

SUBMERSIBLE AERATION 50 HZ

Water in AIR / AIR in Water



SUBMERSIBLE AERATION

AIR IN WATER

Multiple studies have shown that the amount of gas dissolved in a solution (water) is directly proportional to the pressure of the gas in the solution. They have also shown that oxygen is only a small percentage of the gases that make up air. The oxygen transfer is calculated as the difference between the oxygen level in the air and in water. The larger this difference, the greater the transfer. True exchange occurs, and the system finds itself in a situation of saturation, when a balance is achieved between the gases in the air and those in water.

Submersible Aeration is provided through systems that inject air at a depth and dissolve the air/oxygen in microbubbles. The high contact surface of these microbubbles enhances oxygen transfer throughout the entire water column (air in water). With the horizontal flow these systems increase the time of contact between air (oxygen) and water, thus avoiding the loss of oxygen and greatly increasing the oxygen transfer rate. Deep horizontal flow is also important to avoid soil erosion in all the applications concerning water basins with a natural bottom. The whole water column in the area of influence of submersible aerators will be well oxygenated, mixed and circulated, which helps create a healthy water basin.



