

AUTOMATIC ASPHALT PENETROMETER CT-A2000

STANDARD: AASHTO T49, ASTM D5, EN 1426

Automatic Asphalt Penetrometer CT-A2000 is a high-precision intelligent testing instrument mainly used to determine the penetration of road petroleum asphalt, modified asphalt, and the residue of liquid petroleum asphalt or emulsified asphalt after evaporation. It can automatically calculate the asphalt penetration-related values via a formula method.

Besides asphalt testing, the instrument is also widely applicable to the food industry, transportation and highway engineering, and other industrial sectors for testing the penetration of various viscous materials.



FEATURES

- ◎ **Precise measurement and control**
 Temperature control accuracy: $\leq \pm 0.1^{\circ}\text{C}$, timing accuracy: $\leq \pm 0.1\text{s}$, and displacement accuracy: $\leq \pm 0.1\text{mm}$, fully meeting the strict requirements of standard tests.
- ◎ **Easy operation**
 It adopts a touch screen, allows parameter adjustment. Touchscreen and rotary knob for quick and precise needle adjustment.
- ◎ **Intelligent test result judgment**
 After the test, click "Data Details" and the instrument will automatically determine whether the test results meet the tolerance.
- ◎ **Multiple interfaces and large storage**
 Supports USB, RS485 and Ethernet ports; stores up to 200 test records; enables data export, printing and analysis.
- ◎ **Integrated water bath**
 Integrated constant-temperature water bath with heating, cooling and circulation functions; no additional water bath required, saving laboratory space.
- ◎ **User-friendly design**
 The screw lifting system operates smoothly and is easy to disassemble and maintain. Standardized accessories allow convenient later replacement and upkeep.



TECHNICAL SPECIFICATIONS

Measuring range	0~450 Penetration [Temperature range] 0.00 ~ 99.99°C; [Temperature control range] low temperature: 20°C lower than ambient temperature;
Constant temperature water bath	high temperature: 60.00°C; [Display resolution] 0.01°C; [Temperature control accuracy] $\leq \pm 0.1^{\circ}\text{C}$;
Time control	[Time display and control] 0-60 seconds (arbitrary setting); [Display resolution] 0.1 second; [Timing accuracy] $\leq \pm 0.1\text{ s}$;
Displacement	High precision LVDT displacement sensor and split structure are adopted, and there is no friction when the needle rod falls. [Range] 0-50mm; [Display resolution] 0.01mm (0.1 penetration); [Relative displacement accuracy] $\leq \pm 0.1\text{ mm}$;
Store data	200 groups
Standard needle	2.5g \pm 0.05g, meeting the requirements of T0604-2011;
Transmission port	USB port; RS485 communication port (ModBus protocol); Ethernet port
Data post-processing	Test result judgment; Test result data analysis; USB data result export
Dimensions	390mm \times 310mm \times 575mm
Power supply	220 \pm 10%VAC/50Hz
Total power	Max. 350 W
Net weight	12.5 Kg