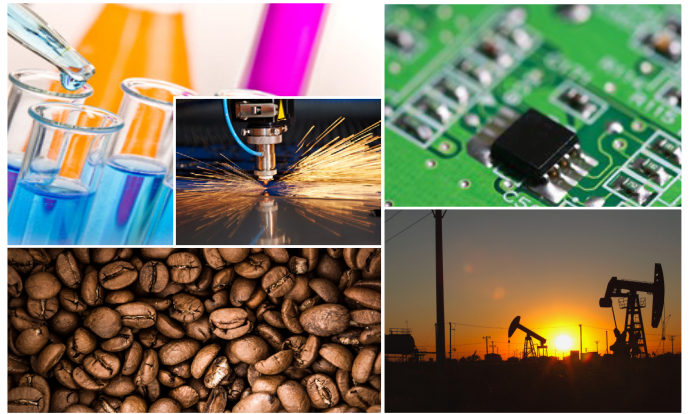




NOXERIOR  
GAS  
SYSTEMS



## MODULAR NITROGEN GENERATOR NITROSWING NS-37

Up to 99.999% nitrogen

Nitroswing is a range of modular PSA generators resulting of years of R&D within Novair Noxerion Gas Systems.

Highly efficient and reliable, Nitroswing offers a full flexibility thanks to its unique patented modular design.

Rev A 04/2021

### Key features

- Adsorber Module(s) in Anodised Aluminium
- Set of External Feed Air Filters
- Pneumatic Valves
- Internal Piping in Stainless Steel 316
- Maintenance-free Exhaust Silencers
- Air Flow Regulation
- Local Instrumentation
- Control System with Siemens SIMATIC® colour 7" Touch Screen
- Operator Interface and Data logging
- Standard Profinet Industrial Ethernet Interface
- Nitrogen Pressure Transmitter for Optimal Monitoring and Automated Idle-Mode

### Designed for

- Blanketing of Chemicals and Pharmaceuticals
- Gas Assisted Injection Moulding (GAIM)
- Heat Treatment of Ferrous & Non-Ferrous Metals
- Inerting of Flammable Liquids
- Laser Cutting
- Prevention of Dust Explosions
- Re-flow and Wave Soldering of PCBs
- UV-Curing of Coatings
- Food & Beverage Processing and Packaging



### Benefits

- **Safety:** Low Operating Pressures, no Hazardous Storage
- **Economy:** Low Operating Costs, Easily Expandable
- **Convenience:** Fully Automatic and Unattended Operation
- **Reliability:** Easy to Install and Maintain

[www.novairindustries.com](http://www.novairindustries.com)

# NITROSWING NS-37

On site nitrogen production up to 99,999%



NOXERIOR  
GAS  
SYSTEMS

## Technical data

| Oxygen Content                                |                   | 10ppm      |      | 50 ppm |      | 100 ppm |      | 500 ppm |      | 0.1 vol.% |      | 0.5 vol.% |      | 1 vol.% |      | 2 vol.% |      | 3 vol.% |      |
|-----------------------------------------------|-------------------|------------|------|--------|------|---------|------|---------|------|-----------|------|-----------|------|---------|------|---------|------|---------|------|
| Feed Air Pressure                             | bar(g)            | 7.5        | 10   | 7.5    | 10   | 7.5     | 10   | 7.5     | 10   | 7.5       | 10   | 7.5       | 10   | 7.5     | 10   | 7.5     | 10   | 7.5     | 10   |
|                                               | psig              | 110        | 145  | 110    | 145  | 110     | 145  | 110     | 145  | 110       | 145  | 110       | 145  | 110     | 145  | 110     | 145  | 110     | 145  |
| Product Flow rate <sup>1</sup>                | m <sup>3</sup> /h | 11.7       | 13.6 | 15.4   | 18.3 | 18.6    | 22.7 | 25.5    | 32.6 | 31        | 37.3 | 43.6      | 52.6 | 52.4    | 59.9 | 64.3    | 73.4 | 69.2    | 79.6 |
|                                               | scfm              | 7.4        | 8.6  | 9.7    | 11.6 | 11.7    | 14.3 | 16.1    | 20.6 | 19.6      | 23.6 | 27.5      | 33.2 | 33.1    | 37.8 | 40.6    | 46.4 | 43.7    | 50.3 |
| Product Pressure                              | bar(g)            | 6          | 8    | 6      | 8    | 6       | 8    | 6       | 8    | 6         | 8    | 6         | 8    | 6       | 8    | 5.8     | 7.8  | 5.7     | 7.7  |
|                                               | psig              | 87         | 116  | 87     | 116  | 87      | 116  | 87      | 116  | 87        | 116  | 87        | 116  | 87      | 116  | 84      | 113  | 83      | 112  |
| Feed Air Consumption <sup>1</sup>             | m <sup>3</sup> /h | 75.6       | 85.1 | 78.8   | 106  | 80      | 109  | 88.5    | 105  | 97.6      | 111  | 113       | 136  | 123     | 148  | 135     | 165  | 135     | 162  |
|                                               | scfm              | 47.8       | 53.8 | 49.8   | 67   | 50.5    | 68.9 | 55.9    | 66.3 | 61.7      | 70.1 | 71.4      | 85.9 | 77.7    | 93.5 | 85.3    | 104  | 85.3    | 102  |
| Min. Air/N <sub>2</sub> Receiver <sup>1</sup> | litre             | 400        | 450  | 400    | 350  | 450     | 400  | 450     | 550  | 500       | 600  | 500       | 600  | 550     | 650  | 600     | 700  | 600     | 700  |
|                                               | gallon            | 108        | 122  | 108    | 95   | 122     | 108  | 122     | 149  | 135       | 162  | 135       | 162  | 149     | 176  | 162     | 189  | 162     | 189  |
| Dew Point <sup>3</sup>                        | °C/°F             | ≤-40 / -40 |      |        |      |         |      |         |      |           |      |           |      |         |      |         |      |         |      |
| Sound Level L <sub>eq</sub>                   | dB(A)             | < 75       |      |        |      |         |      |         |      |           |      |           |      |         |      |         |      |         |      |

