

The SAT450HD and SAT950HD are the ideal breathing-air purification systems for those working in areas where there is a risk of higher than normal levels of carbon monoxide or carbon dioxide being ingested into the compressed-air system.

Both units incorporate compressed-air filtration and drying systems which deliver a smooth, controlled, uninterrupted supply of breathing quality air far exceeding the requirements of BS EN12021 and a range of international standards. Built to last the units are mounted within a tough polyethylene housing. With virtually no ferrous components the unit incorporates stainless and aluminium components making it suitable to be used in tough and arduous environments. The stainless steel wheeled frame allows the unit to be easily manoeuvred into position.

At the rear of the unit there are the CEJN compatible breathing-air outlets (2 no. on the SAT450 and 4 no. on the SAT950), the pressure being delivered to the user from these outlets can be adjusted via the regulator inside the unit.

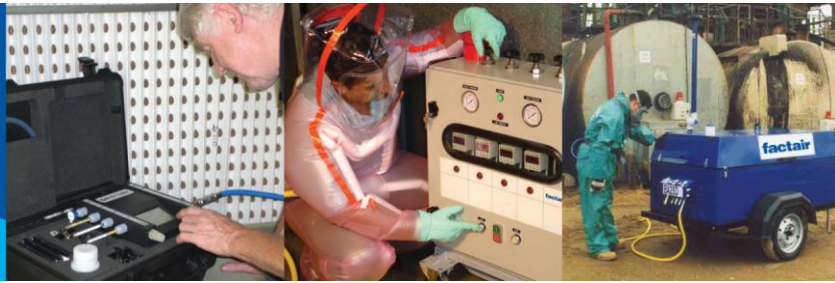


### Operation

The compressed-air supply is connected to the input connection on the side of the Safe-Air Trollies, air is then passed through a 25 micron pre-filter and a 0.01 micron combined oil mist coalescing and carbon filter further reducing oil carryover to less than 0.003ppm. The air is then delivered to a pneumatically controlled pressure swing dryer incorporating a desiccant media capable of both drying the air to a pressure dewpoint of -40°C and significantly reducing the levels of carbon dioxide. Purge air from this system is exhausted from the cabinet via silencers at the rear of the unit. The dried air is now passed through a hopcalite catalyst filter which oxidises excess levels of carbon monoxide back to safe levels of carbon dioxide.

The systems provide a safe reliable source of breathing quality air in excess of all international breathing standards with the additional confidence of protection against surplus levels of carbon monoxide and carbon dioxide.





## Technical Data

Model	Minimum Operating Pressure	Maximum Operating Pressure	Inlet Flowrate	Maximum Outlet Flowrate	Weight (Kg)	Length (mm)	Width (mm)	Height (mm)	Outlets
SAT450HD	4 barg	16 barg	590 lpm	450 lpm at 7 barg	54	600	560	1040	2 no. CEJN compatible sockets
SAT950HD	4 barg	16 barg	1274 lpm	950 lpm at 7 barg	75	600	560	1040	4 no. CEJN compatible sockets

Minimum recommended inlet temperature = 1.5°C, Maximum recommended inlet temperature = 30°C

## International Breathing-Air Standards

Component	UK BS EN12021:2014	Europe EN12021:2014	Canada CSA Z180.1-00	Australia AS/NZS 1715:1994
Nitrogen	Not Specified	Not Specified	Not Specified	Not Specified
Oxygen Level	21%(±1)	21%(±1)	20-22%	19.5%-22%
Carbon Monoxide	5ppm	5ppm	5ppm	10ppm
Carbon Dioxide	500ppm	500ppm	500ppm	800ppm
Pressure Dewpoint	5°C (41°F) below lowest ambient temperature	5°C (41°F) below lowest ambient temperature	5°C (41°F) below lowest ambient temperature	100mg/m <sup>3</sup>
Oil/Lubricant	0.5mg/m <sup>3</sup>	0.5mg/m <sup>3</sup>	1mg/m <sup>3</sup>	1mg/m <sup>3</sup>
Sulphur Dioxide	Not Specified	Not Specified	Not Specified	Not Specified
Nitrogen Oxides	Not Specified	Not Specified	Not Specified	Not Specified
Odours	Free	Free	Free	Free
Methane	Not Specified	Not Specified	5ppm	Not Specified
Volatile non-methane hydrocarbons	Not Specified	Not Specified	5ppm	Not Specified
Volatile halogenated hydrocarbons	Not Specified	Not Specified	5ppm	Not Specified

## Other Breathing-Air Products available from Factair



F6000/F6001  
Safe-Air Testers



Safe-Air Cabinets



Breathing-Air Hoses



A range of Mobile  
Breathing-Air Compressors  
and Trailair Cylinder Sets  
are also available.