

HST-TANK Constant Temperature Water Tank



Picture just for reference

Application

The constant temperature water tank is suitable for the long-term constant pressure test, instantaneous burst test and the determination of the failure resistance time of thermoplastic pipes under long-term constant pressure of various plastic pipes at various temperatures. It is the necessary testing equipment for scientific research institutes, quality inspection departments and pipe manufacturers.

Executive standard

1. GB/T 6111-2018 "Test method for internal pressure resistance of thermoplastic pipes for liquid transportation";
2. ISO 1167-1996 "Test method for internal pressure resistance of thermoplastic pipes for fluid transportation";
3. GB/T 18252-2000 "Determination of long-term hydrostatic strength of thermoplastic pipes by extrapolation of plastic piping systems";
4. GB/T 15560-95 "Hydraulic instantaneous blasting and pressure test methods for plastic pipes for fluid conveying";
5. ASTM D1598-2004 "Pipe, Plastic, Under Constant Internal Pressure, Time-to-Failure of (No S/S

Document)";

6. ASTM D1599 "Standard Test Method for Resistance to Short-Time Hydraulic Pressure of Plastic Pipe, Tubing, and Fittings1"

Instrument Features

1. The thermal insulation system adopts the inner tank as a whole for thermal insulation, and the material adopts two thermal insulation materials, which have good thermal insulation performance and significant energy-saving benefits for long-term use. When the water temperature is 95 °C, the outer box is still close to room temperature, which greatly improves the safety of the whole machine, and at the same time saves more than 70% of power consumption;
2. The pipeline adopts a circulating spray system, and the overall pipeline system is made of 304 stainless steel.
3. External (or built-in) heater, high heat exchange efficiency, no need to stop the heater during maintenance, repair and maintenance, and will not affect the normal operation of the test
4. The opening method of the box cover is pneumatic opening, which should meet the space for laboratory use after opening;
5. The opening angle (opening size) of the box cover can be stopped at will, and it has reliability, safety and convenience;
6. The box cover is sealed with silicone rubber strips, and there is no outgassing at high temperature;
7. The bottom of the structural frame has large bearing weight and strong deformation resistance;
8. Stainless steel inner tank, equipped with stainless steel pump body structure frame bottom, large bearing weight and strong anti-deformation ability.
9. The material liner is 2mm thick stainless steel plate.
10. Thick insulation layer above 85mm, and measures to reduce thermal bridge (short circuit), heat preservation and power saving.
11. The inner and outer tanks of the water tank are made of 304 stainless steel.
12. German circulation pump, large water tank circulation capacity 135 L/min (rated). Depends on tank size
13. The temperature control system adopts the brand leakage protection device to protect personal safety in time.
14. The constant temperature water tank can circulate automatically or connect to the external circulation system.
15. The water tank has its own heating control system, and the pressure input port is determined by the user (such as 10 ports).
16. If the refrigeration system is selected (the temperature can be lowered from room temperature to 20°C), the high-power industrial compressor refrigeration system,

17. The inner wall of the water tank is equipped with high-pressure ports, and each port is equipped with high-pressure and high-temperature hoses. High pressure hose can work at 95 degrees

18. The water tank adopts a spray structure. The circulating pump draws out the hot water from the bottom and sprays it from the top. This cycle goes back and forth, and the temperature of the water tank is always kept in balance.

19. The temperature control system adopts the most advanced microprocessor and has an RS232 interface, which can communicate with the computer in real time and transmit the temperature to display on the computer interface.

20. The water tank cover adopts double cylinder auxiliary lifting method, which is stable, safe and reliable.

21. The heating system of the water tank adopts a vertical heating structure on the back, which has the characteristics of safety and convenient maintenance.

Technical parameter

HPT constant temperature water tank	
Model	HST-Tank
Maximum test tube diameter	D16----D630
Number of test routes	Depends on the number of hosts
Test temperature	Temperature control range with refrigeration system: 20°C--95°C (optional)
Temperature control accuracy	±1°C
Liner material	All 304 stainless steel inside and outside
Liner size	Specific according to the contract
Heating power	9KW (regular) (specifically according to the contract)
Open tank lid system	The water tank above 315 is controlled by the cylinder