

# QUANTAER<sup>®</sup> Fine Bubble Aeration System

## Installation Features



Quantaer Fine Bubble Aeration System  
Installation

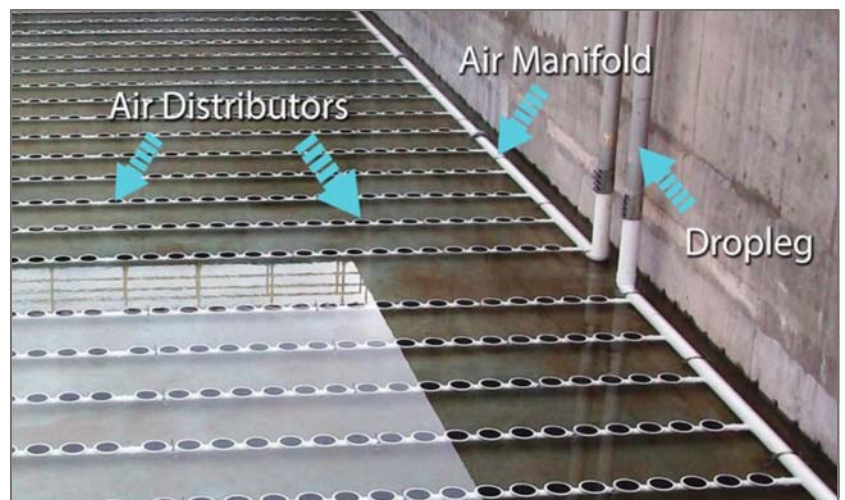
### Not all Aeration Systems are created Equal

Low Cost Does not Equal = Lowest Cost of Ownership

The Aquarius Difference:

- Diffuser Holder
- Diffuser Element
- Air Distributor Joints
- Air Distributor Supports

When every minute counts ....



Main Components of Fine Bubble Aeration System



Drop Pipe and Air Manifold Connection



### The Diffuser Retainer Ring

The only full contact vs point contact thread design

The Aquarius Difference:

- 120% greater thread depth
- 110% greater flange thickness

**Benefit: Minimizes loosening of the retainer ring**

### The Diffuser Holder

The only robotically manufactured diffuser holder which provides repeatable quality diffuser after diffuser

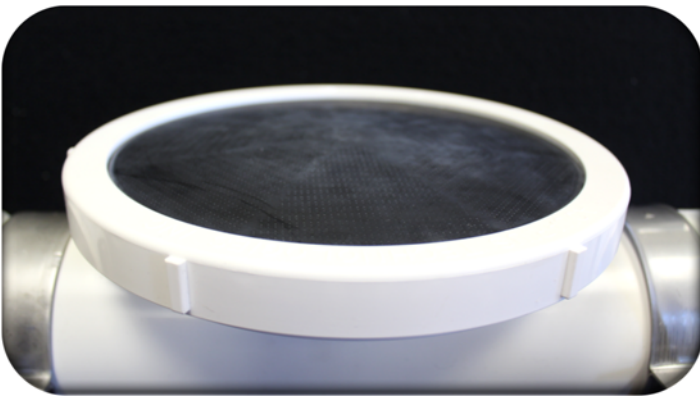
The Aquarius Difference:

- Low profile, single piece holder and subplate design
- Factory bonded to piping insures a level system
- Solvent AND ultrasonic welding provides no-worry seal

**Benefit: Simplified installation**



**Retainer Ring**



**EPDM Membrane Diffuser**

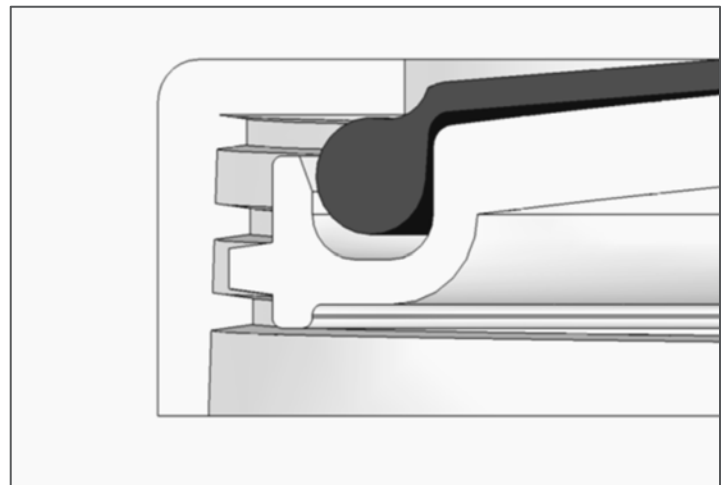
### The Diffuser

EPDM Membrane manufactured with proprietary perforation pattern. (Also available in Ceramic)

The Aquarius Difference:

- Increase in air flow uniformity up to 5%
- Integrated check valve.
- Typical performance 7-10 years when installed, operated and maintained in accordance with the IOM Manual

