SYD-0719B Automatic Wheel-Track Tester (Scientific Research Type)

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 the capability of bituminous mixtures in high temperature (Immersion and not immersion). It also can use as the assistant tester of match design for bituminous mixtures. And can be used to do the determination of the stability of bituminous mixtures in high temperature on site.

I. Main technical characteristics

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

II. Advantages of the software

1.Non-standard function: set time and temperature at random.
2.Real-time display time, displacement deformation and time, temperature curve.
3.It can display compaction time and times.
4.It can automatically calculate and print out wheel-track stability value.
5.The software can calibrate correctly to displacement and temperature sensor.
6.The device has a self-diagnostic function, and display fault code to ensure the device can operate stability.
7.It can make the multi acquisition to the deformation and can improve the consistency of the test results.

III. Main technical parameters and specifications

1.Main technical specifications
(1)Displacement detection range : (0~30)mm ;
(2)Deformation detection range: +0.05 mm, resolution: 0.001mm.
(3)Temperature controlling range : (40~80)℃
(4)Temperature controlling accuracy: +1℃, resolution: 0.1℃.
(5)Height of the sample : 300mm*300mm*(50~100)mm ;
(6)The rubber hardness of mill pinion : National standard hardness 78+2 (60℃)
(7)The ground pressure of mill pinion: 0.7Mpa +0.05MPa.
(8)The walking speed of dolly: 42 time/min + 1time/min.
(9)The walking distance of dolly : (230+10) mm
(10)Wheel-track test time: (20~600)min
(11)Physical dimension : 1520mm*1100mm*1450mm;
(12)Dimension : 1650mm*1150mm*1630mm ;
(13)Total weight: 400kg.
2.Power supply
(1)Three-phase power supply: AC380V, 50Hz, Kw, three-phase four-wire system, with zero line.
(2)Single-phase power supply: AC220V, 50Hz, 5A, single-phase three-wire, with the ground line.