

Auto Freezing Point Tester



ASTM D2386, GB/T 2430

- Used to analyze the freezing point of aviation fuel.
- > Fully meeting the precision requirements.
- Can be widely used in the production and use of aviation fuel and laboratories.



Introduction

- 1. **Freezing Point**: Under Specified conditions, aviation fuel is cooled to form solid hydrocarbon crystals. And then the fuel is heated up. The lowest temperature when the hydrocarbon crystals disappear is the freezing point of aviation fuel.
- 2. The meaning and use of freezing point: The freezing point of aviation fuel is to ensure no solid hydrocarbon crystal in the fuel. The temperature in the aircraft fuel tank usually decreases during flight, and the degree of decrease depends on the flight speed, altitude, and flight duration. Therefore, the freezing point of the fuel must always be lower than the minimum operating temperature of the fuel tank.
- 3. **Product Usage**: It analyzes the freezing point of aviation fuel and fully meets the precision requirements. It can be widely used in the production and use of aviation fuel, laboratories and scientific research departments.

Technical Features

- 1. It meets the requirements of ASTM D2386 and GB/T 2430 standards.
- 2. The double-wall test tube fully meets the standard requirement. The observation is clear, intuitive, and not affected by the environment.
- 3. Magnetically coupled stirring can seal the test tube, isolate the humid air, prevent the interference of ambient humidity on the freezing point, and avoid "false freezing point."
- 4. **Continuous linear stirring**: continuously adjustable, no vibration, does not interfere with crystal formation.
- 5. **Freezing point detection method**: Infrared optical fibre-conducted photoelectric detection, machine vision assisted detection, and manually assisted judgement are integrated. It makes the freezing point value more accurate and reliable, and eliminated the defect that the freezing point of special oil samples cannot be determined.
- 6. The live condition of freezing point detection can be stored as videos or pictures through machine vision for the record or future comparison reference.



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SPECIFICATIONS

Standards	
ASTM D2386, GB/T 2430	
Technical Details	
Temperature Range	-70°C to room temperature
Temperature Solution	0.1°C
Number of Test Samples	2
Test Tube Type	double-wall test tube
Detection Method	Infrared optical fibre-conducted photoelectric detection, machine vision assisted detection, and manually assisted judgement
Temperature Sensor	High precision PT100
Cooling Method	Dual compressor refrigeration
Stirring Method	Sealed magnetic coupling stirring, linear and continuously adjustable speed, no vibration
Power Supply	AC220 ± 10%V 50Hz
Power	< 2.5kW
Operating Environment	
Ambient Temperature	5°C to 40°C (41°F to 104°F)
Relative Humidity	No more than 80% at 35°C
Working Place	Indoor