TSI® INCORPORATED OFFICIAL RESPONSE TO QUESTIONS RELATED TO USE OF THE PORTACOUNT® RESPIRATOR FIT TESTER DURING A PATHOGENIC OUTBREAK

APPLICATION NOTE RFT-032 (A4)

Contents

Introduction

The PortaCount® Respirator Fit Tester is being used extensively to fit test Healthcare Professionals and First Responders as part of respiratory protection programs. Numerous customers have asked TSI Incorporated about the best practices for operation of the PortaCount® Respirator Fit Tester during the pandemic. Frequently asked questions are reviewed below.

TSI does not have expertise on pathogens such as viruses or the transmission of them. Therefore, we cannot assess and provide much in the way of recommendations on the risk(s) of your unique situation. Please follow the CDC guidelines and your facilities policies for using the equipment.

Frequently Asked Questions

1. How do you clean and sanitize the PortaCount® Respirator Fit Tester?

TSI advises customers to follow their company's policies on cleaning/sanitizing the PortaCount® Respirator Fit Tester and associated twin-tubing from your written Respiratory Protection Program. Or, alternatively TSI recommends following your company's upgraded standard operating procedure for sanitizing equipment in your COVID-19 response plan. The surface of the PortaCount® Respirator Fit Tester and the twin tube assembly can be disinfected using a disinfectant from the list of products that meet EPA or CDC criteria for use against SARS-CoV-2 (see links).

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2.

https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html

Please note that TSI has not tested the materials in the list and cannot state if they will affect the lifespan of the PortaCount® Respirator Fit Tester.

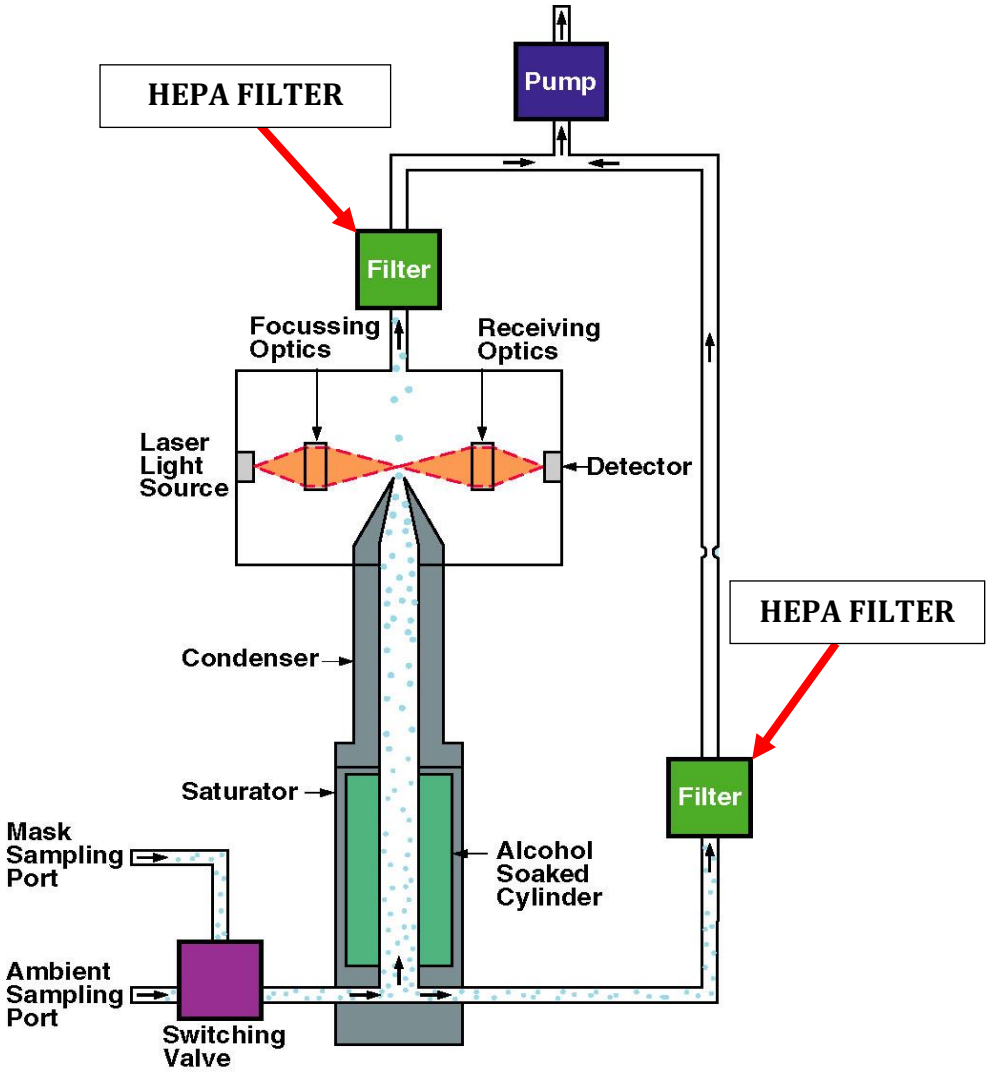
2. Can exhaled air from a person being fit tested expose the next person being tested? Could COVID-19 stay in the twin tube and get pulled back into the respirator when the next person is fit tested?

