

NEXUS Inline Nanobubble Generator



TYPICAL INLINE APPLICATIONS

- Aquaculture
- Drip Irrigation
- Deep Water Culture
- NFT

FEATURES

- No Moving Parts
- Plug-and-Play

The patented Moleaer Nexus Nanobubble Generator is a pumpless system designed to work inline with existing liquid flows. The Nexus is highly efficient gas-to-liquid injection technology that converts bulk oxygen 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 oxygen nanobubbles aid in the removal and prevention of biofilm growth, breakdown of off-flavor compounds and suppression of harmful pathogens. Moleaer's Nexus is an economical and highly effective tool that improves water quality and oxygen utilization rates to maintain optimal growing or rearing conditions.

The Moleaer Nexus has no moving parts, and was designed for durable operation, easy installation and straightforward integration with existing pumping systems. The Nexus can utilize an array of pump types to provide the specified liquid flow through the nanobubble generator and can be installed inline with the primary flow or as a side stream to provide immediate increases in oxygen levels within any process.

FEATURES & BENEFITS

- 85% standard oxygen transfer efficiency (SOTE)
- 100 nm-sized bubbles
- >1 billion nanobubbles / mL
- Saltwater compatible
- Horizontal or vertical installation
- Reliable & rugged design
- Low maintenance, simple operation
- Outdoor rated
- Optional dissolved oxygen monitoring system and PLC control package

Nexus EU Series			
Models	200	500	1000
Liquid Flow Capacity (water)			
Flow Rate, m ³ /hr	45	114	227
Maximum Liquid Pressure, bar		1.5	
Operating Parameters			
Operating Temp, °C		5 - 60	
Solids Handling, mm		< 9.5	
Gas Feed			
Maximum Gas Pressure, bar		8.5	
Indicated Gas Flow Range, L/Min	0-9	0-24	0-47
Electrical Power			
Voltage	400/460	400/460	400/460
Phase		3	
Hz		50/60	
Electrical - Without Control Panel			
Voltage ¹		24V DC	
Connections			
Customer Pipe Connection, mm*	110	160	200
Pump Inlet Flange/Pipe Size, mm	90	110	160
Discharge Flange, Pipe Size, mm	90	110	160
Air Fitting for Offboard Oxygen Tank		1/4" BSPTF	
Dimensions			
Length, mm	1600	1702	2032
Width, mm	610	762	915
Height, mm	432	508	533
Shipping Weight Estimate, kg	73	91	163

Note 1: Single Phase 115/230 V options available

* Customer to adapt pipe connection to the unit inlet/discharge. Only use the suggested customer pipe connection CGA 022 fitting 1/4" MNPT (BSPTF) available for use with oxygen tanks