# Revolutionizing Wearer Seal Checks with the QuantiCheck

Luke Allen, President OHD, LLLP

and

Stephanie Lynch, Phd, Product Manager OHD, LLLP



Positive Pressure Check



Negative Pressure Check

Introduction to Wearer Seal Checks



- Meant to confirm seal
- Not a substitute for a fit test
- Often not performed
- Performed poorly
- No record

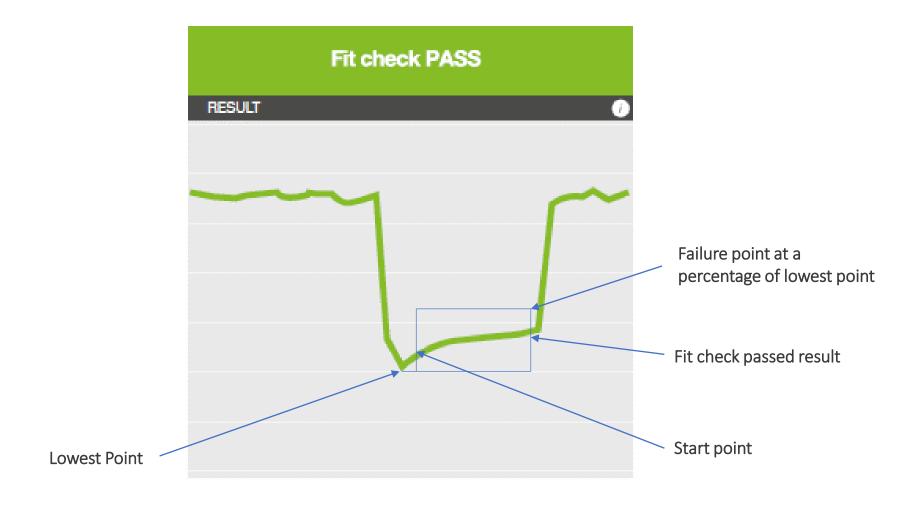
# Background

# Applying Tech to Checks

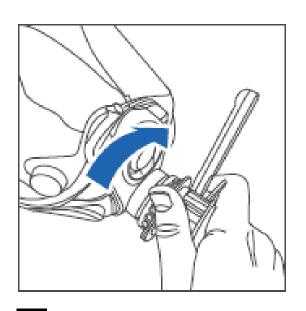
- Sensor measures pressure decay
- Static check of mask integrity and seal
- Companion app to track respirator performance



# What is the QuantiCheck® doing?



### Operation



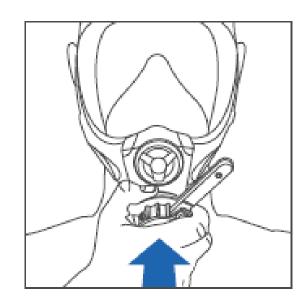
1 Attach QuantiCheck\* device

Attach QuantiCheck® on to the front filter thread by turning clockwise.



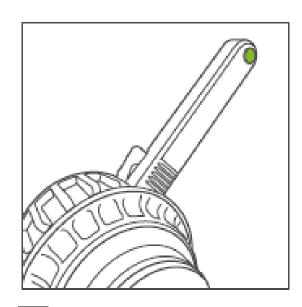
2 Don mask

Don your mask and tighten the appropriate straps.



#### 3 Perform fit check

Squeeze or press QuantiCheck® to seal device for check. Draw a breath until the flashing purple light turns solid, at which point hold your breath static for up to 10 seconds and wait for result.



4 LED indicator - Pass and Fail

A green light illuminates on the LED indicator for a passed test. A red light illuminates on the LED indicator for a failed test. Wait until the LED indicator flashes purple signalling a retest for the fit check.

## Understanding your results OuantiCheck®





#### 1 Passed fit check

A positive pull fit check trace line shows a single large fluctuation, followed by a gently increasing line before rising again at the end of the fit check.

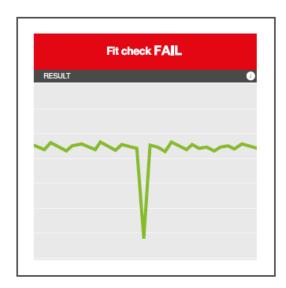
#### 2 Damaged or leaking seal

A negative pull fit check trace line shows large fluctuations or drops rapidly when there is a leaky or damaged seal or a poorly fitted mask.



#### 3 User in-ability to hold breath

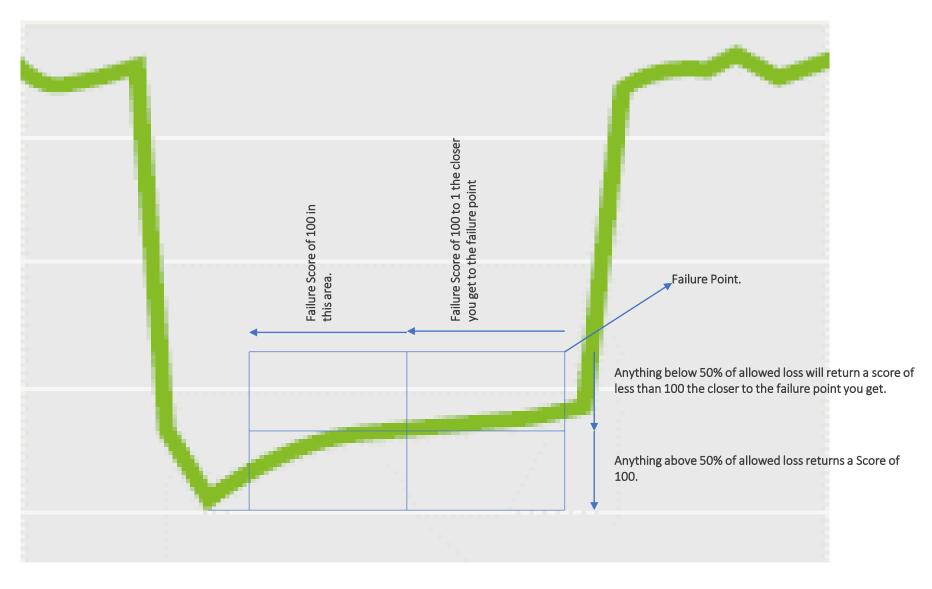
When a subject fails to hold their breath correctly, the trace line will either drop rapidly or look like a mountain range.



#### 4 A large mask breach

A sharp drop indicates a large leak in the mask.

# What does the QuantiCheck® score mean?



# Benefits

- Confirmation of mask integrity
- Verification of donning
- Removes subjectivity
- Wearer confidence
- Instant feedback
- Documented checks for recordkeeping

# QuantiCheck Demo



## Australian Distributor



Air-Met Scientific Pty Ltd Sales | Service | Rental

OHS & Environmental Monitoring Equipment Specialists

W: <u>www.airmet.com.au</u> E: <u>sales@airmet.com.au</u>

P: 1800 000 744 F: 1800 000 774