

NEO[™]

NANOBUBBLE GENERATOR WITH OXYGEN ENRICHED AIR



APPLICATIONS

- Water Tank Aeration
- Reservoir Aeration
- Iron Oxidation
- H₂S / Odor Control
- Algae Control
- Biofilm Control*

The patented Moleaer Neo[™] Nanobubble Generator with oxygen enriched air is a highly efficient gas-to-liquid injection technology that converts enriched oxygen air at 40% purity into nanobubbles and supersaturates water with high levels of dissolved oxygen (DO). Negatively charged, neutrally buoyant nanobubbles remain suspended in water for long periods of time, acting like an oxygen battery that delivers oxygen to the entire body of water. As oxygen is consumed, the nanobubbles continue to diffuse more oxygen into solution to maintain optimal levels of DO. The nanobubbles produce a natural oxidant capable of reducing biofilm growth* and suppressing harmful pathogens, even in warm water. Moleaer's Neo is an economical and highly effective tool that improves water quality, suppresses root disease and promotes the growth of healthy, resilient plants.

The Neo comes with an integrated oxygen enrichment system capable of producing oxygen with 40% purity. The system comes with either a flooded suction industrial-grade stainless-steel pump or an optional, positive suction pump; and a PLC controller that enables automation and control of the Neo when not used in continuous operation. The system is quiet and corrosion-resistant with stainless steel components. The Neo comes standard with an integrated low maintenance, optical DO sensor to allow real time monitoring. Available in 150 and 250 GPM flow rates, the Neo is designed for durable operation and easy installation into any existing irrigation or water treatment system.

*Organic, bio-based nutrients may impact biofilm accumulation rates.

The information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. Moleaer assumes no liability for results obtained or damages incurred through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. Copyright © 2020 Moleaer. All trademarks stated herein are the property of their respective company. All rights reserved. This document is confidential and contains proprietary information of Moleaer Inc. Neither this document nor any of the information contained herein may be reproduced, redistributed or disclosed under any circumstances without the express written permission of Moleaer Inc.

Copyright © 2020 Moleaer. All trademarks stated herein are the property of their respective company. All rights reserved. This document is confidential and contains proprietary information of Moleaer Inc. Neither this document nor any of the information contained herein may be reproduced, redistributed or disclosed under any circumstances without the express written permission of Moleaer Inc.

Features & Benefits:

- ~100 nm-sized bubbles
- Improved water quality
- Onboard oxygen enrichment system (up to 40% O₂)
- Oxygenation of any tank and any depth of water
- Promotion of beneficial bacteria, suppression of pathogens
- Easy integration with fertigation systems and climate control systems
- Auto gas shut off if loss of prime feed
- Low feed gas pressure sensor and alarm
- Integrated real-time DO monitoring
- Corrosion resistant stainless-steel frame and components

NEO US Series

MODELS	NEO 50 Enriched	Neo 50 Enriched	Neo 150 Enriched	Neo 250 Enriched
LIQUID FLOW CAPACITY (WATER)				
Flow Rate, GPM	50	50	150	250
Maximum Liquid Pressure, PSIG	22			
OPERATING PARAMETERS				
Temperature Tolerance, °F	40 - 140			
Solids, inches	< 3/8			
GAS FEED				
Maximum Gas Pressure, PSIG	120			
Indicated Gas Flow Range, CFH	0 - 5	0 - 5	0 - 20	0 - 30
ELECTRICAL POWER				
Voltage	230	460	460	460
Phase	1	3	3	3
Hz	60			
Pump Motor Power (hp)	0.5	2	3	5
Total Amp Draw	12.8	6.4	11.1	12.6
PUMP				
Pump Type	TEFC			
Wetted Parts Materials	Buna-N/316 SS			
CONTROL				
Power (Light)	On/Off DP			
Motor Starter	230V IN to 24V DC OUT w/OL protection			
Start Switch	On/Off (24V DC)			
Dissolved Oxygen (DO) Sensor	Optical, 0-40 ppm (+/- 1.5 ppm) 0-5mV			
CONNECTIONS				
Customer pipe connection, in*	2	2	3	3
Inlet (Flanged), in	2.5	2.5	2.5	3
Discharge (Flanged), in	1.5	1.5	2	3
DIMENSIONS AND WEIGHT				
Height, inches	42			
Width, inches	27			
Length, inches	40			
Weight, lb	265	265	283	338

Note 1: Indicated gas flow range represented under pressure and not represented under standard conditions.

* Customer to adapt pipe connection to the unit inlet/discharge. Only use the suggested customer pipe connection.



The information and data contained herein are deemed to be accurate and reliable and are offered in good faith, but without guarantee of performance. Moleaer assumes no liability for results obtained or damages incurred through the application of the information contained herein. Customer is responsible for determining whether the products and information presented herein are appropriate for the customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Specifications subject to change without notice. Copyright © 2020 Moleaer. All trademarks stated herein are the property of their respective company. All rights reserved. This document is confidential and contains proprietary information of Moleaer Inc. Neither this document nor any of the information contained herein may be reproduced, redistributed or disclosed under any circumstances without the express written permission of Moleaer Inc.

Copyright © 2020 Moleaer. All trademarks stated herein are the property of their respective company. All rights reserved. This document is confidential and contains proprietary information of Moleaer Inc. Neither this document nor any of the information contained herein may be reproduced, redistributed or disclosed under any circumstances without the express written permission of Moleaer Inc.
Rev. 081921