

# QUANTIFIT®

**The Gold Standard of Respirator Fit Testing**  
- Highest Reliability – Fastest Results – OSHA Accepted – NFPA Compliant -

*There are significant advantages when choosing the Quantifit Fit Tester. Plain and simple, the Quantifit is the Gold Standard when it comes to reliable fit testing. Greater accuracy means a better fit and more protection. Quantifit does not just count - it detects a leak point and verifies mask integrity. Quantifit uses the only 5-Step REDON protocol written into the OSHA federal regulation. This means greater interaction with respirator wearers and results that are up to three times faster when compared to aerosol fit testers!*

### **What makes Quantifit a better fit tester?**

Quantifit offers unrivaled accuracy when compared to traditional Aerosol fit testers such as PortaCount. The OHD Quantifit will provide you results with greater accuracy than an aerosol system. This has been scientifically proven. **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) vs. the PortaCount 37% of known calibrated leak with a coefficient of variation of 44.7% (poor reproducibility). Accuracy in doing a fit test is critical. The Quantifit, because of its accuracy, is a more health protective fit test when compared to traditional technologies.<sup>1</sup>

### **Does Quantifit meet OSHA requirements as well as NFPA standards for fit testing?**

Yes, Quantifit meets both the OSHA regulation and NFPA standard for fit testing. Quantifit is OSHA accepted within 29 CFR 1910.134 Appendix A. The current edition NFPA standard is NFPA 1500.

### **Can Quantifit be calibrated to national standards?**

Yes, Quantifit, unlike any other fit tester can be calibrated to the US federal standard NIST (National Institute of Science & Technology). This compliments an organization's respiratory protection program as it relates to OSHA requirements for respirator program record keeping. Maintaining fit test results and calibration records from NIST protects the user and the organization.

### **How much faster is Quantifit when compared to traditional aerosol fit testers?**

**Twice as fast!** Only Quantifit utilizes the **OSHA 5 -Step REDON** protocol. This means greater interaction with the test subject and a faster test. Why wait for a computer to count particles and calculate an average value? The superior CNP technology will detect leaks immediately, and measurement is done in only 8 seconds for each of the 5 steps.

### **What is the advantage of the REDON protocol?**

Respirator program managers, Occupational Hygienists and Trainers alike utilize the OSHA annual fit test requirements as a platform for training. The 5 Step - Redon Protocol challenges the wearer to don the respirator face piece twice during the test. This level of interaction challenges employees to pay greater attention to donning and doffing the face piece. Additionally the Quantifit will measure the ability of a specific face piece to reseal on an individual. This is vital to assure protection!

### **What does the unique seal check feature do?**

The Quantifit seal check feature is unique to CNP technology. This feature can be used to verify the face piece is seated prior to testing. Just as importantly it will create a negative pressure that can detect a leak path when a face piece needs repair. This is similar to mask integrity testing that is done within nuclear and military settings.

### **Do smokers or persons that have recently eaten have to wait 30 minutes prior to fit testing?**

Quantifit eliminates the need to delay testing on mask users that have just eaten or smoked. You can test immediately with Quantifit. The Quantifit CNP technology enhances logistics by simplifying employee requirements prior to testing.

### **Is it necessary to manipulate the environment to perform a fit test?**

Never! Quantifit utilizes air as a challenge agent. Traditional aerosol fit testers required a chamber and the generation of aerosols as a challenge agent. Today aerosol technology as it relates to ambient air testing is limited to elastomeric face pieces or higher efficient filtering face pieces (half masks). While the manufacturer of the PortaCount suggests its use for the testing of N95 filtering face pieces it is done with an aerosol generator that uses sodium chloride not ambient aerosols.

### **Does Quantifit come with a flexible software package?**

Yes, the Quantifit features OHD's flexible data management software. This supports comprehensive records including a unique fit test card component. Fit test results are stored in a database for easy report generation, retrieval and regulatory compliance.

### **Does Quantifit require a special printer to use the fit test card component?**

No, Quantifit users simply select the Fit Test Card report from the Quantifit FitTrack software then print the card on "Standard 8 1/2" X 11" perforated paper (business card size). Once the data is printed, you tear off the individual fit test card and you are done. Quantifit users can protect the Fit Test Card with a standard laminator which can be purchased from OHD. The TSI PortaCount program requires the user to purchase a specialty printer listed at \$2500.00. The cost of the printer alone represents an additional 30 % cost against the PortaCount fit tester. With the Quantifit FitTrack software package there are no costly surprises!

### **Can Quantifit operate as a Stand-Alone unit?**

Yes, Quantifit can operate as a stand-alone unit, store up to 500 fit tests then download to the included software. Ease of operation is further enhanced with access to Quantifit web based training 24/7.

### **Are there daily maintenance requirements for Quantifit?**

No, Quantifit does not require daily maintenance. There are no internal optics to become dirty or contaminated requiring the tester be sent back to the factory for cleaning. Additionally there is no need to use alcohol or stock parts such as wicks or specialty cleaning agents. Quantifit eliminates the need for particle generation or environmental manipulation.

*<sup>1</sup>Researchers have found that aerosol QNFT is biased by various factors, which include lung deposition, sampling conditions, aerosol size distribution, and aerosol in-mask mixing problems. When aerosols are not uniformly mixed inside the face piece an overestimation of respirator fit is reported due to the under sampling of aerosol penetration (Studies available upon request).*

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