

## F4501 Safe-Air Tester For Breathing-Air Systems



The F4501 Safe Air Tester is the latest generation of Factair's market leading air quality testing instruments and enables breathing-air tests to be conducted easily and quickly. This ensures complete compliance with the relevant requirements of COSHH L5.

Mounted within a tough impact and weather resistant PELI case the F4501 unit can be removed from the case and used as a stand-alone unit, where this makes testing more convenient. The instrument is supplied as standard with the F3002 high pressure regulator assembly and connection hose. The F3002 incorporates a DIN connection to fit 200/300 bar cylinders.

F4501 Safe-Air Testers are fitted with internal lithium rechargeable batteries and in addition also have a battery tray which accommodates 6 AA alkaline type batteries. In the event that the rechargeable batteries are not sufficiently recharged then you can continue to use the instrument with either the Alkaline AA batteries or a mains power supply.



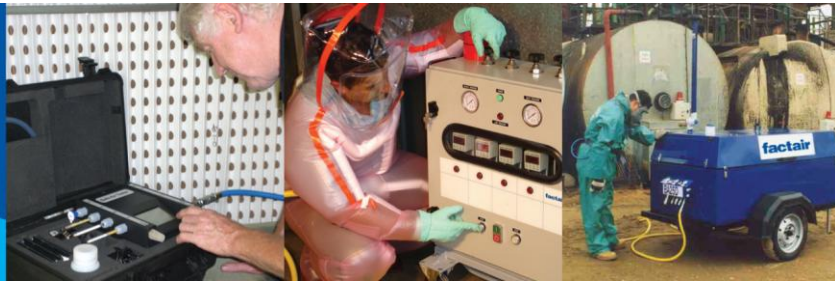
The unit features a colour touch screen, menu driven display, making air quality testing both easy and quick to complete, with a typical test taking about 18 minutes.

The detection parameters of EN12021:2014 are met or exceeded during the automatically controlled test by the use of Draeger detector tubes to establish levels of carbon monoxide, carbon dioxide, and water. For oil the instrument can use either the Draeger Impactor or oil tube. The new Draeger Impactor has no glass or hazard components and can test for all known synthetic and mineral oils. An inbuilt electronic sensor measures oxygen content and the percentage concentration is displayed, whilst a push button allows the odour to be checked through a sintered exhaust port.

At the end of each test results can be stored within the F4501's memory (up to 20 tests can be stored) and then downloaded via the USB cable into PC compatible software which is available to download from Factair's website. This software provides an easy way to retain and print test results.

Factair's quality accredited instrument workshop provides recalibration and servicing for the unit. In fact a testimony to the robustness and quality of Factair's Safe-Air Testers is that units over 10 years old are still in daily use.

## F4501 Safe-Air Tester For Breathing-Air Systems



Safe-Air Tester results download software

Safe Air Tester - [06-Jul-2016 at 16:54]

File Units Language

Test Info  
 Test Date: 06 Jul 2016  
 Tester Serial Number: 45001  
 Tester Calibration Date: 01 Jul 2016  
 Tester Model: F4500  
 Test Category: Airline below 40 Bar  
 Location: FACTAIR  
 Oil: Impactor

Test Result  
 Overall Result: Fail  
 Next Test Due: 18 Jul 2016  
 Name:   
 Address:

Test Measurements	Reading	Pass/Fail	*Requirements/Notes
Ambient Temperature:	19°C	--	
Test Point Volume:	0 L/min	N/A	** Suitable for RPD
Test Pressure:	5.4 Bar	N/A	** Suitable for RPD
System Pressure:	5.4 Bar	--	
Odour:	OK	Pass	Without significant odour or taste
Oxygen (O2):	20.9 %	Pass	20 - 22% by volume
Carbon Monoxide (CO):	0 ppm	Pass	5ppm (5ml per m3) max
Carbon Dioxide (CO2):	400 ppm	Pass	500ppm (500ml per m3) max
Oil Mist:	0 - 0.1	Pass	Less than 0.5 mg/m3
Water Vapour:	5000 mg/m3	--	
Pressure Dewpoint:	26.5°C	Fail	Must be at least 5°C below ambient

Requirements according to BS EN12021 = \*  
 \*\* = If not applicable (N/A), then certificate covers air quality only.

