

BLOOM Nanobubble Generator



TYPICAL APPLICATIONS

- Hydroponics
- Aquatic Management

FEATURES

- Plug-and-Play
- Self-Cleaning
- WiFi Enabled Monitoring & Control

The patent-pending Moleaer Bloom™ is the most effective technology to unlock the full potential of oxygen for crop production. The Bloom produces trillions of charged nanobubbles, ~80nm in size, dissolving oxygen with greater than 90% efficiency. Moleaer's nanobubbles remain in suspension after saturation, creating a reserve of available oxygen in the water. The combination of the high transfer rate and nanobubble stability enables maximum oxygen utilization to increase nutrient absorption, mitigate disease and increase crop yields.

The Bloom comes standard with a variable-speed enclosed impeller pump for maximum energy efficiency and a full set of WIFI-enabled controls that allows growers to monitor dissolved oxygen content, pH, temperature, and electrical conductivity. Available in 25 and 50-gallon-per-minute flow rates, the Bloom was designed for durable operation, easy installation and straightforward, real-time control.

FEATURES & BENEFITS

- Dissolved oxygen, pH, temperature and electrical conductivity monitoring
- ~80nm-size charged bubbles exhibiting neutral buoyancy
- Highest concentration of bubbles per ml (>500M bubbles/ml)
- Most efficient utilization of oxygen
- Increased total available oxygen content in water
- Low-turbulent gas diffusion
- Increased nutrient absorption
- Beneficial bacteria promotion

*Patent-pending technology

www.moleaer.com

MODELS	25 Bloom	50 Bloom
FLOW SPECIFICATIONS		
Flow Rate, gpm (m ³ /h)	25 (6)	50 (11)
Minimum Discharge Pressure	13 PSIG	13 PSIG
Maximum Discharge Pressure	22 PSIG	22 PSIG
OPERATING PARAMETERS		
Temperature - PVC Block	41 - 140° F (5 - 60° C)	41 - 140° F (5 - 60° C)
Standard Oxygen Transfer Efficiency	> 90%	> 90%
Solids	Iso 8573 - 1:2010 Class 1.4.1	Iso 8573 - 1:2010 Class 1.4.1
GAS FEED SPECIFICATIONS		
Gas Flow Range	0-1 CFH	0-1 CFH
Recommended Gas Flow Rate	0.25 CFH	0.5 CFH
Optimum Pressure	120 PSI	120 PSI
Air Quality	ISO 8573 - 1:2010 Class 1.4.1	ISO 8573 - 1:2010 Class 1.4.1
PUMP & ELECTRICAL		
Pump Model	Pentair Sparus 160	Pentair Sparus 160
Wetted Parts	Polypropylene/316 SS/Buna	Polypropylene/316 SS/Buna
Pump Voltage	115/208 V	115/208 V
Pump Motor HP (KW)	0.5 HP (0.37)	0.75 HP (0.56)
Starter	ODP	ODP
CONNECTIONS		
Inlet: Inch	2.00" FNPT	2.00" FNPT
Discharge: Inch	1.00" FNPT	1.50" FNPT
Air	¼" Industrial	¼" Industrial
DIMENSIONS & WEIGHT		
Height, Inches (cm)	28 (71.12)	28 (71.12)
Width, Inches (cm)	14 (35.56)	14 (35.56)
Depth, Inches (cm)	32 (81.28)	32 (81.28)
Shipping Weight Estimate, lbs (kg)	120 (54)	120 (54)