

Autonomous liquid and gaseous oxygen generator

Oxyplane

A logistics-free solution to supply isolated sites with aviation breathing oxygen



- ✓ Autonomous and compact
- ✓ Elimination of logistics restraints
- ✓ Aviation oxygen purity 99.5%
(compliant with STANAG 7106 agreement)
- ✓ Air, sea, train and road transportable
- ✓ Easy to operate (only one person needed)
- ✓ Very low maintenance
- ✓ Compliant with NATO standards





How does it work?

Oxyplane is a robust and reliable system based on air separation technology combining high purity and liquefaction. Inside the container there is an oxygen generating system composed of a gaseous oxygen generator, two P.S.A's (Pressure Swing Adsorption), a purification loop, as well as a filling station for liquid and gaseous oxygen.

The liquid filling ramp can load-up at the same time two converters of 5, 8 or 10 litres, in approximately 20 minutes. The converters can then be taken directly aboard aircraft with breathable oxygen.

The generator also enables high-pressure gas production for filling emergency oxygen cylinders at 200 bar.

Monitoring, analysis and control are managed by a human interface machine which provides all of the necessary information regarding filling, purity and pressure, which makes it easy to use.

Oxyplane is an autonomous oxygen generator in both liquid and gaseous forms. This equipment is designed to provide certified aviation breathing oxygen for isolated sites and in harsh environments

Main components

- Filling ramp for liquid and gaseous oxygen
- Liquid oxygen storage tank
- Gaseous oxygen generator
- Two P.S.A's
- Purification loop



Technical characteristics & performances

- Utilities: electricity only – 45 kW/400 VAC / 50 Hz
Electrical power supply: 3 - phased + neutral + ground
- ISO 20-feet container
- Liquid oxygen production capacity: 60 litres/day
- Liquid tank capacity: 120 litres
- Gas oxygen production capacity at 200 bar: 2 Nm³/h
- Air cooling system in the container
- Compliant with NATO standards

O₂ purity

99.5% aviation quality according to STANAG 7106:

- Maximum water content: 7 ppm/vol. / dew point -63°C
- Maximum CO₂ content < 5 ppm

Environmental conditions

- | | |
|--------------------|---------------------------------------|
| Altitude = 0 m | - External temperature: -30°C / +50°C |
| | - Humidity max: 90% HR |
| Altitude = 1,500 m | - External temperature: -30°C / +40°C |
| | - Humidity max: 90% HR |

Associated services

- Preventive and curative maintenance
- Technical assistance
- Spare parts
- Training

Contacts

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