

SYD-0705 Compacted Bituminous Mixtures Density Tester



Summary

SYD-0705 compacted bituminous mixtures density tester is designed and made as per T0705-2011 “Compacted Bituminous Mixtures Density Test (Surface Drying Method)” in the Industry Standard of People's Republic of China JTG E20-2011 Standard Test Methods for Bitumen and Bituminous Mixtures for Highway Engineering. Meanwhile it gives consideration to T0706-2011 “Test Method for Compacted Bituminous Mixtures Density (Water Weight Method)” and T 0707-2011 “Test Method for Compacted Bituminous Mixtures Density (Wax Sealing Method)” .

The instrument is suitable to:

- 1.The instrument is suitable to determine the bulk volume relative density and the bulk volume density of the water absorption that is less than 2% for kinds of bituminous mixtures specimen by the surface drying method as per T0705 standard.
- 2.The instrument is suitable to determine the apparent relative density and the apparent density of the water absorption that is less than 0.5% for the compacted bituminous mixtures specimen by the water weight method as per T0706 standard.
- 3.The instrument is suitable to determine the bulk volume relative density and bulk volume density of the water absorption that is more than 2% for the bitumen concrete or bituminous mixtures specimen by the wax sealing method as per T0707 standard.
- 4.The instrument is equipped with the balance; it can be used to weigh the air quality of the dried specimen as per T0708 standard, and then calculate the bulk volume relative density and bulk volume density of the specimen by the volumetric method.

I. Main the technical characteristics

1. The instrument has many uses of one machine, and it can satisfy the requirement of the Industry Standard of People's Republic of China JTG E20-2011 “Highway Engineering Bitumen and Bituminous Mixtures Test Code” and calculate the density and relative density according to surface drying method, water weight method, wax sealing

method and volumetric method.

2. The instrument adopts microcomputer controlling water bath temperature, and the operation is convenient, easy and reliable.

3. The electronic control box of the instrument adopts the detachable structure, and it can realize the circuit connection of the electric controlling box and water bath controlling temperature, water tank liquid level control and water bath circulatory stirring by the aviation plug and socket.

4. The instrument adopts high accuracy electric balance, and it has wide measuring range, high measuring accuracy. The work is stable and reliable.

5. The overflow water tank adopts stainless steel material. It is durable and clean conveniently. It can refill and stabilize water level automatically, convenient to operate.

6. The instrument adopts electric lifting structure, and the motor adopts handspike motor. Stable operation and lower noise. It can reduce labor intensity effectively.

7. The working table adopts natural marble material. It provides a stable bench for electric balance.

II. Main technical parameters and specifications

1. Inner diameter of overflow tank: 440mm 410mm 200mm

2. The power of the refrigeration compressor: 300W

3. Power of heating element: 1.3kw

4. Flow rate of circulation water pump: 10L/min

5. Electric balance

Max. weight: 15kg

Reciprocal sensibility: 0.1kg

6. Water bath controlling temperature accuracy: (25 ± 0.5)

7. Power supply: AC(220V \pm 10%)V, 50Hz

8. Maximum power consumption: ≤ 1600 w

9. Dimension: 930mm*750mm*1150mm

10. Net Weight: 117kg