



# Quantitative Face Fit Testing/RPE

RPE2FIT background

Qualitative Face Fit Testing v Quantitative Face Fit Testing

Qualitative-Pros and Cons

Quantitative-Pros and Cons

Quantitative Face Fit Testing-Practical demonstration

Types of RPE-Samples of various RPE types/manufacturers

# RPE2FIT Ltd background

35 years in RPE

10 years training on average between 6-10000 employees annually

Assist in/designing and bringing ranges of disposable/reusable RPE to market

Fit2fit accredited in Qualitative/Quantitative Face Fit Testing



# Qualitative Face Fit Testing pros/cons

## ► Pros

- Inexpensive-a kit costs circa £170 + training
- Simple to use
- Portable
- Good fit training protocol

## ► Cons

- Inaccurate-subjective-did I taste it or not?
- Easy to fool-lying about tasting
- Limited application-unable to test all tight fitting RPE
- Difficult to manage reporting-manual
- Dependant on the employee being able to taste the solution
- Claustrophobia
- Possibility of spreading infection (Colds/flu etc)



# Quantitative Face Fit Testing pros/cons

- **Pros**


- Accurate-objective-Produces a numerical fit factor
- No Limitations-able to test all tight fitting RPE
- Accurate reporting-produces a complete accurate report-produced at the time of the test
- Confidence on the accuracy of the results
- Can't be fooled

- **Cons**

- Expensive-Portacount is circa £8000
- Requires costly annual calibration
- More time consuming in the set up



# Types of RPE and Limitations

- Disposables
  - Half Masks
  - Full Face Piece Respirators
  - Powered Air Purifying Devices
  - Air Fed Devices
  - Self Contained Breathing Apparatus
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# Filters

- **A= Organic Vapour (good warning properties ie taste/smell)**
- **B= Inorganic gasses** do
- **E= Acid gas** do
- **K= Ammonia**
- **P= Particulates = white**
- **AX=Low boiling point Organic Vapours < 65 degrees C**
  
- **P-P1 (4xWEL) P2 (10xWEL) P3 (20 x WEL)**
- **P3 on FFP=40 x WEL**
- **Class 1-ABEK1-**(Up to 1000ppm or 10xWEL) **Class 2-ABEK2-**(Up to 10000ppm or 10xWEL)
- Limitation of Air Purifying Filters- Some filters don't easily adsorb into activated carbon
- Some Organic Vapours are not easily detectable by taste or smell

# Guidance Documents

CoSHH

HSG53

OC282-28 (currently being revised-2018)

EH40



# Portacount demonstration





