

Oxygen Permeability Tester

The oxygen permeation tester measures the oxygen transmission rate (OTR) of materials like sheets, films, and containers. It utilizes a coulometric sensor and precise temperature and humidity control to simulate real-world conditions.



ADDITIONAL IMAGES



Product Overview

Precision Oxygen Transmission Rate Testing

The Oxygen Permeability Tester is a professional-grade instrument designed to measure the oxygen transmission rate (OTR) of high-barrier materials, including films, sheets, solar boards, and compound materials. It is also highly effective for testing finished packaging such as bottles and blood bags. Utilizing coulometry theory and high-precision sensors, this device ensures accurate quality control and research capabilities for the food, pharmaceutical, and flexible packaging industries.

Technical Standards

Compliance Standards

GB/T 19789-2005, ASTM D 3985-1995, ASTM F 1927-1998, ASTM F 1307-1990, YBB00082003, ISO 15105-2003, DIN 53380-3-1998, JIS K-7126

Performance Metrics

Compatible Materials

- High barrier materials
- Sheets
- Solar board
- Compound materials
- PVC
- Rubber
- Paper
- Glass
- Metal
- Flexible packaging
- Bottles
- Blood bags

OTR Measurement Units

$\text{cm}^3/(\text{m}^2 \cdot 24\text{h})$ • ppm

Working Principle

Coulometry theory using high-precision sensors to analyze oxygen concentration in nitrogen carrier gas.

Applications

Target Industries

- Food Industry
- Pharmaceutical Industry
- Cosmetics
- Flexible Packaging
- Academic Research
- Quality Inspection Institutions