The twin tubes are under negative pressure or sealed during the operation of the PortaCount® Respirator Fit Tester. The air is either flowing into the tube to the PortaCount® Respirator Fit Tester or a valve has blocked the air flow in the tube during the fit test. Additional information can be found in TSI Application Note ITI-034 describing testing TSI performed on the air flow on the Twin Tubes during fit testing. The newer 8048 and 8038 units have a higher flow rate than the 8020 described in this application note; therefore, TSI engineers have determined that the conclusions in this application note apply to all models.

TSI does not recommend disinfecting the interior of the tubes between use; however, this can be done at the user's discretion. If you choose to disinfect the tubing, please disconnect the twin tubes from the PortaCount® Respirator Fit Tester before disinfecting the interior of the tubes. The interior of the twin tubes may be disinfected between use using a disinfectant from the list referenced above. Further, if you disinfect the interior of the twin tubes, TSI recommends that the tubes be rinsed with distilled water after disinfecting to prevent damage to the PortaCount® Respirator Fit Tester. TSI's testing has shown no need to clean or disinfect the inside of the twin tubes, as such the details of the cleaning procedure are determined by the user based on their requirements. Alternatively, additional spare Twin Tube Assemblies can be purchased for use (800197 - Twin-tube for PortaCount Respirator Fit Tester, blue/clear, 5-foot, pkg. of 1). Please consult your company procedures for the proper disposal of any used tubing.

3. **Does the PortaCount® Respirator Fit Tester filter the air sample exhausted from the instrument?**

The PortaCount® Respirator Fit Tester has two internal HEPA filters that filter the air sample inside the instrument before being exhausted to the ambient air (See figure below). HEPA filters are 99.97% efficient for the most penetrating particle size of 0.3 microns. Based on current understanding, Coronavirus particles, the smallest of which are believed to be 0.06 microns, are anticipated to be filtered out by NIOSH Series-95/99/100 rated filter medias at >99.97% efficiency.



4. **Can the PortaCount® Respirator Fit Tester be used to test efficiency of N95 Respirators?**

The PortaCount® Respirator Fit Tester is designed to test the fit of respirators to a respirator wearers face. The PortaCount® Respirator Fit Tester cannot be used to verify the filter efficiency of respirator being tested. Respirator filter efficiency is based on filter penetration measurements and pressure drop across the filter media with a filter tester as described in 42 CFR Part 84.

TSI Incorporated – Visit our website **www.tsi.com** for more information.

USA	**Tel:** +1 800 680 1220	**India**	**Tel:** +91 80 67877200
UK	**Tel:** +44 149 4 459200	**China**	**Tel:** +86 10 8219 7688
France	**Tel:** +33 1 41 19 21 99	**Singapore**	**Tel:** +65 6595 6388
Germany	**Tel:** +49 241 523030		

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