

# PRISM<sup>®</sup> Cryogenic Oxygen Generators

## Reliable on-site supply



### Features/benefits

#### Cost-effective

- Standard pre-engineered plant range
- Shorter lead times
- Reduced space required
- Economies of scale due to significant operating experience

#### High reliability

- Integrated instrument air system

#### Low operating costs

- Proprietary column packing
- Efficient adsorber system

#### Liquid argon production

- Argon supply for customer process

#### Flexibility

- The system configuration can be varied to make products required for the application.

#### Fully automatic controls

- Allows for remote operation
- Minimal site manning

### Superior performance

For applications with medium to high volume requirements, on-site gas generation is often preferred because of its cost-effectiveness and reliability. Air Products' Cryogenic Oxygen Generators can produce high purity oxygen at the flow rate you need. These generators can also be designed to make nitrogen and argon if required.

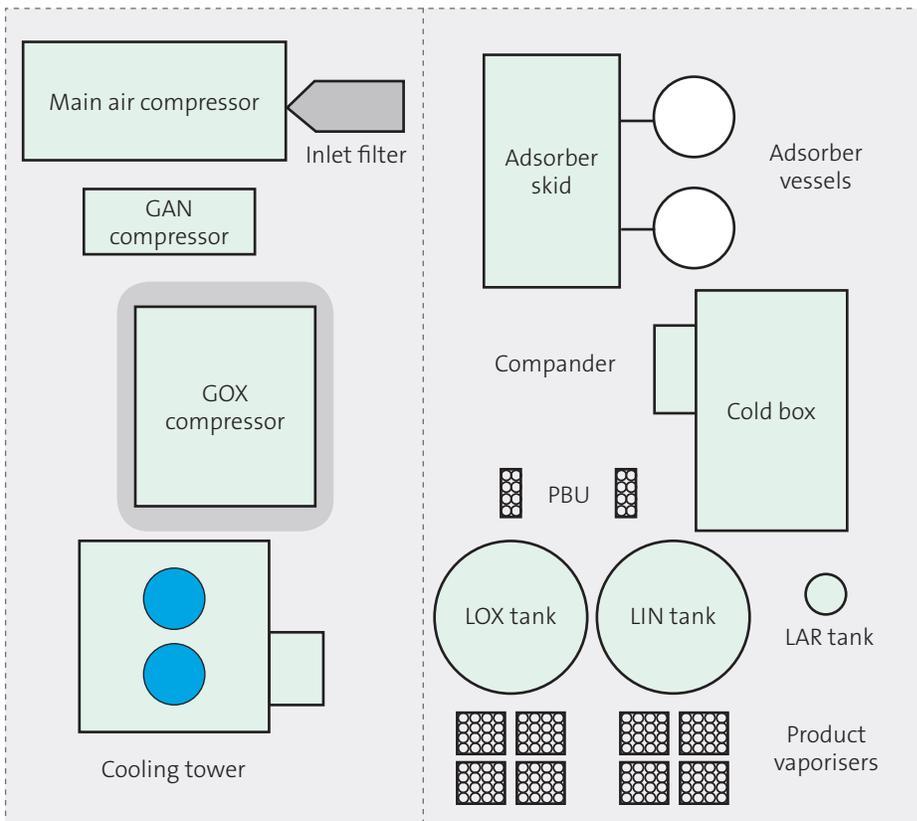
Our design, engineering, and expertise with on-site gas generation has developed over more than 80 years in plants located around the world. Today, Air Products' Cryogenic Oxygen Generators are reliable, efficient, and are designed for unmanned operation.

The PRISM family of Cryogenic Oxygen Generators span a full range of requirements up to more than 500 MTD of oxygen at 99.5% purity, gases nitrogen production of up to 480 MTD at 5 ppm of oxygen in nitrogen, and liquid argon supply of up to 26 MTD at 1.5 ppm oxygen in argon. Required product pressure can be achieved either directly from the plant or with the use of product compression. Product purities are dependent on the operation mode and feed air specification.

Product	Purity
Gaseous oxygen	99.5%
Gaseous argon	5 ppm (oxygen)
Liquid argon	1.5 ppm



Figure 2: Typical Plant Layout



## Applications around the world

On-site gas generation is an excellent choice for a broad range of industries that can benefit from oxygen's ability to increase production rates, reduce emissions, and enhance product quality. Around the world, glass, metals, steel production, and chemicals are utilizing our on-site gas generation solutions to cost-efficiently meet their industrial gas requirements.

## Our commitment to you

We believe that nothing is more important than safety, health and the environment. As an industry safety leader, we put our eight decades of expertise into every plan we design, build, sell and operate.

Additionally, on-site gas generation helps sustainability-minded customers reduce their carbon footprint. It reduces the transportation of delivered products and makes the molecule directly as a gas thereby avoiding the energy needed for liquefaction. And our technology and engineering teams are constantly working to provide even higher levels of energy efficiency in our on-site gas generators.

Certified under ISO 9001, Air Products designs all pressure vessels to ASME VIII standards with regional variations such as European PED when needed. Free field noise levels (with no other noise sources considered) are 85 dB (A) at one meter of the plot boundary. Lower noise levels can also be achieved. ASME B31.3 is our standard piping, while electrics are IEC, CE marked and NEMA where required.

## Gain from our experience

We understand all aspects of on-site gas generation. Put that expertise to work for you and realize the benefits of cryo oxygen generation for your application. Visit us at [www.airproducts.com/gasgeneration](http://www.airproducts.com/gasgeneration) or contact your local office below to see how we can help you.

**We welcome the opportunity to have a discussion with you. Please contact us at any of these locations:**

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