



Model: CCS-II

Cold Cranking Simulator

The instrument is used to measure the apparent viscosity of engine oil at low temperature (- 35 °C ~ - 5 °C).

Method summary: Drive a rotor closely matched with the stator by a DC motor, and fill the gap between the rotor and the stator with samples. The temperature is controlled by the temperature control system, and the motor speed is corrected with standard oil to make it a function of viscosity. Determine the sample viscosity by measuring the rotation speed.

The rotor and stator system of the instrument uses a thermoelectric temperature control system. Compared with the previous model, the temperature control is improved, the preheating time is reduced, and the measurement accuracy is improved. The compact structure is easy to install and use.

I. Main features

- ◆ Automatic detection of rotation speed and control current reduces human error;
- ◆ Adopting imported motor drive with high precision;
- ◆ Semiconductor refrigeration systems can quickly test any temperature;
- ◆ The result will be calculated automatically after the calibration of standard oil;
- ◆ Computer control, Windows operating system, XP, Win7, it can be connected to the printer to print the results;
- ◆ Improved rotor, low torque test status and high repeatability;
- ◆ Automatic generation of calibration curve and direct display of test viscosity results;
- ◆ All testing process is fully automatic control, no need for manual conduct. Automatic shutdown and temperature rise after test;
- ◆ The instrument automatically recommends the refrigeration temperature;
- ◆ The rotary encoder detects the rotation speed;
- ◆ Viscosity measurement range: 1500~25000CP;
- ◆ 20 standard oil results can be edited;
- ◆ Equipped with special cryogenic refrigeration equipment;
- ◆ Temperature control accuracy can reach 0.02°C;
- ◆ Standard oil calibration deviation can be automatically calculated to help users verify the accuracy of calibration data;
- ◆ Patent of Lubricant Apparent Viscosity Tester Using Semiconductor Refrigeration, Patent No.: ZL201822076893.4
- ◆ Patent of lubricating oil apparent viscosity tester with automatic sampling and automatic cleaning structure, patent number: ZL201822076944.3.

II. Technical specifications

1	Reference standard	GB/T6538, ASTM D2602,ASTM D5293
2	Refrigeration method	Semi-conductor
3	Circulation method	multifunctional plastic steel pump
4	Temp.controlling method	Digital PID temperature controller
5	Detection method	Automatic injection,automatic cleaning,automatic testing
6	Data processing	Automatic storage
7	Temp.controlling range	-5℃ -10℃ -15℃ -20℃ -25℃ -30℃ -35℃
8	Power supply	AC220 V 50Hz
9	Power consumption	1000W
10	Dimension	780*560*950mm3
11	Weight	40KG