. The pressure sensor of the product can accurately measure the pressure change before and after the melt pump. The computer-controlled human-machine interface operating system can easily set and display all process parameters. The interface is intuitive, the data is accurate, and the pressure value is calculated automatically, which makes the blending quality of masterbatch or composite more accurate and standard.

Parameters:

Screw diameter: 30

Screw speed: 0-80rpm frequency control

L / D ratio: 1:30

Maximum working temperature: ≤ 300 °C

Temperature control accuracy: ± 1 °C

Filter pressure accuracy: $\pm 2.5\%$

Maximum output: 1-5kg / h

Screw material: 38CrMoAl chrome molybdenum alloy special tool steel, the surface is treated by tempering, nitriding, chrome plating, polishing and ultra precision grinding, with hardness hrc55-60, roughness $R_a \leq 0.4 \mu m$, nitriding layer depth $\geq 0.6mm$, barrel material: 38CrMoAl chrome molybdenum alloy special tool steel, the surface is treated by tempering, nitriding, chrome plating, polishing and ultra precision grinding, with hardness hrc55-60, roughness $R_A \leq 0.4 \mu m$, nitriding layer depth $\geq 0.6mm$

Heating area: cast copper heater, cast copper heater in barrel area 4, heater in head area 1, with copper fins in each area, covered with stainless steel safety hood

Heating / cooling device: electric heating, air cooling, 4 sets of multi wing fans, super static forced air cooling

Melt pump: Bart high temperature melt pump, applicable materials: PP, PA6, PA66, pet, PS, PE

Melt pressure: accurately monitor the pressure fluctuation and flow change, i.e. the difference between pre filtration pressure and post filtration pressure

① Melt pump motor power 0.75 kw

② Measurement range of melt pressure

Before pump: 0-100 bar (pay attention to pressure display unit)

After pump: 0-350 bar (pay attention to pressure display unit)

③ Melt pressure measurement accuracy $\pm 0.5\%$ F.S

④ Repetitive accuracy of melt pressure measurement $\pm 0.1\%$ F.S

Frame: national standard channel steel profile frame; integrated high bearing shock caster

Drive: Dongguan Rongbang motor

Extrusion: independent temperature control fan; movable 304 stainless steel hopper

Screen changer: manual plate screen changer; screen material: 38CrMoAlA, nitriding treatment (nitriding layer 0.5-0.6mm, hardness hv950-1050)

Filter screen: provided by the customer

Electrical automatic control system

① 3 * 380V, AC 50Hz.

② AC contactor and motor switch, control button is Schneider product; Schneider leakage protection switch

③ The main motor is AC motor, 3KW Schneider servo, and the main speed regulating device is Schneider AC converter.

- ④ Omron intelligent temperature control instrument can track the material system through PID self-tuning system to achieve the most control efficiency
- ⑤ The main circuit breaker switch is Fuji circuit breaker.
- ⑥ The solenoid valve adopts SNS solenoid valve.
- ⑦ The heating is controlled by the temperature control meter through the solid-state relay, and the high-temperature resistance wire is used, and the temperature resistance can reach 800 °C
- ⑧ Thermocouple adopts temperature compensation wire to prevent signal loss during transmission.
- ⑨ All parameter settings, system control, data recording, etc. shall be operated and displayed by computer (the seller can provide software, and the computer buyer can provide by itself). Xinjie PLC programmer and touch screen; USB communication interface of equipment.