

Phenomenon and solutions of TSY-T1 Water Vapor Permeability Tester

TSY-T1 Water Vapor Permeability Tester has solved many problems for tremendous customers since it has been launched in flexible packaging market. All customers sing highly praise for its good performance and accurate results, especially in simple and convenient operation, depending on its outstanding advantages TSY-T1 becomes the first choice instrument for WVTR testing in flexible packaging market. But sometimes maybe we have happened to some unusual phenomenon, let us check them out together:

Phenomenon: WVTR Data displays 0.00 g/m².24h

Maybe reason:

1: Test Cup(Dish) on the load cell when TSY-T1 powers on. When TSY-T1 Water Vapor Permeability Tester powers on, the system of instrument will automatically remember the "zero point" before other operations. When test cup on the load cell, system will "think" this situation is "zero" weight and "remember" it, for TSY-T1 WVTR tester, we use water method, so the mass change of test cup will be negative, it is impossible, so system will display 0.00g/m².24h.

2:Some Vibration factor. TSY-T1 conforms to gravimetric method and equips with highly accurate load cell, it is so sensitive to vibration during the whole process.

3:Some Power supply reason. Power supply is foundational requirement, accurate test result is critical to the power volt and if has the proper earth line. Earth line is not only for test result but also for our body safety. Proper earth line can protect us from being shocked. How can we check out the earth line is correct or incorrect? Normally, the volt between the "L" line and "N" should be 220V or 110V, the volt between the "L" line and "E" line should be 220V or 110V too, and the volt between "N" line and "E" line should be from 1V ~ 3V. If only "L" and "N" is 220V or 110V, the other two items are all "0", it means no earth line.

Phenomenon: The same specimen but test result differs a lot. Maybe reason:

1: From sample itself.

- 1.1 Sample clamp is not in a proper position.
- 1.2 Sample sealing maybe has some leakage.
- 1.3 Sample has some pinholes.
- 1.4 Sample has scratches, creases, or some contamination.
- 1.5 Sample thickness is not uniform.
- 1.6 Sample structure changed.

2: From Operation.

- 2.1 Distilled water level higher than 2/3 of cup groove.
 - 2.2 Some little water drops on test cup screw.
 - 2.3 Some little water drops on test cup surface, even very little is prohibited.
 - 2.4 TSY-T1 water vapor permeability tester is not balanced before test.
 - 2.5 TSY-T1 load cell has not been calibrated for a long time.
- 3: From lab environment
- 3.1 Vibration during the test process.
 - 3.2 Power supply fluctuates.
 - 3.3 Strong electromagnetic interference.