

BioPortz™ by ENTEX Technologies

Engineering
a Clean Water
Environment

BioPortz moving media system



BioPortz is a moving media system for use in Integrated Fixed-film Activated Sludge (IFAS) and submerged fixed-film (SFF) systems. Independently moving BioPortz carriers continually circulate through the aeration basin in a random motion, ensuring excellent oxygen and substrate transfer to the biomass.

BioPortz is a cost-effective solution for existing activated sludge plants that need more advanced treatment. Because little or no additional tankage is required, BioPortz is an ideal solution for plants with limited room for expansion. It is also an excellent choice for space efficient, high performance new plant designs.



BioPortz media provide high biologically active surface area for increased biomass growth.

The large size of the BioPortz media allows for exceptionally high open area screens.

Components:

The basic elements of the BioPortz system include:

1. attached growth media,
2. media retention screens, and
3. an aeration system.

Increased capacity. Increased biomass.

BioPortz moving media provides extensive surface area for biomass growth. The attached biomass population can more than double the effective MLSS concentration.

The vigorous motion of the media through the aeration basin provides a high shear on the biomass, maintaining a thin biological film. The thin film provides for high rate biological kinetics.

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BioPortz by ENTEX Technologies, continued

BioPortz is versatile

BioPortz can be used in a variety of configurations, including many different biological nutrient removal (BNR) processes.

Media can be added to aerobic zones for carbonaceous or ammonia removal and to anoxic zones for denitrification.

Optimized Screening

ENTEX's larger BioPortz media allows for media retention screens with exceptionally large open area. Because inlet screening needs to be 2/3 smaller than the media retention screens, BioPortz systems only require normal fine screens, saving capital cost as well as operator time and attention.

Nitrification & Denitrification

BioPortz provides stable growth platforms for slow-growing nitrifiers. Nitrifying plants perform better; non-nitrifying plants are able to nitrify. Plants needing to convert to nitrification can do so at a far lower cost than adding new basins. BioPortz can also be used in anoxic zones for denitrification.

High Performance Media

ENTEX's unique media design maximizes biologically active surface area at an exceptional 176 ft²/ft³. BioPortz is made of durable HDPE; the media never needs replacement.

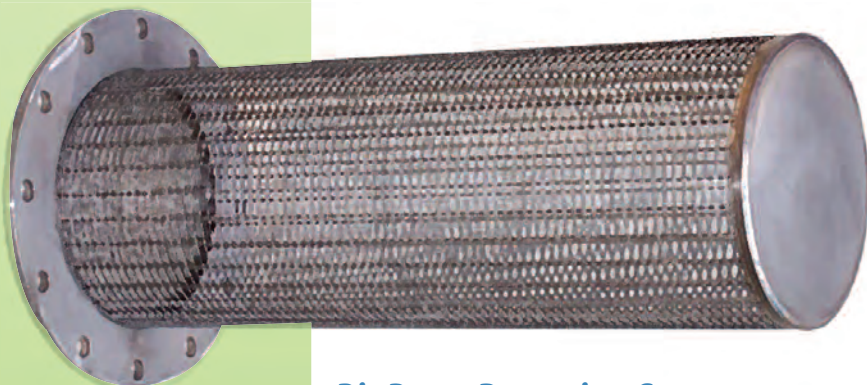
Servicing aeration systems is simplified because of the 0.96 specific gravity. It floats when the air is turned off for easy movement out of the basin.

Cost Effectiveness

BioPortz improves wastewater treatment with little or no addition of aeration basins or clarifiers. It's a significantly less expensive way to upgrade activated sludge plants.

Advanced Systems. Proven Solutions.

ENTEX engineers have been involved in hundreds of plant installations. We'd like to be involved in yours.



BioPortz Retention Screens