

SYD-0728 Bituminous Mixtures Bending Beam Rheometer

Summary

This instrument is made and designed as per T0728-2000 Bending Beam Test of JTG E20-2011 Standard Test Methods for Bitumen and Bituminous Mixtures for Highway Engineering. It is suitable to determine the strain rate of bending creep of bituminous mixtures under specified temperature and loading stress in horizontal condition to evaluate the deformation performance of bituminous mixtures.

I. Main technical features

1. It adopts advanced sensor technology and microcomputer processing technology. It has functions of parameters setting, measurement calibration, automatic test control, automatic data collection and real-time clock.
2. It can collect the creep value and test temperature at the same time and look for the stability region of bending creep. The deformation value, test temperature, curves, result and time will be shown on the LCD directly.
3. It can store 100 groups of test data. An operator can check them at any time.
4. It equips an RS232 communication port to achieve communicating with PC. Data process, store, print and display can be done by the computer. The whole procedures can be operated by the computer too.
5. It adopts temperature control combining electric heating with compressor refrigeration. The temperature control accuracy is high.

II. Main technical specifications

1. Loading capacity : 5kN
2. Measuring range : 0mm~20mm (mid-span deflection)
3. Measuring bias : $\leq \pm 0.01$ mm
4. Lifting speed of pressure machine : (50 ± 5) mm/min
5. Temperature control range : $-2^{\circ}\text{C} \sim 60^{\circ}\text{C}$
6. Temperature control bias : $\leq \pm 0.5^{\circ}\text{C}$
7. Motor power : 90W
8. Compressor power : 1kW
9. Heating power : 2kW
10. Pump power : 45W
11. Communication port : RS232
12. Power supply : AC $(220 \pm 10\%)$ V, 50Hz
13. Net weight : 86kg

