

# Sanitaire<sup>®</sup> 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 <sup>3</sup> /h (8-20 scfm)
610 mm (24 in)	13-63 Nm <sup>3</sup> /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 <sub>2</sub> / kWh (1.1-3.5 lb O <sub>2</sub> / hph)
Operating mode	Continuous /intermittent

