## Advanced Instruments Co.,Ltd.





## **Fully Automatic Cold Cranking Simulator**

This instrument uses semiconductor refrigeration to test the apparent viscosity of lubricating oil. It has an automatic sampling and cleaning structure, including dynamic sampling, automatic cleaning, automatic testing, automatic storage, and printing.

## Model: CCS-III I.Main features

- 1. Automatically detect speed and control current, reduce human error;
- 2. Driven by imported motor, high precision:
- 3. Semiconductor refrigeration system can quickly test any temperature;
- 4. The result is automatically calculated after calibration by standard oil;
- 5. Computer control, Windows operating system, XP, Win7, can be connected to a printer to print results;
- 6. Improved rotor, low torque test state, high repeatability;
- 7. Automatically generate calibration curve and directly display the test viscosity result;
- 8. All test processes are controlled automatically without manual operation, and the test will automatically stop and increase temperature after the test;
- 9. The instrument automatically recommends the refrigeration temperature;
- 10. Rotary encoder detects speed;
- 11. Viscosity measurement range: 1500~15000CP;
- 12. The results of 20 standard oils can be edited;
- 13. Equipped with dedicated low-temperature refrigeration cycle equipment
- 14. It can automatically calculate the standard oil calibration deviation to help users check the accuracy of the calibration data;
- 15. Patent of lubricating oil apparent viscosity tester using semiconductor refrigeration, patent number: ZL201822076893.4
- 16. Patent of lubricating oil apparent viscosity tester with automatic sampling and automatic cleaning structure, patent number: ZL201822076944.3.

## II.Technical specifications

Applicable standard	GB/T6538, ASTM D2602,ASTM D5293
Refrigeration method	Semi-conductor
Circulation method	multifunctional plastic steel pump
Temp.controlling method	Digital PID temperature controller
Detection method	Automatic sampling,automatic
	cleaning,automatic test
Data processing	Automatic store
Temp.controlling range	-5℃ -10℃ -15℃ -20℃ -25℃ -30℃ -35℃
	(optional -40℃)
Power supply	AC220 V 50Hz
Working units	16 tubes
Temperature controlling accuracy	±0.02℃
	Refrigeration method Circulation method Temp.controlling method Detection method  Data processing Temp.controlling range  Power supply Working units