

SR Diffuser Access System

An Innovative Solution to the Challenge of Diffuser Inspection and Maintenance



The patented SR (Slide Rail) Diffuser Access System provides simple removal of the aeration diffusers within a tank without turning off the blowers or draining the tank(s). Applications for the system typically are for aeration or digester basins.

Isolation and air control are provided by a ball valve on each assembly. Removal is achieved by loosening a stainless steel union and lifting up the lightweight PVC assembly on guides. Rigidity is provided by a permanently mounted stainless steel slide rail firmly bolted to the tank wall and floor. The result is a low maintenance, operator friendly system for diffuser upkeep.

Diffuser inspection is easily accomplished without draining the tanks, turning off the blowers or

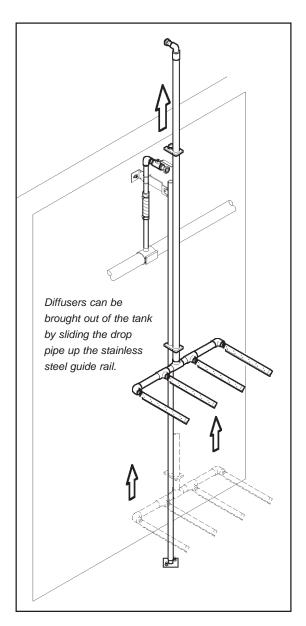
SR Diffuser Access System

- Lightweight diffuser system
- Provides access to diffusers without turning off the blowers or draining tanks
- Individual isolation and control
- Constructed from long lasting, non-corrodible materials - S/S and PVC
- Connects to new or existing air pipes
- Eliminates the need for hoist or winching systems
- Provides access to an individual drop pipe without affecting the entire system

using a hoist. Diffuser cleaning and maintenance can be performed without affecting the operation of the treatment plant or shutting off other diffuser assemblies.

Typical installations include the tubular type of coarse or fine bubble diffusers. Two to six diffusers assemblies are usually mounted to a common slide rail system.

Product Bulletin



Installations of the SR Diffuser Access System can include new construction or retrofits to existing mixing or aeration basins. Systems can be designed for "wet installation" in retrofit applications with all hardware mounted above the water.

PVC Drop Pipe

Typically, a two inch schedule 40 PVC pipe is used to transfer air to the diffusers below the surface of the water in the tank. Supports are mounted to the drop pipe that direct the assembly along the guide rail for inspection and maintenance. At the top, a stainless steel union is installed on the pipe that can easily be disconnected for removal of the assembly. Additionally, a stainless steel shut-off/ throttling ball valve is located at the top of the assembly to isolate the assembly from the air line.

Guide Rail Mounting System

The rigidity needed for operation of the SR Diffuser Access System is provided by the 1.5 inch, schedule 5,

stainless steel guide rail. The guide rail is attached to the side of the tank, near the top, by a stainless steel wall bracket and then secured to the bottom of the tank by a stainless steel floor mounted support.

Diffusers

The SR Diffuser Access System can be used with stainless steel coarse or tubular membrane diffusers. The arrangement of the diffusers per drop pipe is usually two, four or six diffusers in either 12 or 24 inch diffuser lengths. The number of diffusers, as well as the total number of SR assemblies, is contingent on the air requirements. This flexible system readily accepts most types of diffusers in varying amounts.

Aero-Mod Treatment

The SR Diffuser Access System is an innovative component of an Aero-Mod wastewater treatment solution. Every Aero-Mod system is custom-designed to your exact specifications and features:

- 304 Stainless steel fabrication for long-term reliability and reduced maintenance
- Simple, operator friendly processes and equipment for operational consistency
- Common-wall, cast-in-place concrete tank construction for easy expansion
- Patented equipment and processes