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PLUG&PLAY NITROGEN GENERATOR





**NitroBOX** is a compact and easy solution to produce pressurized Nitrogen directly where it's needed, for laser and every other application where **high purity Nitrogen is needed**.

### QUALITY NITROGEN, QUALITY CUT

The high purity of Nitrogen produced by NitroBOX allows cutting stainless steel up to 20 mm thickness, with a **sharp and shiny cut edge**.



# SIMPLE AND EFFICIENT NITROGEN PRODUCTION

.40 bar

NitroBOX is designed and developed to allow a very quick and easy installation, in order to get on-site Nitrogen supply at desired pressure: a real Plug&Play system.

## Yes, it's really that simple!

NitroBOX requires only compressed air (already present in your facility or produced with a compressor) and a power supply, with significant cost and time savings.

NitroBOX is instantly ready to use.

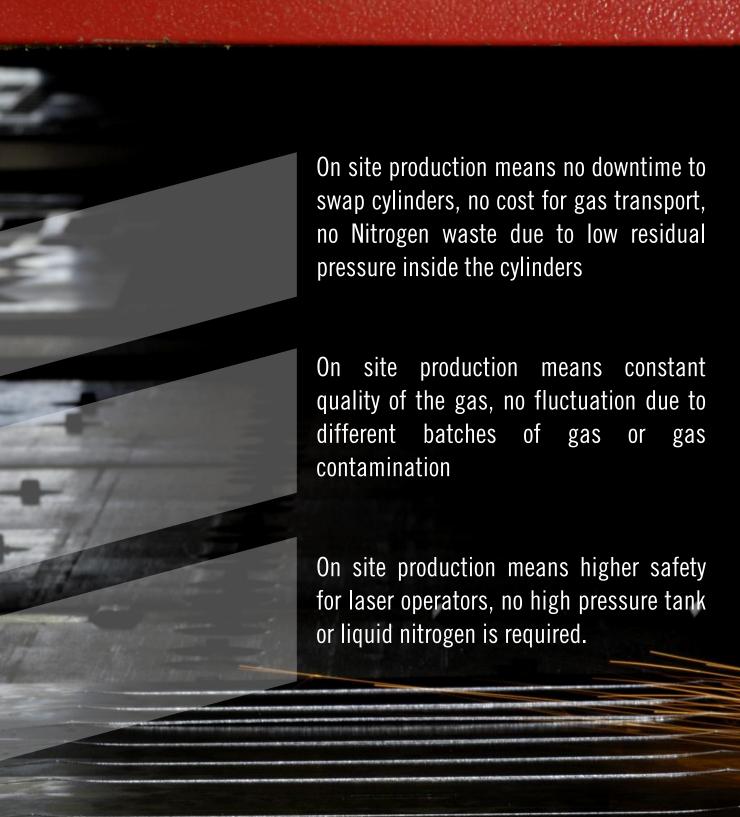
Thanks to the PSA technology, Nitrogen is produced directly from ambient air, **no chemicals required**.

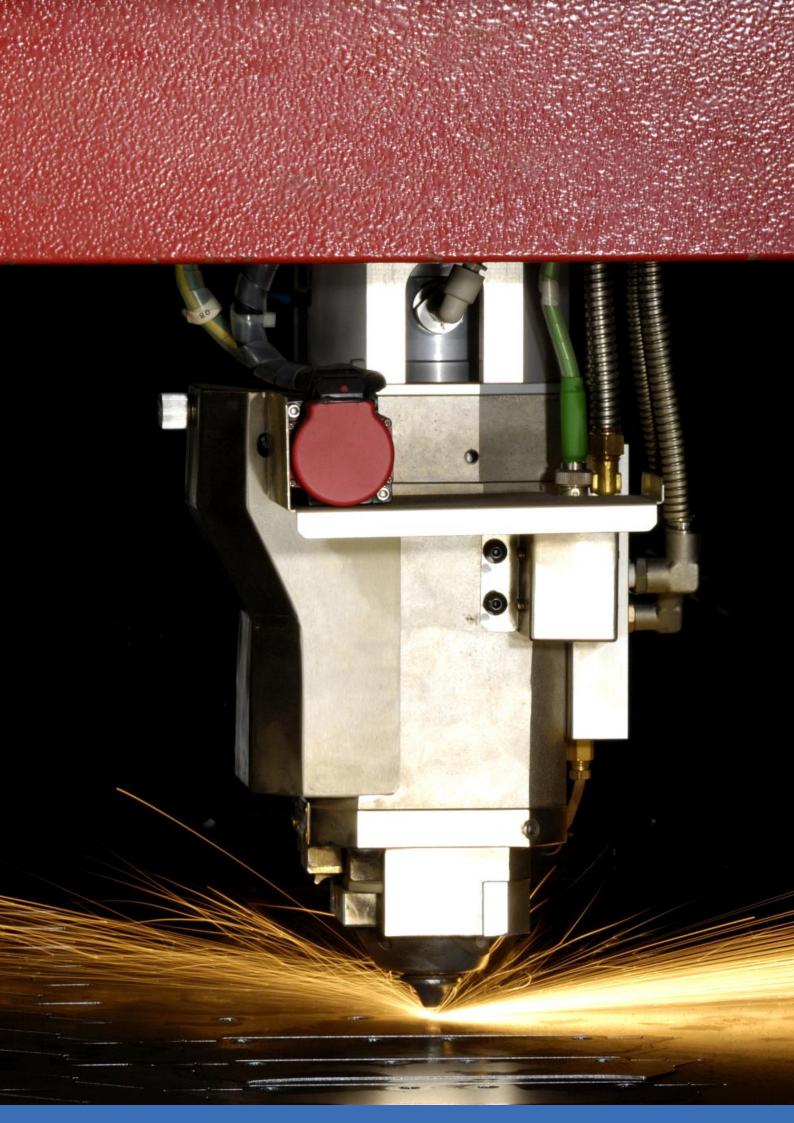
NitroBOX autonomously produces Nitrogen needed for cutting at 40 bar.