<sup>1</sup> Definition of m<sup>3</sup> refers to atmospheric conditions 20 °C, 1013 mbar and dry basis.

Indicated flow rates are valid for operation of the generator at atmospheric conditions 20 °C / 68 °F, 1013 mbar / 14.7 psi and 60% RH.

<sup>2</sup> Smaller receiver volumes might result in lower product pressures. Please contact manufacturer for details.

<sup>3</sup> Dew point at atmospheric pressure

## Peripheral Equipment & Options

- Dual Bank Unit(s)
- Feed Air Unit
- Supporting Frame for Air Filters
- Oxygen Analyser with Zirconium-Oxide Sensor
- Electronic Product Flow Meter
- Feed Air / Product Moisture Analyser
- Feed Air / Product Temperature Transmitters
- Nitrogen Sterile Filters
- Telemetry for Remote Monitoring
- Nitrogen Booster & Cylinder filling System

## Conformity & Certifications

|            |                                 |
|------------|---------------------------------|
| 2014/68 EU | (PED – Cat. 1, Mod. H)          |
| 2014/30/CE | (Electromagnetic Compatibility) |
| 2006/42/CE | (Machinery Directive)           |
| 2014/35/CE | (Low Voltage Directive)         |

## Dimensions & Weight

| L   | W    | H    |     | Weight  |
|-----|------|------|-----|---------|
| 520 | 1639 | 1422 | mm  | 696 kg  |
| 20  | 64.5 | 56   | in. | 1534 lb |

Product protected by international patents

Nr. EP2047897A1, EP2047897B1, EP2052769A1, EP2052769B1

## Feed Air Requirements

|                               |                                    |
|-------------------------------|------------------------------------|
| Supply Pressure               | 6.0 / 10.0 bar(g)<br>87 / 145 psig |
| Supply Temperature            | 5 / 45 °C<br>41 / 113 °F           |
| Min. Air Quality <sup>4</sup> | Class 0.4.0 to ISO 8573.1          |

<sup>4</sup> Feed air quality at air filter outlet. Improper feed air quality may cause damage to the nitrogen generator not covered under warranty

## Power Requirements

|                   |                      |
|-------------------|----------------------|
| Power Supply      | 110–230 V / 50–60 Hz |
| Power Consumption | max. 0.3 kW          |

## Installation Requirements

Well ventilated and weather protected environment with ambient temperatures between +5 °C / +41 °F and +45 °C / +113 °F. Classified areas excluded.

## Connections

|                              |      |
|------------------------------|------|
| Feed Air Inlet               | G 1" |
| Nitrogen Send                | G ½" |
| Nitrogen Return <sup>5</sup> | G 1" |
| Nitrogen Outlet <sup>5</sup> | G 1" |

<sup>5</sup> Only in case of on-board installation of a residual oxygen analyser and/or a product flow meter.