QUANTITATIVE VS. QUALITATIVE FIT TESTING:
SIMULATED N95 PROTECTION FACTORS BY TESTING METHOD

95TH PERCENTILE PROTECTION LEVELS PROVIDED BY N95 FILTERING-FACEPIECE RESPIRATORS, BY FIT TEST METHOD*

PORTACOUNT FIT TESTERS ENSURE RESPIRATOR USERS ARE GETTING THE PROTECTION THEY DESERVE BECAUSE THEY KNOW HOW TO WEAR IT AND WHEN IT FITS.

** SWPF is the protection provided by a respirator, measured during a laboratory simulation of a workplace environment. A SWPF of 10 means that the air inside the respirator was 10 times cleaner than the air outside.

+ A National Institute of Occupational Safety and Health (NIOSH) study* confirms that while any fit test method significantly improves respirator protection, quantitative testing with the PortaCount® Respirator Fit Tester is the most impactful on N95 simulated workplace protection factors (SWPF) by a wide margin.
+ PortaCount Fit Testers were the only testing method in this study where 100% of the test subjects were able to exceed the OSHA Assigned Protection Factor (APF) of 10.
+ These results prove that quantitative fit testing provides a more rigorous training and testing experience than other methods. The findings also support the importance of respiratory protection training going hand-in-hand with fit testing.
QUANTITATIVE VS. QUALITATIVE FIT TESTING:
COMPARING THE TESTING EXPERIENCE

TESTING TIME
How long does a quantitative fit test take versus a qualitative test with Saccharin or Bitrex? It's important to remember that the test itself is only a portion of the total time required.

<table>
<thead>
<tr>
<th>Exercise / Activity</th>
<th>PortaCount® Fit Tester (QNFT)</th>
<th>Saccharin or Bitrex (QLFT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold Screening Test</td>
<td>N/A</td>
<td>~100 - 300**</td>
</tr>
<tr>
<td>Threshold Test Wear-off Time</td>
<td>N/A</td>
<td>~10.00**</td>
</tr>
<tr>
<td>User Respirator Assessment ***</td>
<td>5:00</td>
<td>7:00</td>
</tr>
<tr>
<td>One OSHA Compliant Fit Test***</td>
<td>2:29</td>
<td></td>
</tr>
<tr>
<td>Total Testing Time</td>
<td>7:29</td>
<td>23:00 - 25:00</td>
</tr>
</tbody>
</table>

Note: The listed times do not take into account some necessary preparation activities for each method such as daily calibration (QNFT), solution preparation (QLFT), test subject data entry or documentation (Both).
* Approximated
*** OSHA Respiratory Protection Standard 29CFR 1910.134 Appendix A.

PORTACOUNT FIT TESTERS OFFER MANY ADVANTAGES THAT SAVE TIME OVER QUALITATIVE TESTING

<table>
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<tr>
<th>Exercise / Activity</th>
<th>PortaCount® Fit Tester (QNFT)</th>
<th>Saccharin or Bitrex (QLFT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Prep and Set-up Time</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Automated Testing Steps</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Automatically Recorded Test Data</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Training w/ Real-time FitCheck Mode ™ = Fewer Test Failures</td>
<td>✓</td>
<td>–</td>
</tr>
</tbody>
</table>

TESTING EXPERIENCE
It's easy to see the advantages quantitative testing can offer.

PortaCount Fit Tester (QNFT)
Integrated, automated, step-by-step software test protocol that enables up to four people to be fit tested simultaneously using one computer
1 button push, 99% reduction in work, 100% reliable

Know You Are Protected!
+ Eliminates error
+ Enables real-time fit optimization and training
+ Eases reporting and record keeping
+ Minimizes operational resources
+ Eliminates repetitive stresses injuries caused by bulb squeezing
+ OSHA-compliant for all respirators including N95s

Saccharin or Bitrex (QLFT)
Squeeze Bulb
75-225 nebulizer squeezes per test subject

What a Waste!
+ Tedious process
+ Prone to errors
+ Increases need for operational resources
+ Constant bulb squeezing can cause repetitive stress injuries
+ Necessitates exposure to unpleasant sensitivity and test solutions
+ Prone to deceitful test responses

UNDERSTANDING, ACCELERATED

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