

SYD-2806G-1 Automatic Softening Point Tester

Summary

The instrument is designed and made as per *GB/T4507 Standard Test Method for Softening Point of Petroleum Asphalt* of national standard of People's Republic of China , *T0606-2025 Asphalt Softening Point Test (Ring-and-Ball Apparatus)* in the Industrial Standard of People's Republic of China *JTG 3410-2025 Specification and Test Methods of Bitumen and Bituminous Mixture for Highway Engineering* and refer to *ASTM D36 Standard Test Method for Softening of Bitumen (Ring-and-Ball Apparatus)* It is suitable to determine softening point of petroleum asphalt, coal pitch liquid petroleum asphalt, and various asphalts. It can be widely used for asphalt manufacturing companies, highway and bridge construction companies, relative colleges and universities, and scientific research institutes.



Main technical features

- ◆ This instrument adopts 32-bit ARM processor, color touch LCD screen, laser detection and other advanced technologies. It has the characteristics of homogeneous medium temperature, stable medium heating rate, automatic detection of softening point, excellent repeatability and reproducibility of test results.
- ◆ Adopt the bottom heating plate heating method, the heating rate to be stable at $(5 \pm 0.5) ^\circ\text{C}/\text{min}$.
- ◆ The detection algorithm is advanced, and can filter the impact of bubbles generated during the heating process of the medium on the test results.
- ◆ Different media can be selected for testing in the software, with water medium testing temperature is $(20-90) ^\circ\text{C}$ and glycerol medium testing temperature is $(70-160) ^\circ\text{C}$.
- ◆ It can do two samples at a time, automatically finish the softening point test process, with temperature rise curve display, automatic calculation of average value, measurement results is stable and reliable.
- ◆ Equipped with an infinitely adjustable magnetic stirring device, it is convenient to adjust the stirring speed in real time to ensure the temperature uniformity of the bath.
- ◆ The software has a temperature correction function and is equipped with a high-precision mercury thermometer. Users can regularly perform temperature self calibration to ensure that the temperature display is consistent with the temperature measured by the thermometer.
- ◆ The instrument is equipped with a USB interface, which can export historical test data.

Main technical specifications



1. Power supply: AC (220±10%) V, 50Hz

2. Temperature resolution: 0.1 °C

3. Measurement range:

(1) 5 °C ~ 80 °C (softening point ≤ 80 °C)

(2) 32 °C ~ 160 °C (softening point > 80 °C)

4. Heating mode: Heating using bottom electric heating plate method

5. Heating rate:

When the medium is water, it will automatically adjust to (5 ± 0.5) °C/min three minutes after the start of the experiment;

When the medium is oil, it will automatically adjust to (5 ± 0.5) °C/min after heating to 60 °C

6. Stirrer: the electromagnetic stirring speed can be adjusted continuously

7. Cubage of beaker: 1000ml

8. Data display: Built in industrial computer LCD screen display

9. Data export: USB

10. Ambient temperature: 15 °C ~ 35 °C

Relative humidity: ≤ 85%

11. Dimension: 240mm×400mm×400mm