

# SATURN

HIGH PURITY NITROGEN GENERATORS



**RR**  
ErreDue  
ON SITE GAS GENERATORS

 ERREDUE TECHNOLOGY  
MADE IN ITALY

HIGH PURITY  
NITROGEN  
GENERATORS

# QUALITY NITROGEN, QUALITY CUT

Thanks to the integrated purifier, the high purity of nitrogen produced by Saturn allows to cut stainless steel of 25mm and over thickness, with an excellent cutting quality.



# SATURN

HIGH PURITY NITROGEN GENERATORS



ErreDue Saturn generators produce very pure nitrogen allowing to eliminate the use of cylinders and containers of liquid nitrogen, guaranteeing the company a considerable saving of resources and, thanks to a very small footprint, also of space.

Saturn generators operate totally automatically, controlled by a PLC with a touchscreen interface.

Saturn generators can be remotely controlled via an Ethernet connection. Furthermore, the production capacity can be increased even after installation, simply by adding other modules.

In an almost total absence of oxygen - the residual oxygen is less than 5 ppm - reaching very high levels of brilliance, the cutted piece undergoes an imperceptible oxidation.

The Saturn nitrogen generator, thanks to the high optimization ratio of air consumption (about 75% lower than traditional systems), it also allows equipping with smaller compressors, significantly reducing the consumption of electricity.



# OPERATING PRINCIPLE

## HOW DOES IT WORK

Saturn pure nitrogen generators produce a continuous flow of nitrogen without oxygen and residual humidity (purity up to 99.9999%), through the filtration and subsequent purification of a compressed air flow.

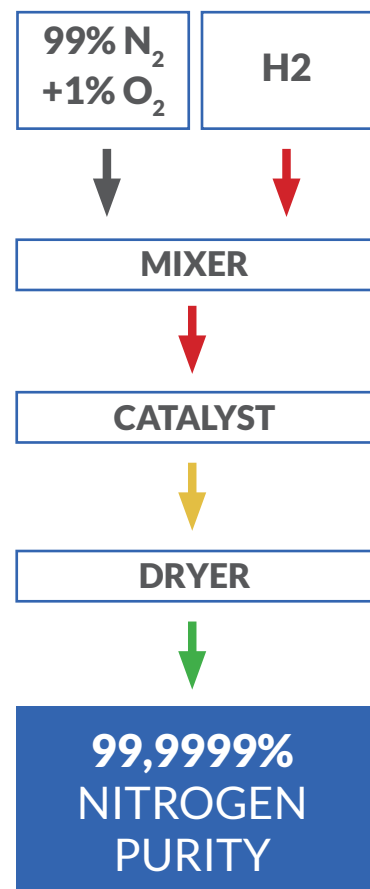
The very high purity of the produced nitrogen is possible by the addition of a small percentage of hydrogen (0.5-1%), which is produced directly by the system and added to the gas flow. The subsequent passages through a reactor and a molecular sieve guarantee the elimination of oxygen and other gases as well as traces of humidity.

## MAXIMUM CONSTRUCTION STANDARDS

Manufactured according to the highest quality standards, they comply with current European regulations, with relative CE marking and in particular:

- 2014/30/UE electromagnetic compatibility;
- 2006/42/CE machinery directive;
- EN60204-1 safety of machinery - electrical equipment of machines;
- 2014/68/EU pressure Equipment Directive;

ErreDue follows ISO 9001:2015 directive for quality management.



### sustainability

less than 0.35 Kw to produce 1 Nmc of pure nitrogen



### practicality

no production stops due to lack of gas



### security

risk-free transport and handling of liquid nitrogen










### savings

2,5 sqm of compressed air for 1 Nmc of pure nitrogen

# GENERAL FEATURES

## **SATURN** HIGH PURITY NITROGEN GENERATORS

	<b>PURITY</b>	High purity up to 99.9999%
	<b>LOW POWER CONSUMPTION</b>	Only 2,6 sqm of air for every 1 cubic meter of nitrogen produced: 75% less than traditional nitrogen generators
	<b>AUTOMATED OPERATION</b>	Continuous production of nitrogen without the presence of the operator, minimal periodic maintenance and elimination of the work required to use liquid gas or in cylinders
	<b>ADVANCED ELECTRONIC CONTROL</b>	management with PLC equipped with intuitive graphics with the possibility of remote MODBUS communication. The system is completely controlled by OCS of the latest generation and ensures complete connectivity between the machine and remote operator, that can read the process variables of the system and remotely intervene on the management of the machine
	<b>EXPANDABILITY OF THE PRODUCTION</b>	Designed to increase production with the simple addition of modules
	<b>ECO FRIENDLY</b>	Road transport for nitrogen supply is eliminated
	<b>TECHNICAL ASSISTANCE</b>	Saturn pure nitrogen generators produce a continuous flow of nitrogen without oxygen and residual humidity (purity up to 99.9999%), through the filtration and subsequent purification of a compressed air flow. The very high purity of the produced nitrogen is possible by the addition of a small percentage of hydrogen (0.5-1%), which is produced directly by the system and added to the gas flow. The subsequent passages through a reactor and a molecular sieve guarantee the elimination of oxygen and other gases as well as traces of humidity.

