

## **NOXILIZER INNO<sub>2</sub>VATOR™ PROCESS DEVELOPMENT STERILIZER**

*For Testing and Evaluation of NO<sub>2</sub> Sterilization Processes During Product Development*

The Noxilizer Inno<sub>2</sub>vator is a compact, stand-alone room temperature sterilizer designed for use in R&D facilities. The sterilizer uses nitrogen dioxide (NO<sub>2</sub>) gas as a sterilant at room temperature (functions within the range 15°C to 40°C).

The control system is designed for total process flexibility, allowing researchers to evaluate NO<sub>2</sub> sterilization processes for their products.

### **Key Features:**

- Stainless steel chamber
- Single, easy to operate manual door
- Viewport in door to support cycle development
- Library of built-in programs (recipes)
- Simple to create and configure new programs
- Vacuum or non-vacuum cycles
- User-friendly, color touchscreen interface
- Printer for process record/batch documentation
- Gas supplied in 2 x 454g (1lb.) cylinders, sufficient for >20 cycles
- Built in abator scrubs effluent gas after use
- Equipment is self-contained and safe to use in the lab environment
- Variety of sensors to monitor and ensure safety
- System validated to IEC 61010 requirements
- Chemical indicators (CIs) and biological indicators (BIs) available
- CE marked

### **About Noxilizer, Inc.**

*Noxilizer is an ISO 13485 certified, Baltimore headquartered company, founded in 2004, with sales and service offices in California, Japan and the United Kingdom.*

*Understanding that NO<sub>2</sub> sterilization is a non-traditional method, Noxilizer provides an expert team to lead clients in their evaluation of the technology and to support regulatory activities.*

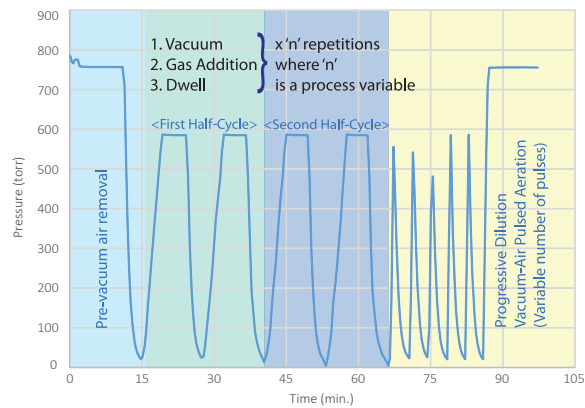
*Our responsive and experienced staff include highly-qualified materials scientists, microbiologists, and regulatory specialists based at our Baltimore, MD facility.*



### **Advantages of NO<sub>2</sub> Technology**

- Room temperature process
- NO<sub>2</sub> is a true gas, not a vapor, non-condensing
- Short process time compared with other methods
- Sterilizes with or without vacuum
- Safe and simple to use: non-flammable, non-explosive and non-carcinogenic
- Low residuals and odorless
- Effective sterilization of a wide variety of materials
- Effective at low humidity levels: allows processing of moisture-sensitive materials
- Minimal use of energy and utilities

## TYPICAL VACUUM PROCESS PROFILE



Number of pulses is a process variable and depends on the nature of the load to be sterilized

## Inno<sub>2</sub>vator Flexibility

Simple adjustment of all process parameters, including:

- Vacuum levels
- Number of sterilization pulses
- Gas concentration
- Humidity
- Dwell time
- Number of aeration pulses

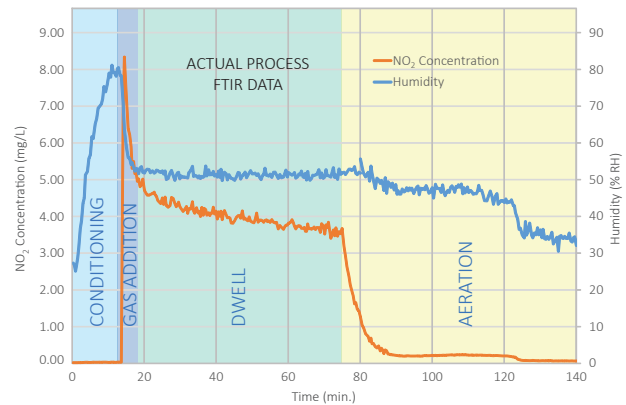
See [www.noxilizer.com](http://www.noxilizer.com) for guidance on material compatibility.

### Equipment Data\*

Unit Dimensions, Weight and Capacity	Width mm (in)	Height mm (in)	Depth mm (in)
Usable Dimensions	635 (25)	635 (25)	915 (36)
Cabinet Dimensions	1,370 (54)	1,900 (75)	2,030 (80)
Machine Weight kg (lb.)	1,724 (3,800)		
Chamber Volume liters (cu.ft.)	730 (26)		

\* Dimensions and utility requirements confirmed at the time of order.

## TYPICAL NON-VACUUM PROCESS PROFILE



Gas fill and aeration depends on load conditions

## NO<sub>2</sub> Sterilant

Sterilant Gas Source	Liquid NO <sub>2</sub>
Sterilant Cylinder	DOT approved steel cylinder
Cylinder Capacity	454g (1lb.) NO <sub>2</sub>
Cylinders per Unit	2
Cycles per 2 Cylinders	>20 depending on parameters
Scrubber Capacity	Sized to maintain 100% safety margin

## Utility Requirements

Exhaust/Vent	Onboard abator
Water	< 1 liter/month
Power	208–230 VAC, single phase, 40A; 50-60Hz

## Consumables

Biological Indicators (BIs)	<i>G. stearothermophilus</i> with color change growth medium
Chemical Indicators (CIs)	Color change process indicator
Scrubber	Material is landfill safe

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