Nitrogen flows from NitroBOX to the laser system with flow rates up to 500Nm<sup>3</sup>/day.

Storage capacity can be easily increased by adding one or more tanks next to the NitroBOX system.









### TECHNOLOGY COMPARISON







**SAFETY** 

pressure (200 bar).

Explosion risk due to cylinders handling and high Full automatic operation with safety check, no cylinders handling.



**ECONOMICS** 

Nitrogen cost is formed by transport cost, cylinder rental and gas cost. No power needed.

Nitrogen cost is only due to the electricity needed to run the air compressor.



**AVAILABILITY** Nitrogen supply is subject to gas supplier availability. Downtime due to cylinders switch.

Nitrogen is continuously available without interruption - independency from gas suppliers.



**PURITY** 

Possibility of variations in gas purity due to different batches and contamination.

Gas quality is monitored in real time through PLC



**LOGISTICS** 

Space needed to store tanks, qualified personnel and vehicles needed for their handling.

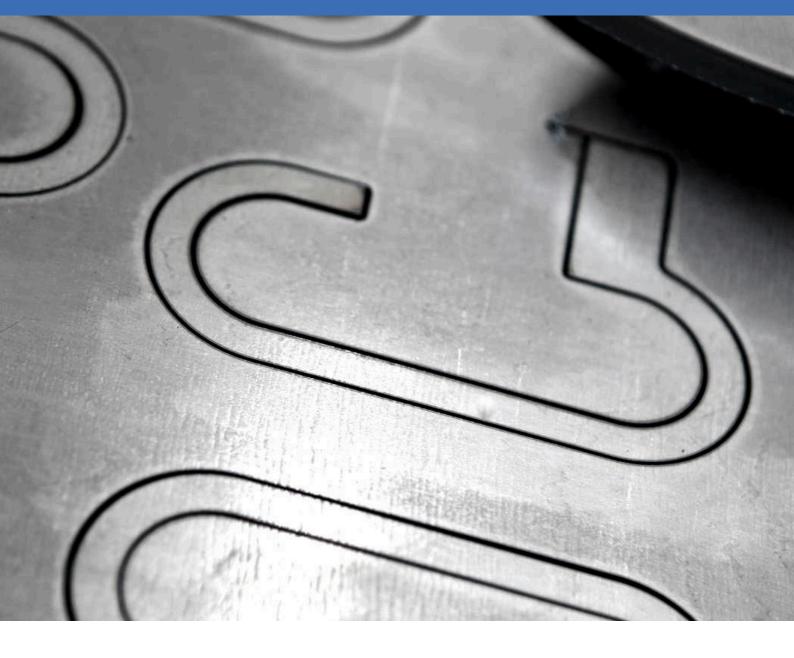
Small footprint, NitroBOX can be installed both indoor and outdoor.





#### **TECHNICAL DATA**

|   |                                       | Box130        | Box200      |  |  |
|---|---------------------------------------|---------------|-------------|--|--|
| Nitrogen production   | m³/day                                | 320           | 480         |  |  |
| Nitrogen Purity   | %                                     | 99,99         |             |  |  |
| Nitrogen pressure   | bar                                   | 40            |             |  |  |
| Nitrogen tank capacity  | Liters                                | 500@40 bar(g) |             |  |  |
| Compressed air consumption  | m³/h                                  | 65@8 bar(g)   | 95@8 bar(g) |  |  |
| Power consumption   | kWh                                   | 3             | 3,5         |  |  |
| Installed power   | kW                                    | 6             | 6           |  |  |
| Voltage   | 400V / 50-60Hz 3PH + N                |               |             |  |  |
| Interface   | Touchscreen display                   |               |             |  |  |
| Noise   | < 80 dbA (1 meter)                    |               |             |  |  |
| Installation Indoor/Outdoor (covered and not directly exposed to the sun) |                                       |               |             |  |  |
| Dimensions  | Cm                                    | 300x165x220h  |             |  |  |
| Weight  | Kg                                    | 2450          | 2600        |  |  |
| Communication   | RS232/RS485-USB, PC control, intranet |               |             |  |  |
| Certifications  | CE - PED                              |               |             |  |  |





NitroBox is designed and produced in Italy by



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