

LASAL™

High-Purity Gases for Laser Cutting and Welding



Freedom from impurities is the most important factor when selecting gas for your lasing application. Gas purity affects the performance and reliability of your laser as well as the lifespan of your optics and output power. Air Liquide pioneered the industry standard for effective, consistent control of impurities often found in gases used for resonator lasing.

Our LASAL pure and multi-component gases are prepared under strict quality control procedures that virtually eliminate impurities such as moisture, hydrocarbons and particulates. Each LASAL cylinder is equipped with a chrome-plated residual pressure valve to preserve gas purity and protect against contamination by restricting backflow into the cylinder. The valve is factory shrink-wrapped to further minimize the opportunity for contamination of the cylinder's contents and to provide clear, visual evidence of tampering. Finally, every cylinder or multiple cylinder pack is strictly dedicated for LASAL products.

Turnkey Solutions

Air Liquide's various modes of high-purity assist gas delivery provide a steady flow of consistent pressure. This facilitates clean, burr-free cuts at maximum cutting speed. We can provide all the high-performance gas delivery equipment necessary to preserve the integrity of LASAL gases and to ensure safe, efficient delivery to your point-of-use.

LASAL advanced cylinder packaging ensures safer and leaner operation

- SCANDINA™ cap improves safety and provides easy maneuvering of cylinder.
- Chrome residual pressure valve protects purity and prevents backflow.
- Factory sealed valve guards against contamination and tampering.
- Cylinder label indicates traceable batch analysis information.
- Dedicated particulate-free cylinders and multi-packs.
- Bulk delivery available.

Specifications	Laser Manufacturer									
	1	P2	4	39	P51/61	53	83	101	105/106	155
	Trumpf Bystronic Rofin Sinar PRC	Trumpf Bystronic Rofin Sinar PRC	Trumpf Bystronic Rofin Sinar PRC	Rofin Sinar	Panasonic Mazak	Lumonics Verco Rofin Sinar	Mazak Cincinnati Amada Fanuc Stripit LVD	Coherent	Mitsubishi	Lumonics
Components										
CO ₂		100%			•	•	•	•	•	•
CO								•	•	•
He			100%		•	•	•	•	•	•
H ₂										•
N ₂	100%			90%	•	•	•	•	•	•
O ₂				10%						
Global Purity	99.999%	99.995%	99.996%							
Controlled Impurities										
H ₂ O (ppm)	<5	<3	<5	<5	<5	<5	<5	<5	<5	<5
Oxygen (ppm)	<3	<2	<5							
THC (ppm)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Particulate*										
CGA	580	320	580	590	580	580	580	350	350	350
Cylinder Volume (SCF)	230	50 lbs.	219	232	228	224	233	175	180	176

* All LASAL cylinders are cleaned and prepared for dedicated service. The operational procedures utilized by Air Liquide, including 10 micron filtration, eliminate potentially damaging particulate from being present within the cylinder.

Other LASAL pure and gas mixtures are available – please contact your Air Liquide representative for more information.