

Claind PICO & FLO Series

N2 PICO & FLO series combine the ten-year experience of Claind in the field of nitrogen generation with the recent improvements in the technology of separating nitrogen from atmospheric air.

N2 PICO & FLO range have been designed to satisfy all the industrial applications, such as iron, steel, agriculture, food, chemical, pharmaceutical, energy and petrol industry.

IMPROVED FEATURES OF THE NEW EDITION

- **No buffer:** the PICO and FLO N series uses only one reservoir, both as a buffer and working reservoir.
- **Improved efficiency:** thanks to the new pneumatic control the air consumption is lower for high purity range, if compared with the previous edition.
- **Standard pressure** regulator for nitrogen outlet.
- **Easier and faster** to install, thanks to the new electronic control.

MAIN FEATURES

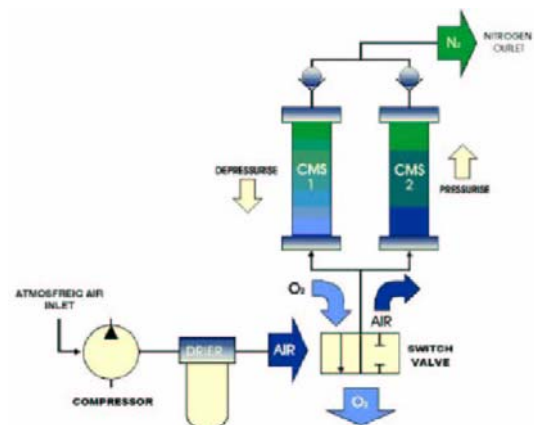
- **Independence:** the generator works unattended and autonomously 24 hours a day, 365 days a year with neither surveillance nor programming by means of electrical power.
- **Stand by:** the production of Nitrogen is proportional to the consumption. If the production flow exceeds the consumption the generator enters in a stand-by mode automatically.
- **Custom purity:** the purity of nitrogen can be set according to the customer needs. It can vary from 99.5% to 99.999%.
- **Oxygen analyser:** every generator from the PICO and FLO series have a standard built in analyser to real time show the purity of the nitrogen generated.



WORKING PRINCIPLE

Thanks to the **PSA (Pressure Swing Adsorption)** principle the generator produces nitrogen by compressing ambient air and passing it into a Carbon Molecular Sieve bed (CMS). Inside the CMS bed, oxygen, moisture, CO₂ and other 'contaminants' are trapped allowing nitrogen to pass through into a holding reservoir. Nitrogen from the holding reservoir is regulated to a fixed flow and pressure before exiting the generator.

Claind is one of the worldwide major manufacturer of the PSA technology.



Pico&Flo flow-rates

MODEL		Outgoing nitrogen flow* [Nm³/h]						
Name	Purity [%]	99.999	99.99	99.9	99.5	99	98	97
Flo	N2 FLO1 N	0.2	0.4	0.8	1.3	1.7	2.1	2.4
	N2 FLO2 N	0.4	0.8	1.6	2.5	3.1	4	4.6
	N2 FLO3 N	0.6	1.2	2.3	3.7	4.6	5.8	6.8
	N2 FLO4 N	0.9	1.7	3.2	5	6.3	7.9	9.2
Pico	N2 PICO3 N	1.3	2.5	4.7	7.5	9	12	14
	N2 PICO4 N	1.7	3.3	6	10	13	16	18
	N2 PICO5 N	2	4	8	12.5	16	20	23
	N2 PICO6 N	3	5	9	15	19	24	27
Multi-Pico 6	N2 2xPICO6 N	6	10	18	30	38	48	54
	N2 3xPICO6 N	9	15	27	45	57	72	81
	N2 4xPICO6 N	12	20	36	60	76	96	108
	N2 5xPICO6 N	15	25	45	75	95	120	135

Air/N ₂ Ratio	12	7	5	3.8	3	2.8	2.5
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* The Flow capacity is referred to nominal conditions of Air Inlet : pressure 8,5 bar, temperature. Apply Correction factors for different Air Inlet Pressure values.

CORRECTION FACTORS

Flow specifications will vary depending from AIR INLET PRESSURE. According to the following "CORRECTION FACTORS" you can determine the real Nitrogen Generator flow:

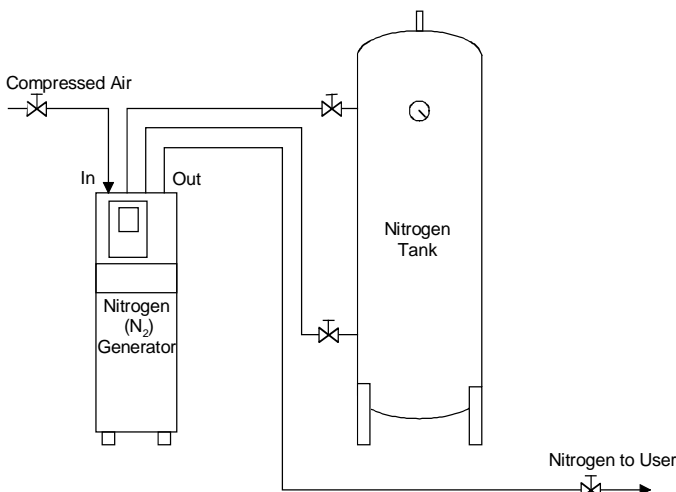
AIR PRESSURE [bar]	6.5	7.5	8.5	9.5	10.5	11.5
PERFORMANCE PERCENTAGE [%]	80	90	100	108	116	125

N₂ working pressure range:
N₂ maximum pressure available:
N₂ moisture content:

0.5÷10 bar
11 bar
-50° Dew
Point ATP

NITROGEN TANK

Pico and Flo models must be connected to a nitrogen reservoir to assure proper work. This reservoir can be dimensioned according to the flow consumption and is not included in the supply. See the following layout.



Dimensions

Series	W (cm)	D (cm)	H (cm)	Wt (Kg)
N2 FLO1 N	40	80	118	92
N2 FLO2 N	40	80	118	113
N2 FLO3 N	40	80	118	134
N2 FLO4 N	40	80	118	155
N2 PICO3 N	40	128	138	218
N2 PICO4 N	40	128	138	254
N2 PICO5 N	40	128	138	290
N2 PICO6 N	40	128	138	290

General specifications

Power Supply: 115 Vac ± 10% 60Hz; 230 Vac ± 10% 50 Hz
 Power consumption: 50 VA
 Degree of protection: IP 20
 Operating temperature: 5÷40°C, INDOOR
 Noise level: ≤ 60 dB

AIR SUPPLY CHARACTERISTICS*

Inlet Air flow: according with the N₂ flow
 Inlet Air pressure: min 6.5 / max 11.5 barg
 Quality: dry, clean air, exhalation free.
 According to ISO specifications: ISO 8573-1, the class quality is <1.4.1