



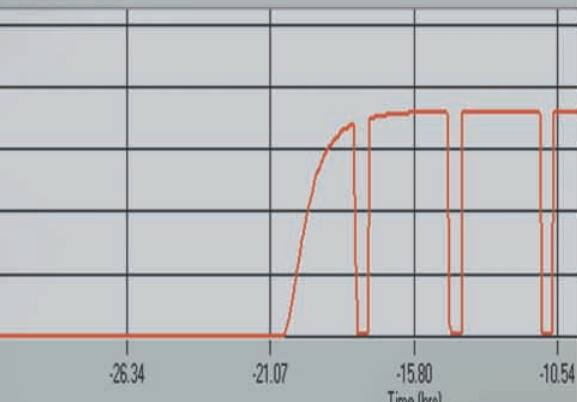
PERMATRAN-W[®] Model 3/61

WVTR Transmission Rate Test System

- Test either flat films or finished packages
- Test up to six samples simultaneously on a single module
- Windows[®] based software interface



Parameter	Mode	Current Value	Units	Set F
Temp	Auto	23.09	°C.	
		1799999.00	A/D Counts	
Temp	Manual	23.00	°C.	
Pressure	Auto	740.23	mmHg	
Humidity	Auto	2.19	%	



Validation Services
Now Available

Only MOCON systems comply
with the following standards:
ASTM F-1249
TAPPI T557
JIS K-7129

Made in USA

mocon[®]
Over 35 Years of
Permeation Experience

System and software that speeds WVTR permeation analysis

High Performance Fast Answers, Simple Operation...

Lowest cost with highest precision **Low Cost!**



Quickstart: Simply choose from standard ASTM, TAPPI, JIS or user-defined test conditions and immediately begin testing...

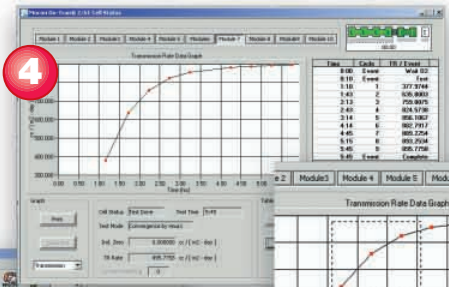


Thickness List: For more accurate results, enter up to five sample thickness measurements. The system will automatically calculate an average that will be used in the test.



Main Screen: Once started, monitor testing progress of up to ten modules or sixty cells simultaneously.

Data: View testing in realtime, both graphically and via data table.



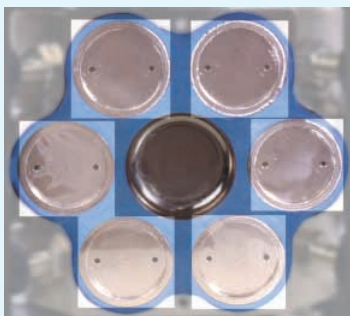
Zoom: Analyze data anywhere on the transmission rate curve in greater detail with the new zoom feature.

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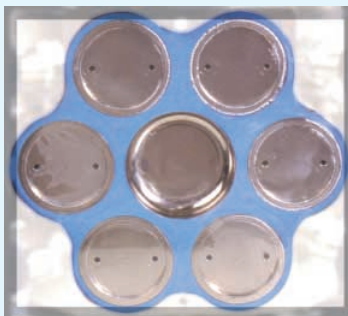
WVTR Permeation
Test System

6 test cells are designed for maximum throughput.

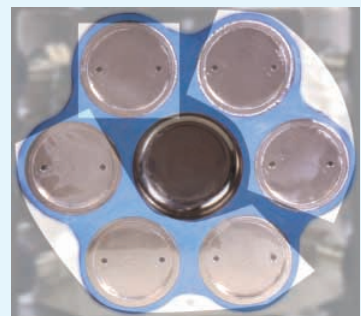
Six separate samples may be run simultaneously for maximum throughput and efficiency.



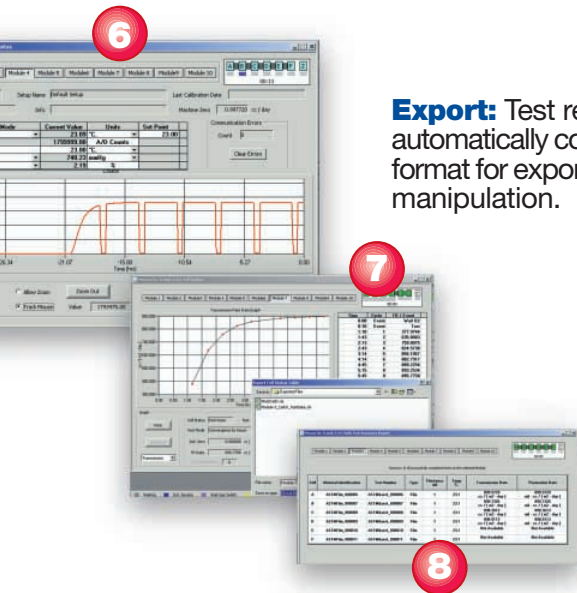
All cells may be combined to provide greatest sensitivity for good barrier materials.



