

PURITY RELIABILITY SAFETY





We develop technology to help companies improving production efficiency, safety and quality of work.

ErreDue designs, builds and sells gas generators, mixers and gas purifiers, with flow rates from a few liters/hour up to hundreds of cubic meters/hour.

Every ErreDue product is designed with the idea of providing solutions to make our customers self-sufficient in producing their own technical gases through safe technologies; our target is to eliminate the use of gas cylinders avoiding the risks coming from potentially dangerous materials' storage, ensuring continuity and quality of production and releasing company's resources.

In ErreDue we seriously take care of quality: every product is certified and tested in order to ensure the maximum reliability in time, furthermore our technical service is always available for intervention in case of need.



## VENUS SERIES



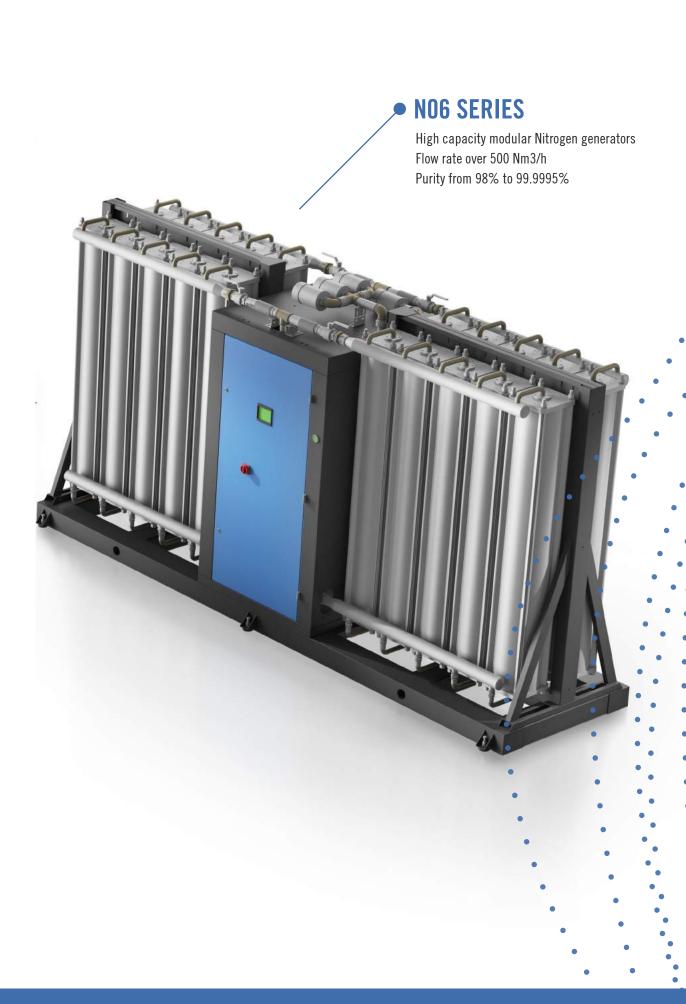
#### WHAT IS VENUS

Venus Nitrogen generator produces directly on site the Nitrogen gas used in many industrial processes, allowing independency from gas suppliers and maximum ease of use.

Furthermore, using a gas generator eliminates the

risks of manipulating high pressure gases.

Nitrogen gas is employed in thermal treatment of metals, inertization, MAP packaging of food and drinks and in plenty of other sectors, in many cases it can replace the use of liquid nitrogen.



# HOW IT WORKS

#### SAFETY AND EFFICIENCY

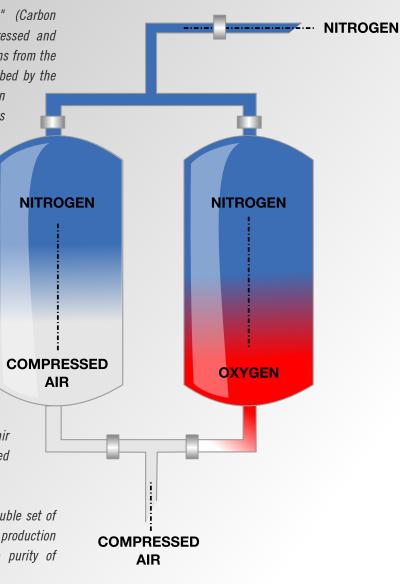
ErreDue Nitrogen generators use the PSA filtration system for filtering ambient air to obtain a continuous flow of pure Nitrogen.

Ambient air contains by volume 78% Nitrogen, 20.8% Oxygen, the rest is traces of other gases (argon, helium, Hydrogen...).

The system is made up by two sets of aluminum extruded columns filled with "CMS" (Carbon Molecular Sieves). A stream of compressed and pre-treated air flows through the columns from the bottom to the top, the Oxygen is absorbed by the filtering material whilst Nitrogen outgoing from the top of the towers is collected in a storage tank, ready to be used.

The PLC control system with dedicated software developed by ErreDue, automatically runs the main functions of the production process. A series of columns is kept in operation for a predetermined period of time: when it's almost saturated by absorbed gas, the control system automatically activates the other set of columns. The content of the first series of columns is then purged into free air and the filtering material is regenerated with a counter-flow of gas.

The production system consists of a double set of columns that allow an increase of gas production just by adding further columns. The purity of Nitrogen is up to 99.9995%.



#### • FLEXIBILITY AND QUALITY

Nitrogen flow produced with Venus generators is inversely proportional to the requested purity: with each model we can obtain different flow rates at different purity levels; for example, a GN30 of the N02 series can produce either 50m3/h at 98% purity or 8,5m3/h at 99,9995% purity.

Venus generators **don't need to be installed**, they just need a power plug and a compressed air supply to be ready for use.

### **ERREDUEGAS.IT**

FIND OUT MORE ABOUT ERREDUE ON-SITE GAS GENERATOR



VENUS NITROGEN GENERATORS ARE
DESIGNED AND MANUFACTURED IN ITALY BY



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