

PERME™ W3/030 Water Vapor Transmission Rate Tester is for the water vapor transmission rate measurement of plastic films, laminated films, sheets as well as various materials used in medical and construction industries. Through water vapor transmission rate testing, the demands for control and adjust technical indexes and satisfy



#### Characteristics

Computer control; automatic testing process.  
Average value of 3 specimens only;  
Interval weighing measurement, auto-zero before each weighing;  
Cylinder cam type lifter lift and lower the cups;  
Standard wind velocity;  
Automatic temperature control;  
Automatic humidity control;  
Temperature and humidity testing port;  
Testing report can be stored in doc., database and Excel formats.  
Broad power input;  
Two rapid calibration modes of standard weight and reference films;  
Network transmission interface for LAN data management and Internet data transmission.

#### Principle

A specific humidity difference is formed among the two sides of the specimen under a certain temperature. The water vapor permeates through the specimen and into the dry side. By measuring the weight changes of the cup, water vapor transmission rate and other parameters can be obtained.

#### Technical Indexes

Test Range: 0.1 ~ 10,000 g/m<sup>2</sup>·24h (Routine)  
Accuracy : 0.01 g/m<sup>2</sup>·24h  
Test Temperature: 15°C ~ 55°C (Routine)  
Temperature Accuracy: ±0.1°C  
Test Humidity: 10% RH ~ 98% RH (Standard 90% RH)  
Humidity Accuracy : ±1%RH  
Purge Velocity: 0.5 ~ 2.5 m/s (Note: non-standard purge velocity can be customized.)  
Test Area: 33 cm<sup>2</sup> x3  
Numbers of Specimen: 3 Pieces  
Specimen Thickness: ≤ 3mm (Note: demands for other thicknesses can be customized.)  
Specimen Size: φ 74 mm  
Test Chamber Volume: 15L  
Gas Source: air  
Gas Source Pressure: 0.6MPa  
Inlet Size: φ 4mm polyurethane pipe  
Dimensions: 695mm (L) × 555mm (B) × 390mm (H)  
Power: AC 220V 50Hz  
Mainframe Net Weight: 76kg

#### Standards:

ASTM E96, ASTM D1653, TAPPI T464, ISO 2528, DIN 53122-1, JIS Z0208, GB 1037, GB/T 16928, YBB 00092003

#### Configuration:

**Standard:** Mainframe, software, cup, gas dry device, automotive dry filter, calibration weight, communication cable, sample cutter, gas supply valve

**Optional:** reference film, air compressor, desiccant.

**Note:** The gas inlet is φ4mm polyurethane pipe.

Users provide gas source and distilled water for themselves.