Testing may be configured in any cell combination for maximum throughput, sensitivity and flexibility.



Parameters: For further analysis, monitor the status of the infrared sensors (temperature, barometric pressure, relative humidity) at any point of a test.



Export: Test results are automatically converted to Excel® format for export and further data manipulation.

Summary: Print or view a summary of all testing results.

User friendly, quality driven operation:

- Windows® 2000 operating system
- User selectable sensitivity
- Precise RH & temperature measurement and control
- No extrapolations or accumulation necessary
- Automatic flow compensation
- NIST traceable calibration films

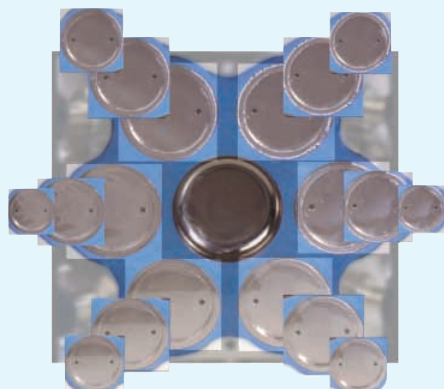
Also available:

- Optional package testing capability on all test cells
- Software for early prediction of permeation values
- Software for P, S, D calculation
- MOCON service and support

With all the technology and support you'd expect from a MOCON system:

- Over 35 years of permeation innovation
- Proprietary high sensitivity modulated infrared sensor
- CE, ETL, UL and CSA certifications
- Proven accuracy with NIST traceable systems and calibration films
- ASTM accepted protocol
- Systems and service in over 60 countries

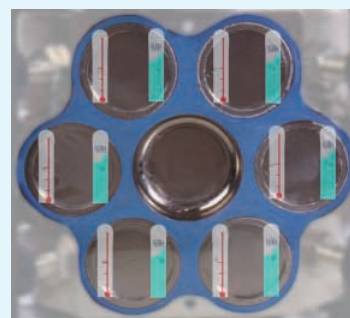
Given their efficiency, simplicity and ease of operation, these systems are perfect in production and QA/QC environments.



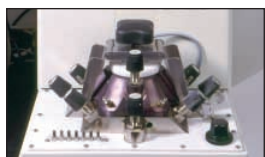
With the optional package adaptor, six packages may be tested simultaneously.



Temperature and Relative Humidity (RH) are monitored directly at the test site which is critical for accurate results which reflect real world conditions.



Easy to Use



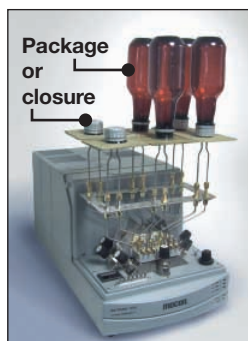
These systems have been designed for easy sample preparation and mounting.

Real World RH



Digital pressure and flow controls allow for simple "set and forget" relative humidity generation. A single setting achieves critical "real world" RH conditions quickly and precisely with minimal operator involvement.

Package Testing



Package testing capability allows for package component or complete package testing.

Expandable to 60 Test Cells



Linking modules allows central control of up to 60 samples at a time while throughput is maximized with an individual sensor in each module.

Sample preparation tools.



Product Information

WVTR Test Range:

One Cell: 0.05 – 500 g/m² • day (0.003 – 32.0 g/100 in² • day)

All Cells Combined: 0.01 – 85 g/m² • day (0.0006 – 5.5 g/100 in² • day)

Test Temperature Range: 20C to 65C (68°F – 149°F)

Controlled RH Testing:

Films: 35 to 90%, 100% RH

Packages: Ambient or Controlled RH (environmental chamber not included)

Test Sample Area: 10cm² to 60cm²

Test Cells per Module: 6 test cells

Expandability: Ten modules (60 test cells)

Automatic Flow Compensation (standard)

CE/CSA/ETL Certification (standard)

Selectable Zero Compensation (standard)

Automatic Temperature Monitoring and Control (standard)

Operating System: Windows® 2000

WinPerm™ Permeability Software, Computer, Monitor, Printer (standard)

Package Adapter Head (optional)

*Full instrument specifications available upon request.

NIST Traceability

MOCON instruments are manufactured traceable to NIST (National Institute of Standards and Technology) and come with a set of two NIST Traceable Calibration films. These films allow for calibration in the range of desired testing assuring greater precision and accuracy of test data.

MOCON Commitment

This new system is another example of MOCON's 35 year commitment to innovation and quality in the design of permeation testing systems for barrier material and package assessment.

Consulting & Testing Services

MOCON maintains an applications and testing laboratory to assist customers in realizing the full potential of their MOCON instrument. Seminars and intensive training classes are held for those interested in maximizing their understanding of the systems, technology, and operating procedures. Call your MOCON representative for more information on these programs or for a system quotation.

mocon®

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www.mocon.com

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MOCON reserves the right to change specifications without notice as part of our continuous program of product improvement.

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