MOLEAER
ADVANCING NANOBUBBLE TECHNOLOGY

NEO™ N

NANOBUBBLE GENERATOR WITH ON-BOARD OXYGEN

APPLICATIONS

Oxygenation:

- Hydroponics
- Drip Irrigation
- Drain Water
- Reservoirs
- Day Tanks
- Aquaculture Systems

Water Treatment:

- Drain Water Treatment
- Reservoirs
- Iron Oxidation
- Algae Control

Moleaer's patented Neo™ N nanobubble generator is a highly efficient gas-to-liquid injection technology that converts bulk oxygen into nanobubbles and supersaturates water with high levels of dissolved oxygen (DO). Without the use of chemicals, the Neo N is a highly effective tool to improve water quality, enhance water infiltration in soils and substrates, suppress water-borne pathogens, reduce biofilm and algae and promote healthy, resilient plants.

The Neo N comes with a PLC controller that enables automation and control of the system when not used in continuous operation. The Neo N is quiet and corrosion-resistant with stainless steel components. A robust and durable design, the Neo N is easy to install into existing irrigation or water treatment systems and comes standard with onboard oxygen generation.

Benefits:

- Significantly increase DO levels
- Improve root health & plant vigor
- Enhance nutrient absorption in plants
- Suppress and prevent algae, pathogens and biofilm*
- Improve infiltration and dripper uniformity
- Improve irrigation system hygiene
- Complement IPM strategies
- Reduce chemical usage

Features:

- Easy to integrate with fertigation systems and climate control systems
- Programmable automation controls
- Operating sensors and alarms
- Integrated real-time DO monitoring
- Corrosion-resistant stainless-steel frame and components
- Onboard oxygen generation

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

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NEO N 60 HZ with Oxygen Generator

MODELS	S2 O_2		S3 O_2		S5 O_2
LIQUID FLOW CAPACITY					
Flow Rate, (gpm) nominal	40 - 60		75 - 110		180 - 275
Pump TDH, (ft) nominal	50				
ENVIRONMENTAL PARAMETERS					
Ambient Temperature Range, (°F)	40 - 140				
Max Diameter Solids, (in)	< 1/8”				
GAS SUPPLY					
Gas Source	Onboard Oxygen Generator and Recompressor				
Maximum Gas Feed Pressure, (psig)[1]	100				
Gas Flow Range, SCFH (CFH @ 40 psig)	0 - 12.7 (0 - 6.6)		0 - 16.3 (0 - 8.5)		
Gas Flow Control	Needle Valve on Oxygen Generator				
ELECTRICAL POWER					
Voltage (V), Phase (F), Frequency (Hz)	230, 1, 60	460, 3, 60	230, 1, 60	460, 3, 60	460, 3, 60
Pump Motor Power (hp)	0.75	0.75	3	3	5
Total Amp Draw (A), nominal	9.7	5.6	16.3	8.3	10.0
PUMP					
Pump Type	Flooded Suction or Self-Priming				
Motor Type	TEFC				
Wetted Parts Materials	Viton/316 SS, PVC, PFA, PTFE, PVDF, Brass, Buna-N, Polypropylene, Polyester, EPDM, Neoprene, Technopolymer				
OXYGEN GENERATOR					
Models	Airsep Topaz		Airsep Topaz Ultra		
PLC CONTROL MODES					
Manual	On/Off Control for Continuous Operation				
Timer	On/Off Timers for Intermittent Operation				
Dissolved Oxygen (DO) Control	Intermittent Operation to Maintain DO Level - 0 - 40 ppm range				
CUSTOMER CONNECTIONS[2]					
Recommended Customer Pipe Size (in)	2”		3”		
Inlet Connection - Flooded Suction (Goulds)	N/A	2.5” ANSI Flange	N/A	2.5” ANSI Flange	3” ANSI Flange
Inlet Connection - Self-Priming (DAB, Pentair & Pacer)	2” NPT				2.5” F - SCT (3” M - SCT)
Inlet Connection - Self-Priming, (Hayward)	N/A				2.5” NPT
Discharge Connection	2” Open Pipe		3” Open Pipe		
MATERIAL, DIMENSIONS AND WEIGHT					
Frame Material	SS 300 Series, Passivated				
Envelope Dimensions, (in)	42” L x 26” W x 43.6” H				
Weight, (lbs)	310		320		330

Note 1: Maximum Gas Pressure does not represent gas pressure indicated on the machine during normal operation.
Note 2: Flange adapter kits for inlet and discharge connections come standard for all units.

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