

SYD -0719 Automatic Wheel-Track Tester (Common Type)

Summary

The instrument is designed and made as per T0719-2011 “Bituminous Mixtures Wheel-track Test” in the Industry Standard of People’s Republic of china JTG E20-2011 Standard Test Methods for Bitumen and Bituminous Mixtures for Highway Engineering.

It is suitable to determine the wheel-track against capability of bituminous mixtures in the high temperature. And it is also can be used to determine the stability in the high temperature of bituminous mixtures on site.



I. Main technical characteristics

- 1.The instrument can automatic control temperature, automatically generates, save test results; it is convenient to call history data and print out test report.
- 2.It adopts absolute temperature sensor, long time no temperature drift test. The range of temperature controlling is wide, high accuracy and good stability.
- 3.Test machine and constant temperature box adopt a kind of all-in-one machine, and inner box adopts air circulation, high accuracy. Stable operation and no noise.
- 4.It adopts high displacement sensor; the precision is more than +0.05mm. Data collection has high resolution and fast speed.
- 5.The computer and touchscreen can be controlled independently.
- 6.The instrument can preheat three samples at the same time.

II. Advantage of the control software

- 1.Non-standard function: set time and temperature at random.
- 2.Real-time display time, placement deformation and time, temperature curve.
- 3.It can display compaction time and times.
- 4.It can calculate automatically and print wheel-track stability value.
- 5.Software can calibrate accuracy to placement sensor and temperature sensor.
- 6.The device has functions of self-diagnostic, and display fault-code to ensure the stable operation

III. Main technical parameters and specifications

1.Main technical specifications

- (1) Displacement detection range: (0~30)mm
- (2) Deformation detection range: +0.05mm, resolution: 0.001mm.
- (3) Temperature controlling range: (40~80)°C(do adjustment at random)
- (4) Temperature controlling accuracy: +1°C, resolution: 0.1°C.
- (5) The rubber hardness of test wheel: the national standard hardness 78+2(60°C).
- (6) The grounded pressure of the test wheel: 0.7MPa+0.05Mpa.
- (7) The walking speed of a dolly: 42 time/min + 1time/min.
- (8) The walking distance of a dolly: (230+10)mm ;
- (9) Wheel-track testing time: (20~600)min (do adjustment at random)
- (10) Physical dimension: 1300mm*740mm*1240mm;
- (11) Dimension: 1500mm*900mm*1460mm;
- (12) Total weight: 250kg;

2.Power supply

- (1) Three-phase supply: AC380V, 50Hz, 3Kw, three-phase four-wire system, with zero line.
- (2) Single-phase supply: AC220V, 50Hz, 5A, single-phase three-wire, with the ground line.