

Which blower is suitable for Bio floc and other aquaculture aeration

Parameter	Twin lobe Root Blower	Two stage turbine blower	Single stage turbine blower	Diaphragm Air Pump
Air flow against water head of 4-5 feet	Very good	Good	Poor	Good
Volume of air available for aeration	Very good	Good	Good	poor
Initial investment	High	Moderate	Moderate	Low
Maintenance	Low	Low	Low	Low
Durability with continuous operation	High	Moderate	Moderate	Low
Installation	Difficult	Easy	Easy	Easy
Noise	High	Moderate	Moderate	Very low
Loss of air pressure in piping	Low	Moderate	High	High
Distance air can travel at required pressure	Long	Moderate	Short	Very short
Area needed for installation	Large	Small	Small	Very small
Recommended upto water depth	10-12 feet	5 feet	1.5 feet	4 feet
Use with multiple tanks and ponds	Yes	Yes but few tanks	No	no
Centralized installation possible	Yes	No	No	no
Recommended for indoor or outdoor	Outdoor	Indoor and covered outdoor	Indoor and covered outdoor	Indoor
Total volume of aeration possible	High	Medium	Low	Very low
Stocking density supported	High	Medium	Low	Very low
Suggested use in aquaculture aeration	For small, medium and large ponds and farms of all types of production size	For small sized farms, with individual blowers for each pond or tank	For mini farms or for initial trial purpose in small farms or for hydroponics or for small scale production	For small tanks and small scale production
AirOxi aeration tubes supported at 4-5 feet depth	25 mtr	20 mtr	15 mtr	Pump air flow rating divided by 30
Approximate fish biomass supported (there are many variables to this, only a thumb rule is given here)	1 HP = 4 ton of fish	1 HP = 3 ton of fish	1 HP = 2 ton of fish	120 LPM = 250 Kg of fish