

1. Set pressure at regulator to approximately the maximum pressure capacity of the manometer.
2. Saturate the element in isopropyl alcohol.
3. Insert cork and Poly-Flo tubing into the open end of the element.
4. Submerge element in tank to 1" below the surface of the alcohol.
5. Slowly open the metering valve until the first column of bubbles is observed coming from the porous media.
6. Subtract 1" of water from the manometer reading to obtain the "bubble point".

Leak Testing Procedure

7. Follow steps 1 through 4 above.
8. Slowly open the metering valve and bring the pressure on the manometer up to the minimum "bubble point" for the media being tested plus 1" of water. If no bubbles emanate from the element up to this pressure, the element is acceptable and meets the Mott standard for filtration.

Mott Bubble Point Standards

Nominal Filtration Grades – Micrometers

0.2µm – 5.0-6.9" Hg	10µm – 7.5-10.9" H ₂ O
0.5µm – 3.0-3.9" Hg	20µm – 5.0-7.0" H ₂ O
2µm – 17.0-24.0" H ₂ O	40µm – 3.0-4.0" H ₂ O
5µm – 13.0-16.9" H ₂ O	100µm – 0.5-1.5" H ₂ O

Suggested Bill of Materials

1. Element to be tested.
2. Bored-through rubber cork, as required, with solid cork in opposite end of elements with both ends open.
3. Poly-Flo ¼" tubing or equivalent, as required.
4. Union tee, Imperial Eastman 264-P-04, or equivalent.
5. Male run tee, Imperial Eastman 271-SP-04x02, or equivalent. Remove nut from branch and pinch inner guide tube for bleed to atmosphere.
6. Metering valve, Hoke 2311-F2B, or equivalent.
7. Pressure regulator, as required.
8. Well type direct reading manometer, Dwyer 1230-24, or equivalent. Use mercury for 0.2µm and 0.5µm elements, and water for 2µm and above.
9. Stainless steel tank, as required.
10. Isopropyl alcohol.

