

Below, you will find the advantages of the OHD Quantifit over the PortaCount fit testing system. There are some significant advantages when using the Quantifit system. Plain and simple, the Quantifit is the best instrument to use when performing a Quantitative Respirator Fit test.

1. The Quantifit offers the fastest quantitative fit test possible

It takes as little as 2-3 minutes to complete a quantitative fit test with the OHD Quantifit compared to 8-15 minutes with the ambient aerosol system (TSI PortaCount). The Controlled Negative Pressure (CNP) Redon protocol has 5 steps at 8 seconds each. The actual test measurements take all of 40 seconds to complete.

2. The Quantifit offers unrivaled accuracy over ambient aerosol

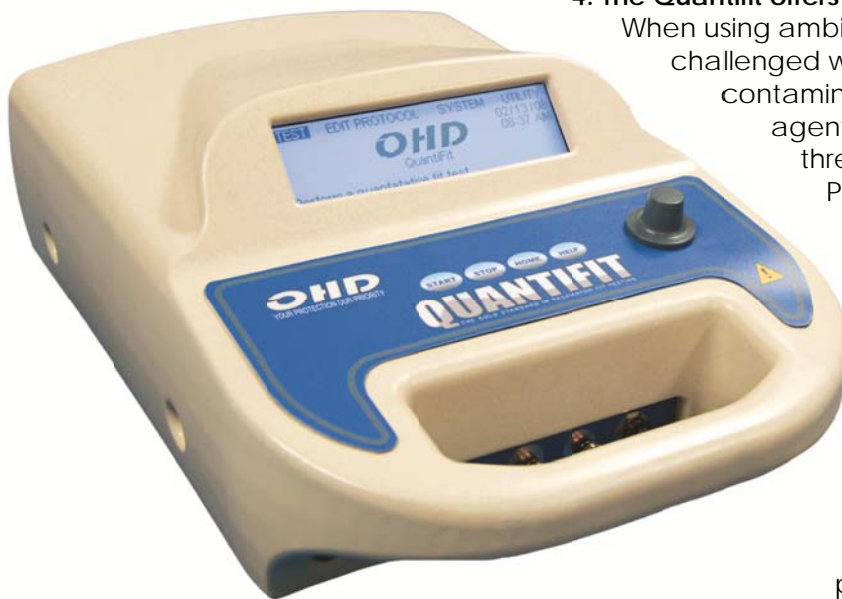
The OHD Quantifit is much more accurate than the aerosol system. "Effect of Leak Location on Measured Respirator Fit," *AIHA 58:413-417 (1997)*, showed that the Quantifit measured 97.9% of known calibrated leak with a coefficient of variation of 4.3% (excellent reproducibility) compared to the PortaCount which measured 37% of known calibrated leak with a coefficient of variation of 44.7% (poor reproducibility). The PortaCount produces "false positives", meaning that it doesn't see known measured leaks within the respirator. The Quantifit performs the most accurate fit test.

3. The Quantifit operates in virtually any environment

The OHD Quantifit uses air as a challenge agent; the PortaCount uses particles. The OHD Quantifit is not concerned with having enough particles in the ambient air to do a fit test. Using the aerosol method, there must be enough particles in the air to do a fit test. If the air does not contain enough particles, the user must light candles or incense or generate salt fog. Since there will always be air supply available for testing, the OHD Quantifit can test in any environment.

4. The Quantifit offers the most health protective fit test

When using ambient air, the respirator is challenged with particles *only*. What if the contaminant is a vapor or gas, like CBRN agents? Typically these are the more threatening contaminants. The PortaCount can only tell the user that particles may get in the respirator. If air can get in the respirator, there is a chance gases and vapors can as well. The Quantifit, by using air as the challenge agent, is able to make a direct measurement of leak which could include gases and vapors as well as particles, offering the most health protective fit test available.



5. The Quantifit offers no wait time to test smokers

When using the PortaCount, a test subject must wait 45-60 minutes before doing a fit test after the person has smoked a cigarette. This is not an issue with the OHD Quantifit. A fit test can begin immediately with the OHD Quantifit, even if the person has just smoked. There are no worries of particle contamination coming from the test subject. As a result, the fit test is more convenient and more accurate with the OHD Quantifit.

6. The Quantifit has no internal optics that can become dirty or contaminated

The PortaCount has internal optics that can become dirty, requiring that the unit be sent back to the factory for cleaning.

7. FitTrack Gold flexible data management software allows for comprehensive records including a unique fit test card

The FitTrack Gold software includes a report that allows the user to print a wallet sized fit test card. One can print these cards on a standard Windows based printer. The PortaCount requires a special printer to print fit test cards. While a dedicated card printer is available from OHD, there is no requirement to purchase this printer, allowing the user to print fit test cards at no additional cost.

8. The Quantifit is calibrated to a NIST primary standard

The OHD Quantifit is the only fit test system that can be calibrated back to an NIST primary standard. This gives one additional liability protection. The PortaCount aerosol method cannot be calibrated to a primary standard. Any precision instrument, particularly when protecting the health of an employee, should have the ability to be calibrated to an NIST standard (National Institute of Standards and Technology).

9. The Quantifit measures leak *directly*

OSHA defines a Quantitative Fit Test as "an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator." The PortaCount makes a ratio measurement of particles inside and outside the respirator while the Quantifit makes a direct measurement of leak. The ability to do a direct measurement offers the speed and accuracy advantage.

10. The Quantifit is virtually maintenance free

No messy alcohol wicks that need to be changed twice a day as is needed with the PortaCount. The OHD Quantifit has no need for consumables, therefore, offers additional cost savings with no maintenance required.

11. The Quantifit allows one to set various challenge pressures to simulate actual work conditions

The PortaCount does not allow specific work conditions to be emulated other than the attempt to perform "exercises." The Quantifit uses a challenge pressure of 53.8 - 93.1 L/min, stressing the mask as an employee would while breathing heavily under extreme physical conditions. This makes the Quantifit the most rigorous fit test available.