**Benefit: Less installation**



**Full Contact Leak Proof Compression**



**Air Distributor Connected to Air Manifold**

## The Joint

The weakest link in the system with greatest potential for leaks or failure is the joint

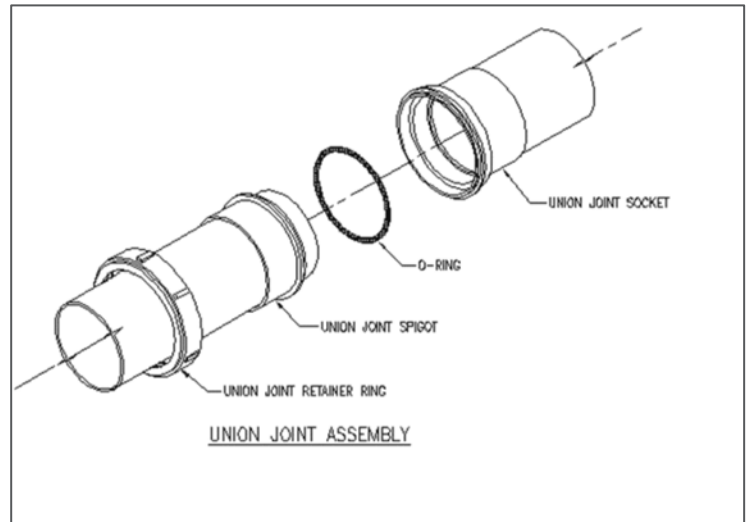
The Aquarius Difference:

- Anti-rotational union style joint provides unimpeded 360° rotation for speed in leveling
- Anti-rotational feature does not stress joint
- Heavy duty boltless fixed union style
- Anti-rotational lugs grip the O-ring
- O-ring compressed on four (4) sides vs two (2) sides reduces chance of leaking
- 120% greater thread depth for positive engagement
- 110% greater flange thickness provides greater compression force.
- Hand tighten joint PLUS 1/4 turns to improve joint integrity.
- Tighten with strap or lug wrench

**Benefit: Increased installation rate over expansion couplings or flanges through elimination of nuts, bolts and gasket sets and sleeve and band clamps.**



**Union Joint**





**Air Distributors and Supports Installed**

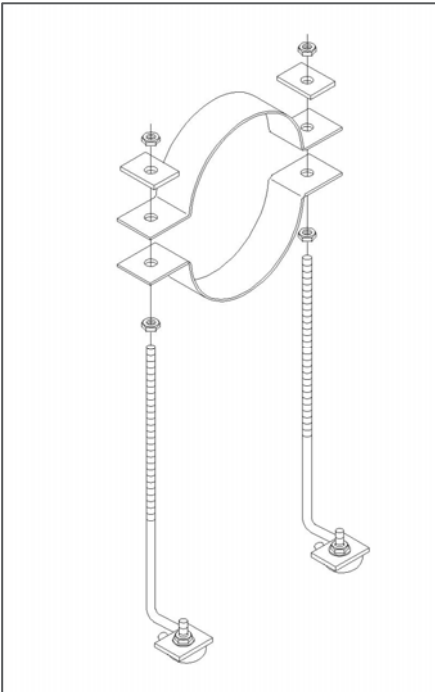
## The Support

All supports are guide style to accommodate expansion and contraction

The Aquarius Difference:

- Single anchor bolt along centerline of pipe for 4" air distributors or manifolds
- Infinitely adjustable over the height range of the support
- One clamp bolt elevation sets all with the grid
- Locator plate bi-directional, eliminates installation errors and loose supports
- Withstands up to 70% greater torque without damaging deflection.
- Critical for 1/2" anchors bolt requirements

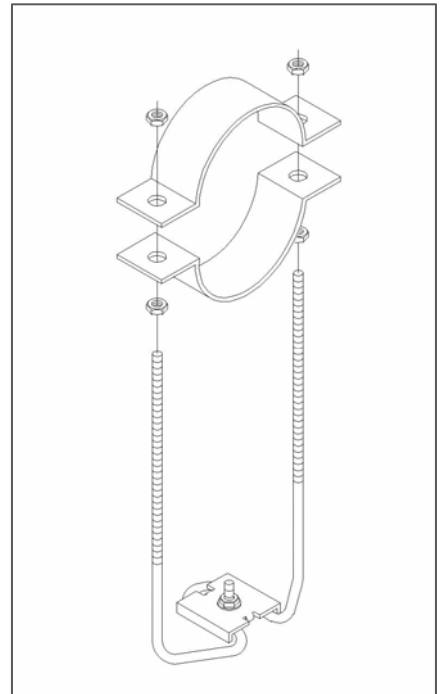
**Benefit: Locating plate deflects under the same anchor bolt torque, remains anchored.**



**Air Manifold 6" and Above**



**Locator Plate**



**Air Distributor and Manifold 4" Support**