

# Diffusers

Aeration equipment for sewage treatment plants

Novel diffuser systems for a correct **transfer of oxygen**. Environmental regulations are increasingly restrictive and rising energy costs are forcing increased **energy efficiency**. Currently **aeration systems** account for between 30 and 70 percent of the total estimated energy costs in a typical plant. Increasing the efficiency of the biological treatment processes of your plant, you will obtain a **great reduction of the operating costs**.



Tubular System Diffusers



Circular System Diffusers

## Tubular Diffusers

Membranes made of **high quality** materials, available in EPDM and blend of special polymers.

**Available** in 62mm diameter and 1 meter in length.

**Resistant** to incrustations and seals.

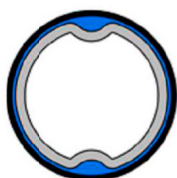
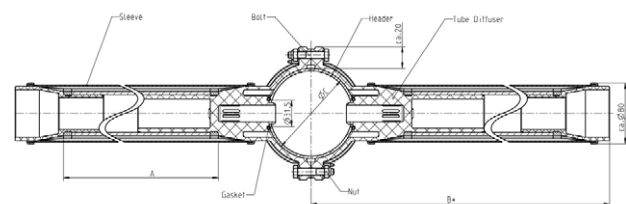
**Made of ABS and PVC** for maximum resistance to the chemicals, the temperature and the UV rays.

High strength design with **stainless steel thread** of 3/4".

Greater **efficiency-cost** ratio than circular diffusers.

**Special accessories** for perfect assembly.

Membrane properties	
Color	Black
Polymer	33%
Carbon black	31%
Plasticizer	33%
Others	3%
Density	1,08 ± 0,03 g/m <sup>3</sup>
Tensile strength	> 10 MPa
Elongation until rupture	> 400%
Tear resistance	> 7N/mm
Hardness	53 ± 5 shore A
Tensile strain	< 7%
Ozone resistance	Without cracks



The air (in blue color) flows easily through the grooves, considerably reducing the load losses.

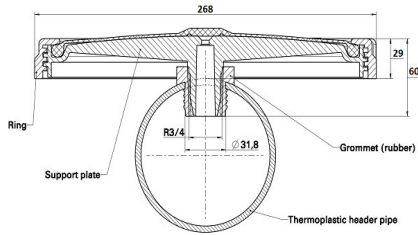
# Circular Diffusers

The system of circular coupling diffusers, without wedge, consists of a thread that allows **perfect coupling** of the diffusers, avoiding possible air leaks and facilitating the change of the diffusers **without having to dismantle the structure of the grid**.

## Fine Bubble Circular Diffusers

Fine bubble diffusers are used for **biological aeration**, prior to discharge and odor control of sludge retention. Available in two sizes: 9" and 12".

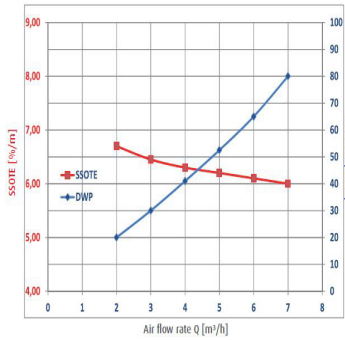
### Fine Bubble Circular Diffusers of 9"



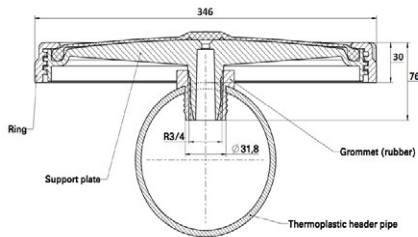
Technical description diffuser

Height	Perforated area	Air flow in operation	Maximum air flow
60mm	0.037m <sup>2</sup>	2 - 6 Nm <sup>3</sup> /h	10 Nm <sup>3</sup> /h

SSOTE and headloss 9"



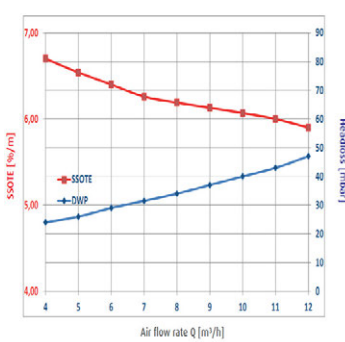
### Fine Bubble Circular Diffusers of 12"



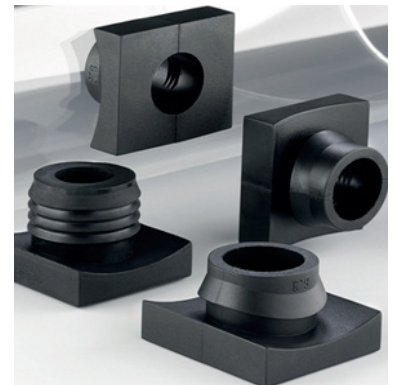
Technical description diffuser

Height	Perforated area	Air flow in operation	Maximum air flow
76mm	0.060m <sup>2</sup>	5 - 12 Nm <sup>3</sup> /h	15 Nm <sup>3</sup> /h

SSOTE and headloss 12"

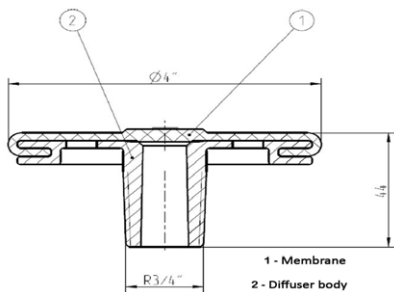


Membrane properties	
Color	Black
Polymer	33%
Carbon black	31%
Plasticizer	33%
Others	3%
Density	1,08 ± 0,03 g/m <sup>3</sup>
Tensile strength	> 10 MPa
Elongation until rupture	> 400%
Tear resistance	> 7N/mm
Hardness	53 ± 5 shore A
Tensile strain	< 7%
Ozone resistance	Without cracks



## Thick Bubble Circular Diffusers

For more demanding applications, such as sludge, sandblasting or industrial waste water, thick bubble diffusers are the preferred technology.



Technical specifications

Total diameter	Total height diffuser	Thread length	Membrane thickness	Diffuser thread
105 mm	45 mm	25 mm	2 mm	M - 3/4"

UDM Technical specifications

Connector	Color	Pipe thickness	Opening diameter	Material
UDM	Black	4 - 8 mm	32 mm	EPDM



**Our engineers study your project and our installers can do the supervision and installation on site**