NITROGEN *ON-SITE* GENERATION SYSTEMS

For LASER CUTTING

INDUSTRIAL

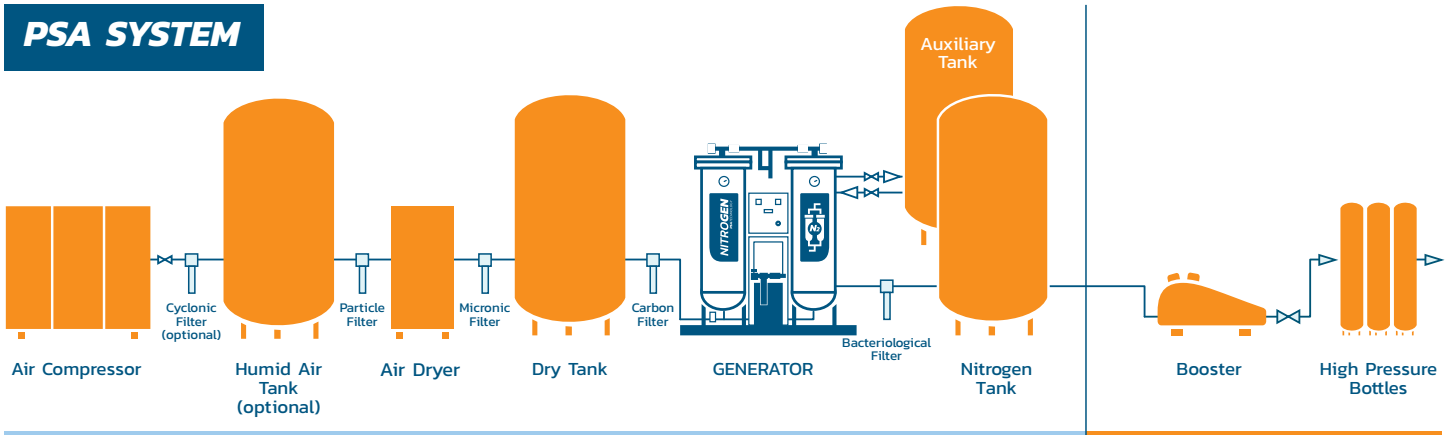
Modern metal parts manufacturing techniques are based on higher cutting efficiency, mainly supported in laser cutting technology.

This technology uses Nitrogen and Oxygen for cutting sheet metal process. The laser melts the metal at the cut-off point and the gas "blows" the melted material, leaving a smooth, clean and shiny surface. Nitrogen at high pressure is used in stainless steel cutting, aluminum and other alloys. Nitrogen flow and pressure will depend on the type of material, thickness or sheet cutting speed. The greater the plate thickness, more Nitrogen pressure is needed to make the cut.

High pressure, high purity and high flow rates are a major technological challenge for Nitrogen on site generation systems. After more than 2 years of R&D devoted to laser cutting operators, **SYSADVANCE** has developed a complete and effective system for production and supply of pressurized Nitrogen applied to laser cutting. **SYSADVANCE** modular technology allows generators to "grow" with your business.

With two different configuration possibilities, from medium pressure (up to 40 bar) and high pressure (up to 300 bar), **SYSADVANCE** systems guarantee the pressure, availability and purity required to obtain a clean and precise cut.

PSA SYSTEM



LOW PRESSURE INSTALLATION DIAGRAM

HIGH PRESSURE INSTALLATION DIAGRAM



MEDIUM PRESSURE

N_2 PURITY	> 99,99%
PRESSURE	Up to 40 bar
STORAGE	Tank

HIGH PRESSURE

N_2 PURITY	> 99,99%
PRESSURE	Up to 300 bar
STORAGE	Cylinder Rack



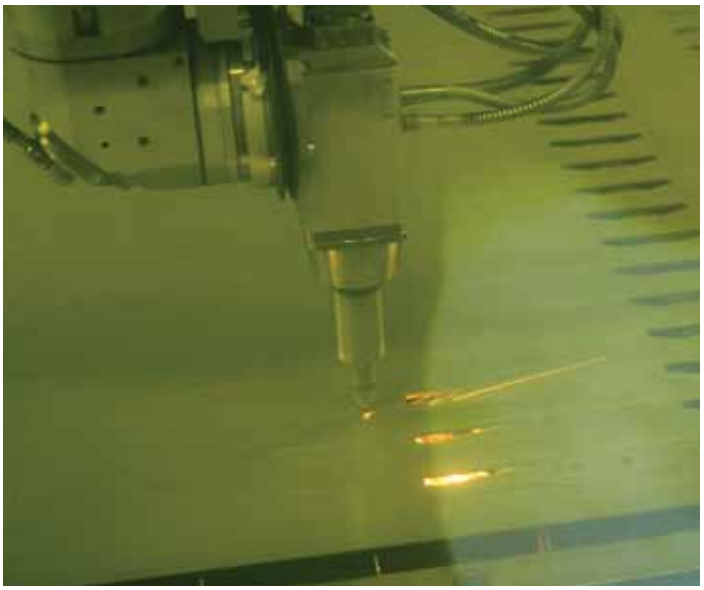
ON-SITE NITROGEN GENERATION SYSTEMS with PSA Technology

In the laser cutting process, Nitrogen consumption is one of the main cost factors. Start saving immediately, by producing Nitrogen from compressed air. **SYSADVANCE**'s nitrogen systems ensure fast return on investment, high reliability and low maintenance.

SYSADVANCE has an extensive experience in gas application in the laser cutting process.

Consult us for customer references with our systems installed already, as well as for more information on which solution best suits your needs.





QUALITY CONTROL CARRIED OUT ON NITROGEN PRODUCED BY NITROGEN GENERATORS

The Nitrogen produced by **SYSADVANCE**'s Nitrogen range generators is subjected to rigorous quality control tests in the factory, using calibrated measuring equipment and analytical methods suitable for the industry, in order to guarantee that the gas meets the specifications defined by the legislation.

The results obtained are duly recorded in a report, which is sent to the client together with the equipment documentation.

SYSADVANCE also offers its customers the service of periodically monitoring the specifications of the Nitrogen produced by the Nitrogen range of generators already installed and in operation.

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