

SYD-0711A Bituminous Mixtures Theoretical Maximum Specific Gravity Tester



Summary

This instrument is designed and made as per T 0711-2011 Standard Test Method for Theoretical Maximum Specific Gravity of Bituminous Mixtures (Vacuum process) in JTG E20-2011 Standard Test Methods for Bitumen and Bituminous Mixtures for Highway Engineering. It is suitable to determine the theoretical maximum specific gravity of bituminous mixtures by a vacuum process. It is used to design the ratio of bituminous mixtures, survey the road condition or calculate the void ratio and compactness of road construction. It is not available to determine the lacunose bituminous mixtures which water absorption overs 3%.

I. Main technical features

1. It adopts single chip machine technology to vacuum, shake, fill the air and relieve pressure automatically.
2. Equipped with a high-accuracy absolute pressure sensor, the negative pressure can reach $3.7 \text{ kPa} \pm 0.3 \text{ kPa}$.
3. The working status of the vacuum pump can be reflected by a vacuum meter.
4. It equips a water buffer device to prevent the water in the negative pressure container from flowing into the vacuum pump.
5. It can determine two samples at the same time. Test efficiency is high. The structure is reasonably designed. It is easy to use.

II. Main technical specifications

1. Power supply: AC ($220 \pm 10\%$) V, 50Hz.
2. Volume of vessel: 4000ml \times 2
3. Power of vacuum pump: 160W
4. Negative pressure: 3.7 kPa (27.75 mmHg) .
Allowable bias is $\pm 0.3 \text{ kPa}$.
5. Power of shaking machine: 30W
6. Dimension: 510mm \times 520mm \times 380mm

III. Optional accessory

1. Constant temperature water bath: HWY-1 Low-temperature water bath