mocon
AMETEK

PRODUCT BROCHURE

OX-TRAN® 2/12 SERIES
OXYGEN PERMEATION ANALYZER

Wide range oxygen transmission testing for barrier films and packages.

IMPROVED VERSATILITY

OTR barrier measurements...

done right.

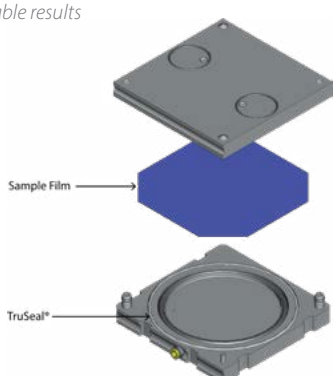
Wide Range Oxygen Permeation Analyzer

The OX-TRAN 2/12 Series Oxygen Transmission Rate (OTR) analyzers offer a wide range of detection for testing low-to-high level barriers or high transmitter films. These analyzers are a lower cost option for reliable OTR analysis. They feature two independent cells with changeable horizontal test cartridges that allow a wide variety of sample sizes and types to be easily and accurately tested.

Models:

	2/12 R	2/12 T
Transmitter	Low-to-high barriers	High transmitters
Barrier	Widest range OTR analyzer	Designed for barriers beyond the operating range of traditional OTR instruments
Detection range	0.05 to 28,800 cc/(m^2 · day) (up to 255,300 cc/(m^2 · day) with reduced area cartridge)	200 to 65,000 cc/(m^2 · day) (up to 576,200 cc/(m^2 · day with reduced area cartridge)
Sensor	Wide range sensor providing reliable, repeatable results	Unique high range Coulox sensor for high transmitter barriers

Removable cartridge utilizes central pneumatic clamp and TruSeal to provide repeatable results



Wide Range of Applications

The OX-TRAN 2/12 Series instruments are compatible with a variety of AMETEK MOCON® exclusive test cartridges, providing flexibility to test more sample types. These include whole packages, paper-based materials and lower barrier films with the reduced area cartridge that increases the maximum range without the need for masks.

All test cartridges incorporate the AMETEK MOCON proprietary TruSeal® design that utilizes two seals and flushes gas between them to prevent ambient ingress into the test area. This reduces background levels, improves repeatability, and reduces the need to run individual zero.

In addition, interchangeable cartridge options such as package adapter, edge effect and reduced area cartridges expand testing capabilities.

Additional interchangeable cartridge options

TruSeal®

- Gas flush of sample mounting seal protects chamber integrity
- Lowers background level reducing need to run individual zero
- Shortened testing time increases throughput

Control Features

- Fully automated flow, temp, & RH control throughout tests
- Automatic test method development and recommendations
- Temperature compensation mode for refrigerated applications

SIMPLIFIED RESULTS

Advanced Control System

The user friendly WinPerm2 control system features fully automated testing including temperature, gas flow and RH control. Final test reports are automatically saved and can be set to automatically print and export to permanent storage directories. The analyzer is compatible with PermWare®, your complete permeation laboratory data management system.

The test mode options make testing known or unknown samples easy and repeatable. A single button push initiates a fully automated test following pre-set stored parameters, reducing operator variability. The intuitive color touch screen is easy to learn and use while the automated testing provides consistent results and fewer potential errors.

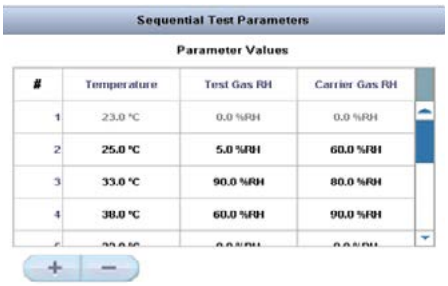
A Versatile Solution for OTR Testing

With interchangeable cartridges and several detection ranges available, OX-TRAN 2/12 Series analyzers are the ideal OTR testing instrument for busy QA/QC labs. Features like our patented TruSeal technology and exclusive test cell drawer design ensure better repeatability and improved data integrity. Whatever material you're testing, OX-TRAN 2/12 Series analyzers provide a straightforward workflow and accurate, repeatable results.

Auto-test mode *automatically adjusts the testing parameters to take the guess work out of determining parameters*

Advanced-test mode *is the most commonly used, allowing the user to specifiy the parameters and conditions to perform the test*

Sequential testing allows a series of tests to be performed on the same samples at different test conditions



To learn more about the OX-TRAN 2/12 Series, please contact your local AMETEK MOCON sales representative.

Touchscreen Interface

- Intuitive, automated operation requires less training
- Built in multi-level user management and data security
- Event log & troubleshooting guide

Accurate Sensors

- 2/12 R: wide range sensor providing reliable, repeatable results
- 2/12 T: unique high range Coulox sensor for high transmitter barriers
- Built-in sensor protection

Warranty

- Full 100% parts and workmanship warranty for 12 months

OX-TRAN 2/12 SERIES
SPECIFICATIONS

Industry Standards

- ASTM F2622-08
- ISO CD 15105-2
- JIS K-7126-B
- DIN 53380-3

Conformance Standards

- CE, UL, CSA Safety Compliance

Connectivity

- Ethernet Port
- 2 USB Ports
- PERM-NET™ Lite for remote monitoring

Dimensions & Weight

Depth: 23" or 58,0 cm
Width: 12" or 30,4 cm
Height: 15.5" or 39,4 cm
Weight: 95 lbs. or 43,1 kg

Accessories

- PermWare® software is available to collect and manage test data
- Additional cartridges allow samples to be prepared and staged for a quick change out to increase efficiency
- Interchangeable dual-cell cartridges expand testing capabilities. Options include:
  - Reduced area cartridge
  - Edge effect cartridge

Performance Specifications

	2/12 R	2/12 T
Test Temperature Range	10° to 40° C ± 0.2° C	10° to 35° C ± 0.2° C
Controlled RH Testing Ranges	0%, 5 to 90% ± 3%	0%
Maximum Film Thickness	Up to 120 Mil	
Carrier Gas	100% Nitrogen	
Test Gas	100% Oxygen (Purity 99.9%)	

Technical Specifications

Models		Test Ranges			Resolution	Repeatability
		cc/(m² • day)	cc/(100 in² • day)	cc/(pkg • day)	cc/(m² • day)	cc/(m² • day)
2/12 R	Normal (50 cm²)	0.05 to 28,800	0.003 to 1858	0.00025 to 144	0.05	0.05 or 1.5%*
	Reduced Area Cartridge (5.64 cm²)	0.44 to 255,300	0.027 to 16,470	-	-	-
2/12 T	Normal (50 cm²)	200 to 65,000	12.9 to 4200	1.0 to 323	2.0	25 or 1%*
	Reduced Area Cartridge (5.64 cm²)	1770 to 576,200	114 to 37,200	-	-	-

** Whichever is greater*

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