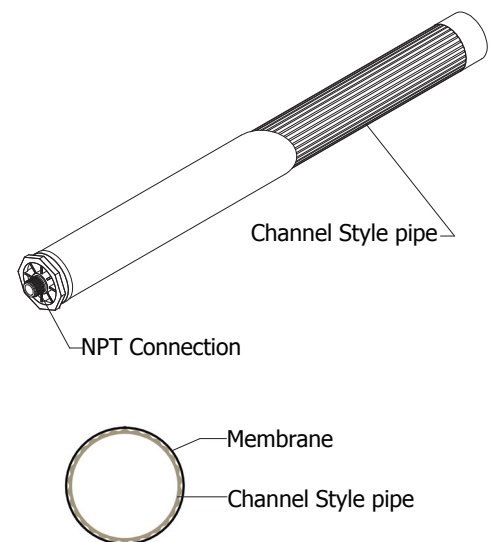
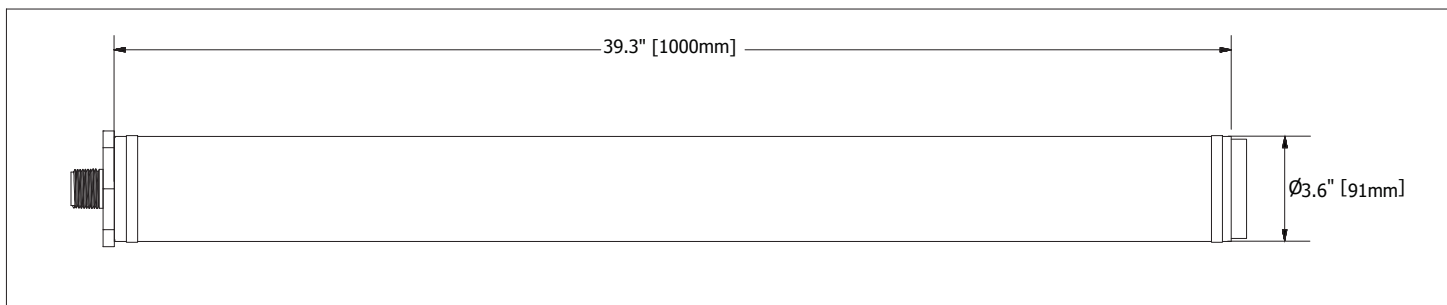


# What Makes the SSI AFTN31000 Tube Diffusers a world wide choice ?

SSI Tube diffusers are designed to offer high oxygen transfer efficiency, low pressure loss, and a simple installation. Our tube diffusers are available with a variety of membrane materials including our patented PTFE membranes designed to use less energy and require minimal maintenance. The one piece lightweight but strong ABS body makes handling during installation easy, provides temperature resistance up to 212°F (100°C), and is environmentally friendly. Our tube diffusers feature a channel style support tube which extends membrane life in on/off applications.



## Unique System Strengths

### Complete product line – creating the system that fits your needs

SSI manufactures disc diffusers, tube diffusers, and coarse bubble diffusers, and we mount these products on a wide range of piping materials including PVC, CPVC, PP and Stainless Steel. We have the ability to attach diffusers to pipe using saddles, grommets, or pre-assembled PODS. We can provide retrievable systems or fixed grids, and systems in kit form or mostly factory assembled. We try to understand and anticipate your needs, and fit our recommendations to your situation.

### Piping system integrity – thicker wall pipe and double anchors for fewer breakages

Our piping is 38% thicker and has double rod support stands as standard – two anchors for each support location means twice the resistance to hydraulic and thermal loads. Most often supports fail due to temperature and water velocity. SSI locates two anchors where support is needed most, helping to increase product longevity.

### Comprehensive design service and after sales support

SSI provides full design services, including biological and mixing calculations, process simulations and hydraulic studies. We maintain a full drafting department with 3D and animation capabilities and we can assist with specifications and CAD drawings. Our service and installation crew can hold your hand during the early stages of the project and our worldwide multilingual staff is dedicated to your complete satisfaction.

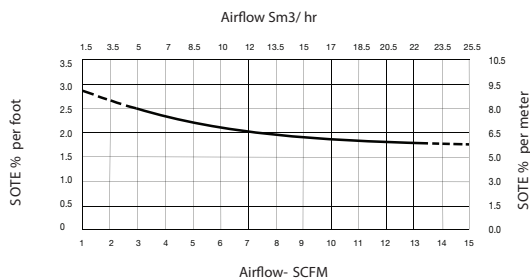
### New Channel style Tube Diffusers

After extensive research SSI designed our tube diffuser bodies to have a channel style support body. Through our research we found that this will extend the lifespan of the membrane particularly in on/off applications. The channel style body helps prevent folding of the membrane when the airflow is off and in turn increases the lifespan.

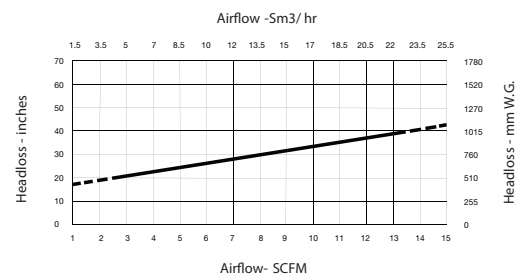
| Average Operating Condition per Meter          | Flow Range of Diffuser per Meter          | Active Surface Area per Meter                | Weight per Diffuser AFTN31000 |
|--|---|--|-------------------------------|
| 1 - 15 SCFM<br>1.69 - 25.5 Sm <sup>3</sup> /hr | 0 - 20 SCFM<br>0 - 34 Sm <sup>3</sup> /hr | 2.375 ft <sup>2</sup><br>0.22 m <sup>2</sup> | 4.75 lbs<br>2.17kg            |

\* All diffusers can operate at low flow rates close to zero in such conditions air distribution may not be uniform and at higher rates fouling are possible so routine bumping / flexing may be appropriate.

Per Meter



Per Meter



## Intelligent Upgrade Options

### Patented PTFE membranes prolong efficiency and reduce whole-life costs

SSI's patented PTFE membrane barrier properties not only reduce plasticizer extraction, shrinking, and membrane hardening but also limit dynamic changes that can result from swell, such as creep. Compared with uncoated products that are more susceptible to increases in DWP due to more aggressive fouling and changes in physical properties and weight, the PTFE coated membrane improves consistency of DWP (Headloss) values over the product life. This directly impacts long-term power costs and the ability of the system to distribute air uniformly across the tank floor.

### SSI Telemetry – the inside story solves maintenance problems

At the click of a mouse, you will know the DWP of your diffuser membranes, airflow rate to those monitored diffusers, and air temperature in the submerged piping system. You can sense vibration, pipe roll over, and water in the grid. Automatic moisture purging and automatic acid dosing systems are available. Through multiple cameras, you can see both inside the grids, and surface bubble patterns. Wet probes are also available for DO and WW temperature. Tracking all this data on a user-friendly online dashboard facilitates communication between consultant and client, manufacturer and rep. This smart technology lets you locate problem areas and allocate resources more efficiently. SSI Telemetry is your preventive maintenance hub in the heart of the plant.

