

NitroPure

Nitrogen Generation for Laser Cutting



COMPRESSED GAS TECHNOLOGIES INC.

Nitrogen Generation Specialists

www.nitrogen-generators.com



NitroPure

Designed specifically for laser cutting, the NitroPure system offers the highest in purity, pressure and efficiency. This total package includes a premium air compressor, a booster compressor, and a CGT PSA Nitrogen Generator that is reliable, yet simple. Maximize profitability and productivity with on-site nitrogen gas generation.



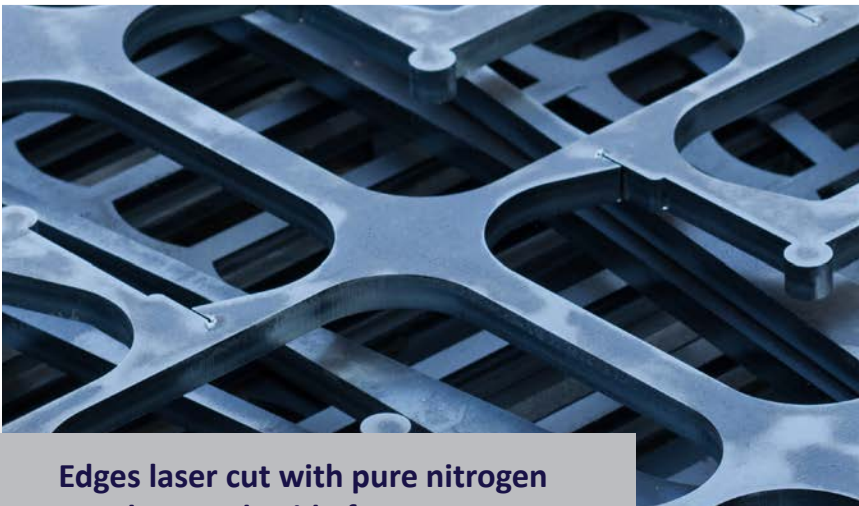
High flow rates to suit large nozzle sizes



Higher purity for improved edge quality



Highest efficiencies available on the market



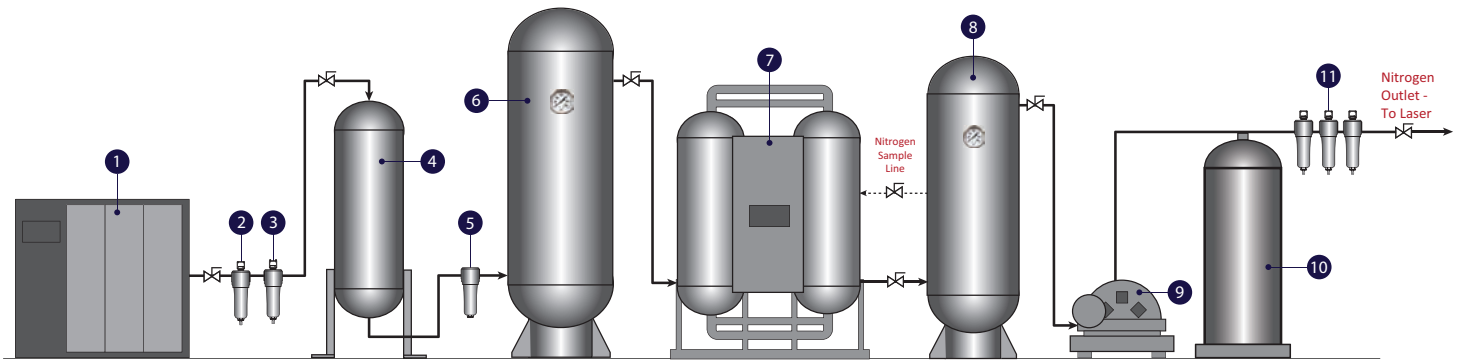
Edges laser cut with pure nitrogen are clean and oxide free.

Nitrogen Generation

Nitrogen is a dry, inert gas used in a wide range of applications where oxygen may be harmful to the product or process, such as laser cutting. Nitrogen generation starts with ambient air being compressed by a rotary screw air compressor. It is then dried and filtered to remove any impurities such as moisture, humidity, hydrocarbons and particulate. The air then enters the nitrogen generator, which separates the oxygen from the compressed air, leaving high purity nitrogen. The nitrogen gas then enters a high pressure nitrogen booster compressor, which boosts the pressure up to almost 500 psig and stored in a high pressure nitrogen buffer tank. The entire system is clean, simple and reliable.



System Layout



Equipment List:

- | | |
|--|------------------------------------|
| 1. Air Compressor & Air Dryer | 6. Dry Air Receiver |
| 2. General Purpose Air Filter | 7. CGT PSA Nitrogen Generator |
| 3. 0.01 micron High Efficiency Coalescing Filter | 8. Nitrogen Buffer Tank |
| 4. Activated Carbon Tower | 9. Nitrogen Booster Compressor |
| 5. 1 micron Particulate (Dust) Filter | 10. High Pressure Nitrogen Storage |
| | 11. Final Filtration Package |

Benefits

Guaranteed Performance

CGT has decades of experience with PSA (pressure swing adsorption) technology that reliably produces nitrogen gas.

Rapid Return on Investment

Nitrogen gas generation offers a significant cost savings over traditional cylinder or liquid supply that can provide a return on investment of less than 24 months.

Environmentally Friendly

Lower air consumption and refined controls provide greater energy efficiency in the nitrogen generation process.



Reduced Costs



Maximum Profitability



Less Downtime



High Reliability

Technical Data - Assist Gas (CO₂ and Fiber Lasers)

Model	Flow Rate	Purity *	Pressure **
NitroPure AG 2000	2000–4000 scfh	95%–99.99%	200–500 psig
NitroPure AG 4000	4000–6000 scfh	95%–99.99%	200–500 psig
NitroPure AG 6000	6000–8000 scfh	95%–99.99%	200–500 psig
NitroPure AG 8000	8000–10,000 scfh	95%–99.99%	200–500 psig

Technical Data - Beam Purge

Model	Flow Rate	Purity *	Pressure **
NitroPure BP Series	120–1300 scfh	up to 99.99%	75–200 psig

*Purity dependent on project specifications

**Higher pressures available as needed (up to 4,500 psig)



Compressed Gas Technologies Inc.
has been an industry leader of on-site
nitrogen generation throughout North
America since 2001.

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