Sample breathing-air test result certificate

SAFE-AIR

factair

Test Date: 06 Jul 2016  
 Tester Serial Number: 45001  
 Tester Calibration Date: 01 Jul 2016  
 Tester Model: F4500  
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 Location: FACTAIR  
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\* = Requirements according to BS EN12021  
 \*\* = If not applicable (N/A), then certificate covers air quality only.

Overall Result: Fail  
 Next Test Due: 06 Oct 2016

SIGNED:   
 Service Engineer  
 Factair Ltd  
 49 Boss Hall Road  
 Ipswich  
 Suffolk, IP1 5BN

Name: Service Engineer  
 DATE: 16 Jul 2016

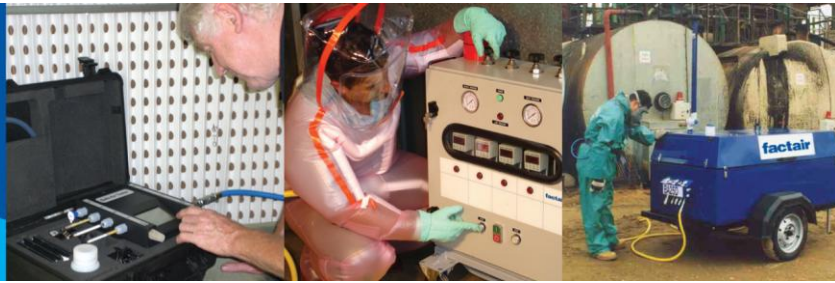
### DRAEGER DETECTOR TUBES / IMPACTOR

Substance	Chemical	Reference	Range
Carbon Monoxide	CO	-ref 6728511	5 -150 ppm
Carbon Dioxide	CO <sub>2</sub>	-ref 6728521	100 - 3000 ppm
Water	H <sub>2</sub> O	-ref 6728531	5 mg/m <sup>3</sup> – 200 mg/m <sup>3</sup>
Oil (Impactor)		-ref 8103530	0.1 mg/m <sup>3</sup> – 1.0mg/m <sup>3</sup>
Oil (tube)		-ref 6728371	0.1 mg/m <sup>3</sup> – 1.0mg/m <sup>3</sup>

Oxygen Cell	0 to 30%
Odour Check Button	

Model	Width	Length	Height	Weight
F4501	180 mm	470 mm	360 mm	7.5 Kg

## F4501 Safe-Air Tester For Breathing-Air Systems



### Included as standard



F2187 Tube Tip Cutter



High Pressure Regulator  
Up to 300 bar



Travel Container for  
Used Detector Tubes



USB A to Male USB B  
Connection Cable

### Accessories



6728371 6728531 6728511 6728521

Oil H<sub>2</sub>O CO CO<sub>2</sub>



8103530

Draeger Oil Impactor

### Other Factair Breathing Air Quality Testing Instruments

#### F4501ED Safe-Air Tester with integral electronic dewpoint meter

To fully automate moisture determination the F4501ED is supplied complete with an integral electronic dewpoint sensor (ED). This unit measures the moisture levels within the breathing air and records the information as both an atmospheric dewpoint levels and in mg/m<sup>3</sup>. This dewpoint meter is specially suited to sample air quality testing ensuring an accurate moisture reading within the standard test time.

Electronic Dewpoint Meter

-65°C to +10°C Pressure Dewpoint

#### F4500 Safe Air Tester

Designed for testing airline systems up to 10 bar, the F4500 features a built in digital flowmeter which can measure flowrates up to 600l/min. The F4500 can also be used to test HP cylinders and systems when used in conjunction with the F3002 HP regulator.