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Floating Lateral Systems

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BULLETIN BRIEF



Floating lateral systems can be employed in many applications and have many benefits. Benefits include ease of installation without having to drain a basin which allows the system to continue to operate and allows units to be installed over uneven floors thereby eliminating the need for dredging. Easy access and often lowest cost for installation are other benefits of a floating lateral system.

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Floating diffused aeration systems are finding more applications throughout the world in municipal and industrial bio treatment systems and aeration mixing applications. The floating diffuser concept is very simple:

1. The diffuser air supply piping is designed to float on the liquid surface.
2. Diffuser units are hung a constant distance below the floating air piping system. This provides uniform pressure to all diffuser units for proper air distribution.
3. The floating air lateral (piping) system provides buoyancy and structural support for the diffuser units to maintain their proper positions.
4. The diffuser units can be suspended above the floor or can sit on the floor depending on the application.
5. Suspended diffuser units are particularly attractive as they allow installation into existing basins that are filled with water and/or sludge. Wet installation is a particular benefit of a floating diffuser system.
6. Systems that have significant sludge deposits or uneven floors can make very effective use of floating diffuser systems. The diffusers installed at a fixed distance below the liquid surface produce uniform pressure throughout the system and allow proper air distribution even if the floor of the basin has a major variation in elevation or structural capacity.
7. The floating aeration system allows 100% access to all components without dewatering the basin and without taking the process out of service. Only the floating lateral system allows this flexibility of installation and/or operation.
8. Floating aeration systems generally involve lowest installed cost for aeration systems into lagoons or low intensity aeration or mixing applications.

Please request literature and a Project Data Sheet on the EDI floating lateral systems for engineering support and technical assistance in developing optimized solutions for your lagoon and low F/M aeration mixing systems. Lagoon and earthen basin type aeration basins are particularly well suited for application of the floating lateral and floating diffuser components.

