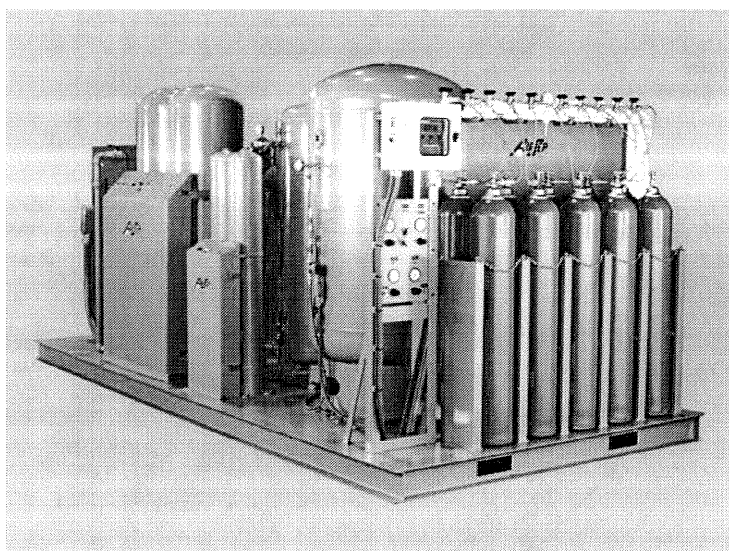


High Purity PSA Oxygen Systems



Features

- All components are oxygen-compatible
- Produce oxygen from compressed air
- Microprocessor controlled
- Low operating cost
- Automatic and unattended operation
- Easy to install and maintain

Typical Applications

- Hospitals/Medical
- Thermal/Chemical Oxidation
- Cylinder Refilling
- Metal Fabrication/Cutting

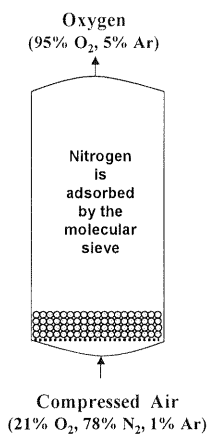
High Purity Oxygen Plants, with oxygen generation capacity up to 3000 SCFH at 2200 psig, are available from AirSep as standard, single train, turnkey systems. Plants with capacities up to 1250 SCFH are fully assembled and tested in AirSep facilities. Larger plants are designed to customer specifications and are field assembled.

The Dual Stage, High Purity Pressure Swing Adsorption (PSA) Oxygen Generating Process

Air contains 21% oxygen, 78% nitrogen, 0.9% argon, and 0.1% other gases. AirSep Dual Stage, High Purity Oxygen Generating Systems separate oxygen from compressed air utilizing a two stage Pressure Swing Adsorption (PSA) process to generate up to 99% pure oxygen.

Stage One:

The first stage of the PSA process uses molecular sieve (a synthetic zeolite), which attracts (adsorbs) nitrogen from air at high pressure and releases (desorbs) it at low pressure to generate 95% pure oxygen.



Stage Two:

The second stage of the high purity PSA process further purifies 95% oxygen to a level of up to 99% using a second type of molecular sieve (activated carbon sieve), which attracts (adsorbs) oxygen from the 95% oxygen stream at high pressure and releases it at low pressure.

