MOLEAER
ADVANCING NANOBUBBLE TECHNOLOGY

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-liquidinjection technology that converts enriched oxygen air at 40% purity into nanobubbles and supersaturates waterwith high levels of dissolved oxygen (DO). Negatively charged, neutrally buoyant nanobubbles remain suspendedin water for long periods of time, acting like an oxygen battery that delivers oxygen to the entire body of water. Asoxygen is consumed, the nanobubbles continue to diffuse more oxygen into solution to maintain optimal levelsof DO. The nanobubbles produce a natural oxidant capable of reducing biofilm growth* and suppressing harmfulpathogens, even in warm water. Moleaer's Neo is an economical and highly effective tool that improves waterquality, 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 34 and 57 m^3/hr flow rates, the Neo is designed for durable operation and easy installation into any existing irrigation or water treatment system.

Features & Benefits:

- ~100 nm-sized bubbles
- Improved water quality
- Onboard oxygen enrichment system (up to 40% O_2)
- 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

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

NEO EU Series

MODELS	NEO 50 Enriched	Neo 50 Enriched	Neo 150 Enriched	Neo 250 Enriched
LIQUID FLOW CAPACITY (WATER)				
Flow Rate, m^3/hr	11.3	11.3	34	57
Maximum Liquid Pressure, Bar	1.5			
OPERATING PARAMETERS				
Temperature Tolerance, °C	5 - 60			
Solids, mm	< 9.5			
GAS FEED				
Maximum Gas Pressure, Bar	8.5			
Indicated Gas Flow Range, L/min	0 - 2.5	0 - 2.5	0 - 10	0 - 15
ELECTRICAL POWER				
Voltage	230	400	400	400
Phase	3			
Hz	50			
Pump Motor Power (kW)	1.1	1.1	2.2	4
Total Amp Draw	13.8	7.5	10.3	13.5
PUMP				
Pump Type	TEFC			
Wetted Parts Materials	Buna-N/316 SS			
CONTROL				
Power (Light)	On/Off DP			
Motor Starter	400V 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) 0-5 mV			
CONNECTION				
Customer pipe connection, mm	63	63	90	90
Inlet (Flanged), mm	63	63	90	90
Discharge (Flanged), mm	63	63	90	90
DIMENSIONS AND WEIGHT				
Height, cm	107			
Width, cm	68			
Length, cm	102			
Weight, kg	107	107	124	187

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.

Rev. 081921