

RESPIRATOR FIT TESTING WITH CONTROLLED NEGATIVE PRESSURE



1. Is the test done on the respirator issued to the employee, or an equivalent mask shared by all tested employees?

With Controlled Negative Pressure (CNP) you can use each individual person's respirator, their assigned face piece and you just click in the adapters and perform the test.

2. Can the QuantiFit be used on disposable masks?

No, CNP cannot be used on disposable masks.

3. Our workers mainly use P2 disposable mask what testing do you recommend best to use?

Depends on how many people you are fitting. Both Qualitative (Bitrex, Saccharine, and banana oil methods) and Quantitative CNC method are options.

4. Can CNP be used for half-face pressure-demand PAPR (Cleanspace2)?

Yes

5. Many workplaces require the use of safety glasses. Do you fit test with safety glasses on at these workplaces?

Yes, if any other PPE is required when you wear your respirator, then you would wear it while you are being fit tested.

6. Do you need to be trained to use the QuantiFit Fit Test unit?

Not specialised training to use the Quantifit, but you need to be trained on fit testing to fit test with any equipment. According to ISO: Fit-test operators should have adequate knowledge, understanding and practical skills required to conduct a fit test. Fit-test operators shall be familiar with this document along with the appropriate sections of the RPD programme concerning RPD fit testing, purpose and applicability, specific roles and responsibilities, interference concerns, inspection, cleaning, maintenance and storage in ISO/TS 16975-1 and ISO/TS 16975-2.

7. Will calibration of the QuantiFit be available locally in Australia?

Yes, Air-Met will be setting up their offices to be able to calibrate the QuantiFit units locally.

8. Can I have a bit more information on the measurement during exercises? Is it dynamic?

With controlled negative pressure, when you do the test, you are holding your breath and you are not moving. It is doing fundamental fit on a continuous inhale after performing the exercise. So no, you are not doing dynamic movements during testing.

9. What do the reporting outputs from the QuantiFit include/look like? Does the CNC method produce a written report?

It does produce a written report.

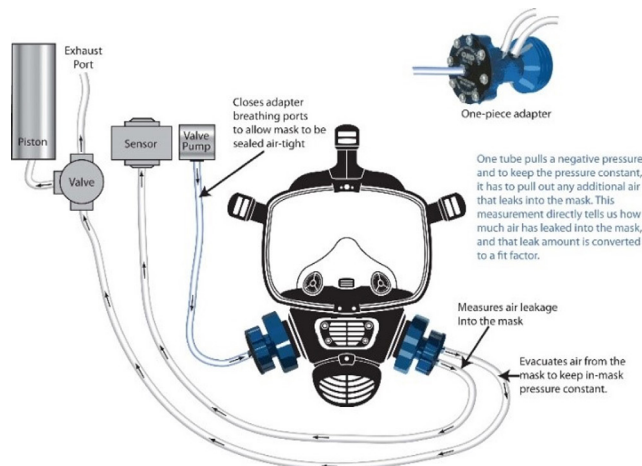
10. How interchangeable are the adapters between mask models? Do you need different adapters for different masks?

Mask models are very manufacturer specific so if they have the same means of connecting their filters to the respirators then they can move from model to model.

11. How does the adapter connect to the respirator when compared to CNC?

There's a one-piece for when you have one thread but then when you have the two inlets, they just screw in or click into either side. They are all made for each respirator type.

There is a very exhaustive list of different adaptors available for the masks that are on the market currently. So, similar to the probing adapters for CNC.



12. Are there any concerns with the rubber which are within the adaptors because of the disinfection process using alcohol?

The QuantiFit operates in a one-way flow and so at no point, is it just holding the air that you would have to worry about from person to person.

However, if you are assuming that anyone who comes in to be tested is e.g. COVID-19 positive, you would be concerned about any sort of surface contaminant. So anytime that you would take the adapter, you would want to just clean it out.

You are introducing alcohol to a surface that's not meant to be continuously exposed to alcohol, so you would definitely want to make sure that you're cleaning it and letting it dry completely and it might eventually take some sort of toll eventually but we haven't had anything thus far.

13. Australia has two different factor protectors for the same type of masks depending on the type of filter. Full face mask with P2 -> Factor protection of 50 and Full-face mask with P3-> Factor protection of 100. At the time we perform the test, which fit factor we need to use? 500 or 1000 or both?

It would be based on which type of filter you are using. If you are using both, then I would go with the higher value.

14. When performing the fit test on positive pressure masks, which is the fit factor to use?

That would be very mask and regulatory based.

15. How vigorous should the exercises be using the CNC method?

They are not performed in a vigorous manner.

16. Is there any difference when using CNC measures when placing the probes in the outer mask and not through the oral nasal passage? i.e. potential underestimation of fit factor?

Probe placement has an impact on the fit factor and you will get artificially higher fit factors if you don't probe into the nasal passage and keep it in the adapter.

17. Can the QuantiFit be used out in the field? i.e. when worker is on a dirty, hot and sweaty environment?

Yes, it can. The unit is highly portable so you can take this anywhere and run it off multiple different power sources.

18. Can the QuantiFit be used in an open environment, or does it have to be in controlled environment like Portacount?

Any environment.

19. Does the QuantiFit require alcohol wicks?

No wicks

20. Are the results shown in real-time as well or at the end of testing?

The test is only about 8 seconds long and there is a graphical representation throughout the 8 second test. It will show you the fit factor for each exercise and then the overall fit factor at the end.

21. When using the two-piece adapter, are results affected by the person's breathing rate? (air that is also being expelled from exhale valve)?

When performing the test, the user is holding their breath, so results are not impacted by the person's breathing rate.

22. How do we know what is happening with Australia and fit testing and where do I go to keep up to date with this?

Look for the Respfite accreditation.

23. What is the time allocated for REDON testing?

An individual test, those 5 exercises, typically takes about 2 minutes. For an in-depth look at the Redon Protocol, visit https://youtu.be/_K88R2D14hc

24. How does REDON protocol compare to other protocols?

There are a lot of different protocols. REDON is, in my opinion, the fastest.

25. Do you have anybody that can undertake these types of fit testing?

Anyone who can wear a respirator can undertake a CNP fit test.