

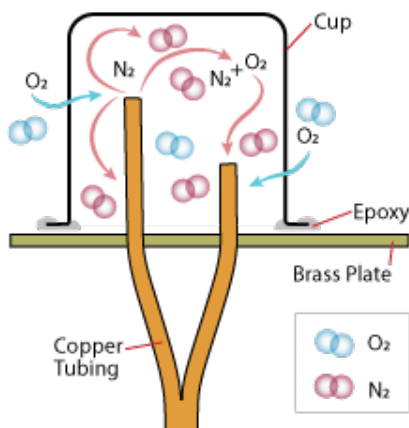


PACKAGE TEST CARTRIDGES: COFFEE CAPSULES

Cup and Capsule Testing Made Easy!

Single-serve coffee capsules are extremely popular. These individual capsules may have different sizes depending on the brand. A lot of coffee capsules have similar opening diameters, which is why we have designed test cartridges for both individual and multiple capsules (i.e. 10) geared toward R & D and QA/QC test objectives.

When comparing historical test results using the epoxy mounting method, the new compression sealed cartridge results are closer to actual cup transmission results. The epoxy method covers part of the exposed permeation area and thus provides results 8%–10% lower than the actual OTR. The compression sealing design provides more consistent, and real-life results without the variability of epoxy.

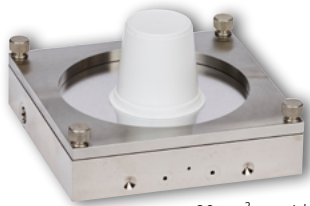


CHOOSING THE CORRECT CARTRIDGE FOR YOUR PACKAGE TESTING NEEDS

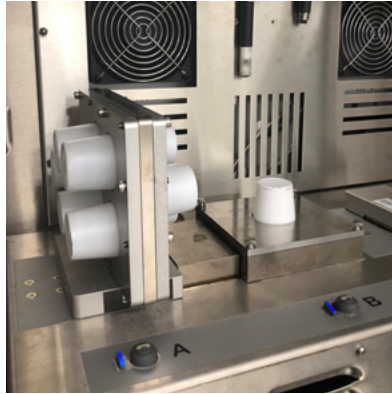
Test Objectives and Package Size Will Determine Cartridge

Packaging applications for cups are comprised of—yet not limited to—snack foods, yogurt, soups, personal care and pet food. Increasing testing efficiency amongst these industries affects a substantial portion of packaging materials. Cup testing capabilities are mostly limited by cup diameter. The 80 cm² cartridge can accommodate a sample diameter of up to 7.5 cm.

Cartridge	Part Number	
	Each	Set of 4
Single K-Cup	054-503	-
10 K-Cup	054-033	054-042
80 cm ²	052-724	054-036



80 cm² cartridge with cup on foil



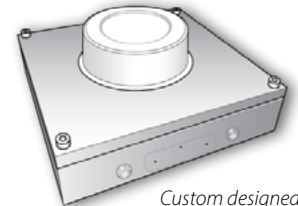
K-cup cartridges on an OX-TRAN® 2/48



K-cup cartridges on a PackRack®

Custom applications

For cup sizes that do not fit in the single or 10-cup test cartridges, the limitations when conducting permeation testing of these packaging materials are mostly due to size of the containers (e.g. diameter of cups or bottle openings). The generic 80 cm² cartridge accommodates cups with a diameter of up to approximately 7.5 cm. For different sized cups, AMETEK MOCON can design custom test cartridges. Options are also available to allow permeation testing for closed system packages.



Custom designed coffee capsule

As commodity plastics are being used less often for packaging materials, more sustainable materials are being implemented for barrier cups such as bio-based PE, PLA, PHA and barrier-coated paper-based structures. To ensure adequate product shelf life while supporting new barrier structure implementation, these materials must be characterized as efficiently as possible. Whether verifying new production tooling for cup manufacturers or profiling novel barrier structures, our cup-testing cartridges not only reduce prep time (optimizing test throughput), but they also produce results with higher accuracy and repeatability.

Our experts listen to your needs and offer customized solutions.

At AMETEK MOCON, we continually expand our extensive cartridge line based on customer testing requirements to ensure accurate and consistent test results. With over 55 years of industry experience behind the designs, our interchangeable cartridges address general industry challenges as well as specific customer requests.



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