



Atlas Copco

# Laser cutting gas mixers

LC MIX

Level up your experience at  
[atlascopco.com](https://atlascopco.com)



## Optimize your laser cutting

Mixing high-pressure nitrogen and oxygen for laser cutting combines speed and efficiency with quality and a clean finish. The Atlas Copco LC MIX makes it easy. Available in two versions, the LC MIX provides pressure up to 31 bar and flow rates from 20 to 120 m<sup>3</sup>/hr with variable nitrogen and oxygen mixing. The compact and simple package (no mixing vessel required!) takes up very little room on your shop floor and requires minimal service, offering the simplest way to optimize your laser cutting performance and results.



### Quality cutting

- Superior mild steel and aluminum cutting quality.
- Reduced burr.
- Increased cutting speed.



### Quick installation

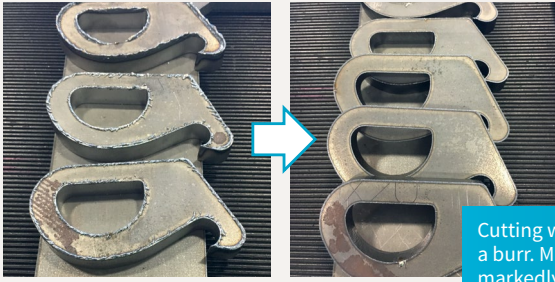
- Most compact gas mixer available.
- Easy, plug-and-play installation.
- Specifically designed to work with laser machines.



### Easy operation

- No large mixing vessels required.
- Flexible, real-time purity mix change.
- Minimal service requirements.

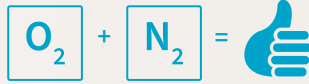
# Mixing speed and quality



Cutting with nitrogen only can create a burr. Mixing  $N_2 + O_2$  will give you a markedly cleaner result.

**O<sub>2</sub>** Pure oxygen cutting is **slow** and **leaves an oxide layer** that may need to be removed.

**N<sub>2</sub>** Pure nitrogen cutting is **faster** and gives clean edges but can require **deburring**.



By adding just the right amount of oxygen to nitrogen, you get:

- ✓ More than 5 times faster cutting speeds than with oxygen.
- ✓ Less burr.
- ✓ Edges that are paint- and weld-ready.

## Two versions to meet your needs

### LC MIX+ (Automatic)

- Controller with automatic selection of gas mix
- 79-99.5% purity
- Requires only single-phase electrical supply
- Dual certified (IEC/UL) and dual electrical supply (50/60 Hz)

### LC MIX (Manual)

- No controller
- Manually adjustable dial
- 79-99.5% purity
- No power supply needed



## A superior assist gas mixer

- Nitrogen purity up to 99.5%
- High accuracy  $\pm 0.1\%$
- Pressure and mix designed for laser cutting
- Accurate and stable mixed gas supply

## Technical specifications

Measurement	Min outlet capacity	Max outlet capacity	Max inlet pressure N <sub>2</sub>	Max inlet pressure O <sub>2</sub>	Max outlet pressure mix	Purity range (N <sub>2</sub> purity*)	Power supply (Automatic version)	Pressure drop	Inlet / outlet connections	Dimensions (L x W x H)	Mass**
Metric	20 Nm <sup>3</sup> /h	120 Nm <sup>3</sup> /h	34 Barg	33 Barg	31 Barg	79-99.5%	230v 50 Hz	2-4 Barg	1/2" BSP Cone male	0.6x0.6x0.8m	80 kg
Imperial	12 cfm	71 cfm	493 psig	478.5 psig	449.5 psig	79-99.5%	110v 60 Hz	29-58 psig	1/2" BSP Cone male	23.6x23.6x31.5"	176 lbs

\*rest gas is oxygen

### Reference conditions:

ISO class 8573-1 1:-:1 inlet quality; Nm<sup>3</sup>/h: 20°C/68°F; and 1013.5 mBar(a)

### Options:

- Oxygen room analyzer