

CLEAR™ Nanobubble Generator



APPLICATIONS

- Pond/Lake Aeration
- Aquatic Management
- Odor Control
- Turf Irrigation
- Iron & Manganese Control
- Chlorophyll a Reduction
- Improve Water Clarity

Moleaer's patent-pending Clear™ is an all-natural, chemical-free solution for improving water quality and clarity in lakes and ponds. The Clear nanobubble generator is a hyper-efficient gas-injection technology that converts air into nanobubbles. Moleaer's technology produces trillions of negatively charged, neutrally buoyant nanobubbles that remain suspended in a water body to provide a reserve of oxygen throughout the water column. As aquatic life consumes oxygen from the water, the reserve of nanobubbles transfers oxygen throughout the water body to maintain DO levels. Maintaining dissolved oxygen (DO) levels at the muck layer reduces nutrient cycling from the sediment. The nanobubbles also produce a mild and effective oxidant to improve clarity and overall water quality.

The Clear is available in 50 and 150 gpm flow rates and includes a pump and air compressor or the option to transfer twice as much oxygen to the water body using an oxygen enrichment package. The Clear nanobubble generator was specifically designed for aquatic management and is easy to install, operate, and maintain.

FEATURES & BENEFITS

- 90% standard oxygen transfer efficiency
- <65 dB (optional quiet package available)
- Improved water quality and clarity
- 100 nm-sized bubbles
- >1 billion nanobubbles / mL
- Oxygenates entire water column
- Easy to install
- Compact & lightweight
- Reduced nutrient recycling rate
- Enriched oxygen option available

www.moleaer.com

MODELS	Clear 50	Clear 50 (230V)	Clear 150	Clear 150 Enriched
LIQUID FLOW CAPACITY				
Flow Rate, GPM (m ³ /hr)	50 (11)	50 (11)	150 (34)	150 (34)
Indicated Gas Flow Range Maximum, CFH (m ³ /hr)			20 (0.6)	
Indicated Gas Flow Range Recommended, CFH (m ³ /hr)	5 (0.1)	5 (0.1)	15 (0.4)	15 (0.4)
OPERATING PARAMETERS				
Temperature Tolerance, PVC, °F (°C)			41 - 140 (5 - 60)	
Standard Oxygen Transfer Efficiency			> 90%	
Solids, inches (mm)			Up to 3/8 (10)	
GAS FEED¹				
Feed Gas Pressure Range Minimum, PSIG (bar)			60 (4.1)	
Feed Gas Pressure Range Maximum, PSIG (bar)			120 (9.7)	
PUMP				
Pump Model			Pentair Sparus 160	
Wetted Parts Materials			Polypropylene/316 SS/Buna	
Voltage	115	230	230	230
Phase			1	
Hz			60	
HP	3/4	3/4	3	3
COMPRESSOR				
Compressor Model			Gast 86R Single Cylinder	
Voltage	115	230	230	230
RPM	1725	1735	1725	1725
HZ			50/60	
Total Draw, Amperage (Including Pump/Comp)	12	6.8	15	18.2
Total Draw, Horsepower (kW)		0.875 (0.652)	3.125 (2.32)	3.37 (2.51)
CONTROLS				
Pressure Gauges (bar)			Wika 2.5" (60/160) (4-11)	
Rotameter, CFH (KNOBLESS)	0 - 20	0 - 20	0 - 20	0 - 20
MOTOR STARTER SWITCH				
Model			Enclosed Motor Starter with OL reset button	
Resistance Rating			9-45A rating with 24 VDC input	
			Watertight / NEMA 4 X	
UNIT CONNECTIONS - FEMALE SOCKET CONNECT				
Inlet, inches	2 (50)	2 (50)	3 (75)	3 (75)
Discharge, inches	2 (50)	2 (50)	3 (75)	3 (75)
DIMENSIONS & WEIGHT				
Height, inches (cm)			26 (66)	
Width, Inches (cm)			34 (86)	
Length, inches (cm)			38 (96.5)	
Weight, lb (kg)	164 (74)		198 (90)	202 (92)

General Note

3" inlet and outlet Customer piping is recommended for the Clear 150 and Clear 150 Enriched

Nitrogen Separator Details (Enriched Option Only)

Nitrogen Separator Model Prism PA3010

Max Pressure PSIG(BAR) 385 (26.5)

Max Temp °F (°C) 150 (65.6)

EPA Establishment Number 94231-CA-1