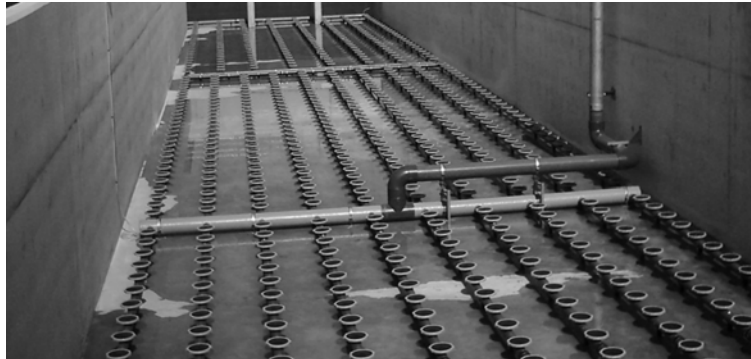


Diffused Aeration Systems

Response Group

Equipment
Data Sheet #: 22



Half Bridge
Scrapers

Picket Fence
Thickeners
(PFT)

Grit Traps

Recent Installations

- Cloughduv WWTP
- Rochfortbridge WWTP
- Newmarket on Fergus WWTP
- Castletown Geoghan WWTP
- Baraduff WWTP

Response Group manufacture and install Fine Bubble Diffused Air (FBDA) Systems for the treatment of industrial and municipal wastewaters. FBDA systems supply oxygen to aerobic reactors by pumping air under pressure and releasing it in a stream of fine bubbles (< 1.5mm) in the mixed liquor. Circulation and mixing is achieved by the currents set up by the rising bubbles and oxygen transfer takes place between the air bubble and the surrounding liquid. The turbulence created at the reactor surface encourages enhanced oxygen transfer.

Dry dust-free air is supplied from air blowers through a submerged conduit system to disc-shaped flexible EPDM membrane porous diffuser heads attached at regular intervals to the compressed air conduit. Oxygenation efficiencies of up to 2.5kg O₂/kWh are achieved. The diffusers are designed to be self cleaning in normal operation. Air is supplied from robust Roots type blowers which are capable of supplying air through a wide range of flows within a narrow range of pressures. Air supply to the reactor is normally regulated by a DO monitoring system.



Key Features

- High-efficiency O₂ Transfer
- COD/BOD, N & P Removal
- Upvc Air Supply System
- Precision Eng. Diffusers
- Durable EPDM Membranes
- Self-sealing Membrane Opeps
- Robust Fixing-SS Clips
- Reliable Roots Type Blowers
- Factory Assembled Units
- No Moving Parts Underwater

Optional Features

- S S Air Supply System
- Ceramic Diffusers
- Tube Diffusers
- Lane Impellers/Mixers
- Acoustic Blower Enclosures
- Gas Cleaning System
- Condensation Evacuation
- Modular Removal System

Dissolved Air
Flotation (DAF)
Units

Surface Rotors
/ Aerators

Rotating Bar
Interceptors
(RBI)

Tipping
Buckets

Dissolved
Aeration
Systems

Penstocks /
Stoplogs

Packaged
Pump Stations

Further information on our full range of products can be obtained at our website www.response-group.ie