

Sanitaire[®] Tube Diffusers

FINE BUBBLE AERATION WITH HIGH OXYGEN THROUGHPUT

Sanitaire tube diffusers provide high oxygen throughput for efficient, reliable fine bubble aeration in biological treatment processes.

Effective basin coverage

Sanitaire tube diffusers provide high oxygen throughput over a large active surface area, reducing the number of diffusers required for effective aeration. This in turn reduces grid framework and diffuser quantity requirements, providing significant capital expenditure (CapEx) savings.

High-density basin floor coverage is also possible due to the tube diffusers' compact design.

Low pressure loss

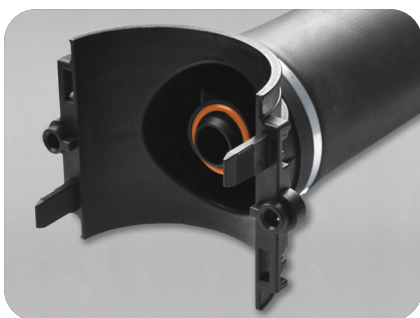
The polypropylene pipe design combined with precise slits in the diffuser membrane ensure low head loss across the length of the diffuser. Perforation types are adapted to operating conditions and requirements.

Replaceable membrane

The Sanitaire tube diffuser's replaceable membrane extends the service life and efficiency of the system, lowering maintenance expenses over the long term.

Easy installation

Sanitaire tube diffusers are available with a simple-to-use clamp connection for use with standard pipes.



Sanitaire tube diffusers are available in two diameters, 63 mm and 90 mm, to meet plant requirements.



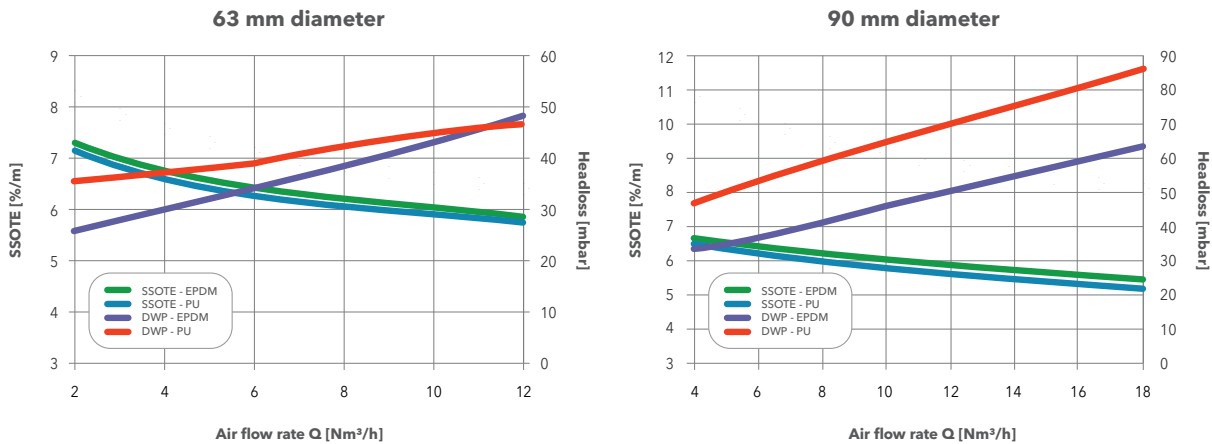
SANITAIRE
a xylem brand

Sanitaire® Tube Diffusers

Experience you can trust.

With our unique expertise in biological treatment processes and equipment, Xylem can design state-of-the-art aeration systems that provide energy efficiency and process stability. From developing aeration and mixing specifications to defining a control strategy, we can assist you every step of the way.

Performance curves



Technical data

	63 mm diameter		90 mm diameter	
Materials				
Membrane material	EPDM	PU	EPDM	PU
Support tube material	PP / PP 20% GF		PP / PP 20% GF	
SS clamp material	1.4301		1.4301	
Dimensions				
Wall thickness	1.9 mm	0.6 mm	1.9 mm	0.6 mm
Perforation length	1000 mm		1000 mm	
Total length	1116 mm		1195 mm	
Perforated area	0.18 m²		0.24 m²	
Air flow				
Air flow rate at standard operating conditions	2 - 12 Nm³/h		4 - 18 Nm³/h	
Max. overload / maintenance air flow rate	20 Nm³/h		28 Nm³/h	
Standard oxygen transfer efficiency (SOTE)	Approx. 6.5% per m submergence		Approx. 6.0% per m submergence	
Standard aeration efficiency (SAE)	2.5 - 6 kg O ₂ /kWh		2.5 - 6 kg O ₂ /kWh	
Pressure loss at standard air flow	25 - 48 mbar	35 - 48 mbar	33 - 64 mbar	47 - 87 mbar
Operating mode	continuous / intermittent		continuous / intermittent	

Membrane material data

	EPDM	PU	Technical standard
Colour	Black	Transparent	
Plasticiser	35 %	0 %	
Density	1.11 g/cm³	1.13 g/cm³	DIN EN ISO 1183-1
Tensile strength	>8.5 N/mm²	>45 N/mm²	DIN 53504
Elongation at break	>550 %	>450 %	DIN 53504
Tear strength	>10 N/mm	>35 N/mm	DIN EN ISO 34-1
Hardness (Shore A)	43 ± 5	80 ± 5	DIN ISO 7619-1
Operating air temperature	5 - 80 °C	5 - 60 °C	
Operating water temperature	5 - 40 °C	5 - 40 °C	