# SERIES SATURN 20/30



TECHNICAL FEATURES		SATURN 20	SATURN 30
DIMENSIONS	mm	2200x1000x2150	2200x1000x2150
WEIGHT	kg	1300	1450
NITROGEN PRODUCTION	Nmc/h	20.0	30.0
RESIDUAL OXYGEN CONCENTRATION	PPM	up to 5	
OUTLET GAS DEWPOINT	°C	up to -70° C*	
OUTLET PRESSURE STD*	bar	5	
ELECTRIC POWER SUPPLY STD*		3x400V+N50Hz	
ELECTRICAL POWER	kwh	6	7,5
DISTILLED WATER	Lt/h	0,45	0,65
COMPRESSED AIR CONSUMPTION	Nmc/h	60	90
AMBIENT TEMPERATURE STD*	°C	5-35	
CONTAINMENT TANK		•	
INTERNAL INSULATED TRANSFORMER		•	

\*Other configurations on request

# SERIES SATURN 60/90

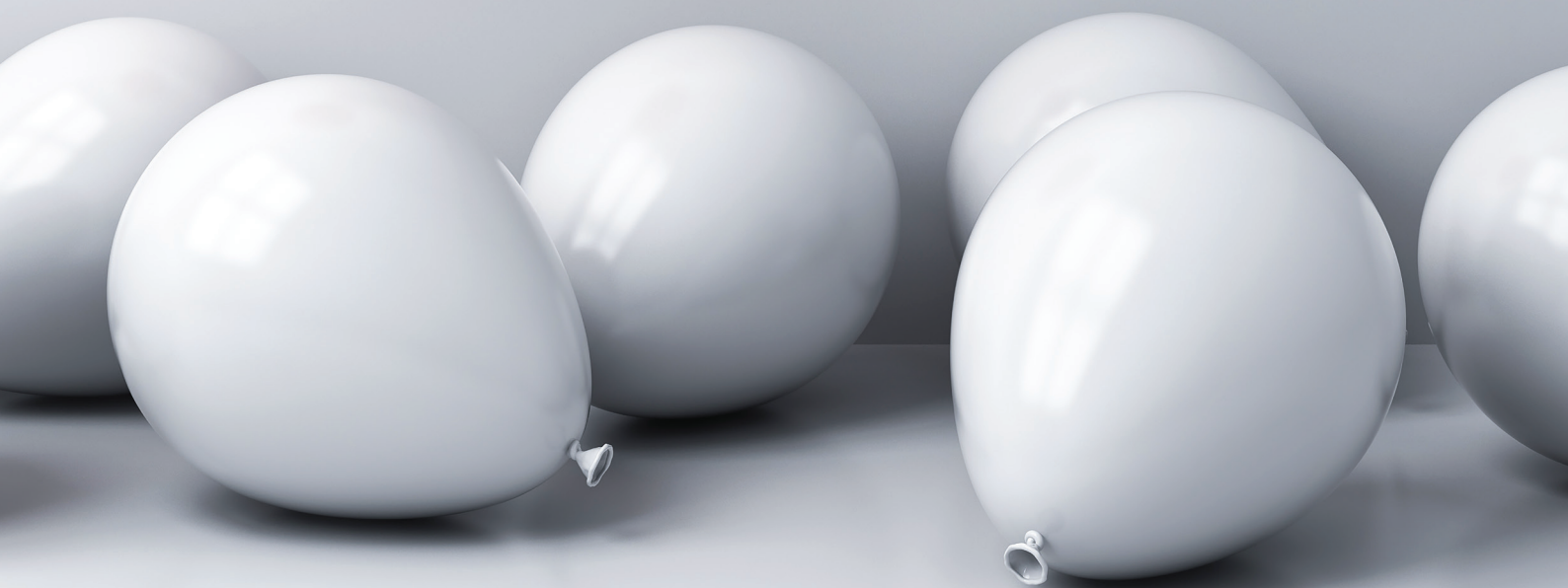


TECHNICAL FEATURES		SATURN 60	SATURN 90	SATURN 250
DIMENSIONS	mm	3000x1370x2560	3000x1370x2560	5930x1800x2510
WEIGHT	kg	2300	2700	7800
NITROGEN PRODUCTION	Nmc/h	60.0	90.0	250.0
RESIDUAL OXYGEN CONCENTRATION	PPM	fino a 5		
OUTLET GAS DEWPOINT	°C	fino a -70*		
OUTLET PRESSURE STD*	bar	5		
ELECTRIC POWER SUPPLY STD*		3x400V+N50Hz		
ELECTRICAL POWER	kwh	15	20	35
DISTILLED WATER	Lt/h	1,35	2,00	3
COMPRESSED AIR CONSUMPTION	Nmc/h	180	270	720
AMBIENT TEMPERATURE STD*	°C	5-35		
CONTAINMENT TANK		•		
INTERNAL INSULATED TRANSFORMER		•		

\*Other configurations on request



DON'T  
BUY GAS  
**GENERATE  
IT!**



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**ErreDue**

ON-SITE GAS GENERATORS

  **ERREDUE TECHNOLOGY  
MADE IN ITALY**



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