

Sanitaire[®] Coarse Bubble Wide-Band Diffusers

ROBUST STAINLESS STEEL DESIGN FOR TOUGH APPLICATIONS

For tough applications such as sludge or industrial wastewater, the Sanitaire stainless steel wide-band diffuser is an excellent choice and a smart alternative to mechanical aeration. This coarse bubble diffuser is especially suited to aerobic sludge digestion, grit chambers, flow equalization, and channel aeration.

Clog-resistant, maintenance-free design

The Sanitaire wide-band diffuser features an innovative inverted air reservoir. This stores sufficient air volume at the centre of the diffuser to ensure continuous and uniform airflow and prevent clogging. Meanwhile, a bottom deflector prevents the entry of debris into the diffuser and reduces the need for maintenance.

Erosion/corrosion resistance

Thanks to immersion passivation after fabrication, the Sanitaire wide-band diffuser is erosion/corrosion-resistant and maintains full structural integrity even in welded heat-affected zones. This prolongs service life.

Solid oxygen transfer efficiency

Dual horizontal levels of diffusion ports on the diffuser side ensure uniform air distribution and aeration efficiency.



SANITAIRE
a xylem brand

Sanitaire® Coarse Bubble Wide-Band 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.

Robust grid fabrication

Sanitaire uses specialized manufacturing techniques for coarse bubble aeration headers to minimize crevices and associated corrosion, and to provide adequate strength for long-term operation.

A pulled nozzle connection to the level connector ensures a smooth entrance port, and reinforcing gussets at each connector prevent damage to the header piping from vibrational loadings common in a coarse bubble aeration system.

Technical data

Diffuser material	Stainless steel AISI 304 or 316
Diffuser length	305 or 610 mm (12 or 24 in)
Airflow range per band	
305 mm (12 in)	13-32 Nm ³ /h (8-20 scfm)
610 mm (24 in)	13-63 Nm ³ /h (8-40 scfm)
Standard oxygen transfer efficiency (SOTE)	1.6-2.5% per m submergence (0.5-0.8% per ft)
Standard aeration efficiency (SAE)	0.7-2.0 kg O ₂ / kWh (1.1-3.5 lb O ₂ / hph)
Operating mode	Continuous /intermittent

