



KOMPAKT®

Tubular Block Media for Submerged
Fixed Bed Systems

- ▶ Modular media consisting of extruded HDPE tubes which are heat welded into rugged blocks
- ▶ Vertical tube orientation resists plugging of biomass
- ▶ Improved treatment efficiency due to 3-dimensional openness of media which promotes complete mixing within the reactor

We are **Raschig USA** and we supply media for biological treatment systems for industrial and municipal water and wastewater treatment facilities around the world.

Call us today to discuss fixed film solutions for your project!



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Fixed Film Technology for Wastewater Treatment

KOMPAKT®

Tubular Block Media for Submerged
Fixed Bed Systems

Kompakt Improves Treatment Efficiency

Kompakt is a tubular block media consisting of polyethylene tubes heat welded together on the ends to create rugged rectangular modules used predominantly in submerged fixed beds (SFB).

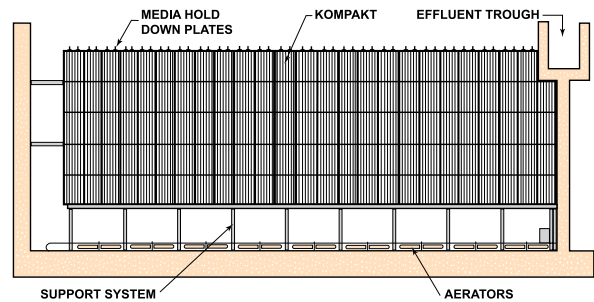
The polyethylene material is biologically and chemically resistant and also neutral to micro-organisms. The internal fins of individual tubes provide surface area. The large openings in the media promote complete mixing of the liquid in the reactor which improves treatment efficiency in SFB systems.



Kompakt has been installed in numerous SFB systems worldwide, treating many types of wastewater, including domestic, food processing, chemical, brewery, pharmaceutical, creosote and paper. Kompakt is designed for use in submerged fixed beds, but existing activated sludge aeration basins can be retrofitted with Kompakt to increase treatment capacity.

MEDIA CHARACTERISTICS & ADVANTAGES:

- ▶ Manufactured of extruded HDPE tubes with or without UV inhibitors
- ▶ Welded tube construction results in rugged blocks which can be removed for maintenance or cleaning
- ▶ Large openings allow for sloughed biosolids to pass through the media, minimizing clogging
- ▶ Available in dry surface areas from 27 to over 100 ft²/ft³
- ▶ Easily cut to fit tanks of all dimensions
- ▶ Typical block dimensions: 24" x 24" x 24" and 24" x 48" x 24" H. Custom sizes are available.

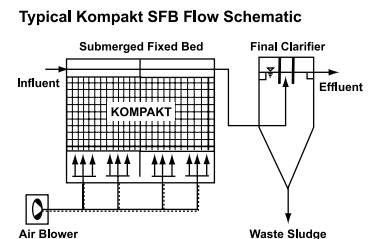


Typical Kompakt submerged fixed bed section

PRODUCT APPLICATION

Submerged Fixed Bed Systems

Many SFB systems consist of fixed media installed in an aeration tank followed by a clarifier. The SFB plant layout is similar to an activated sludge plant but does not require settled sludge to be recycled to the basin because the biomass is attached to the plastic media.



Benefits:

- ▶ High operational stability
- ▶ Operational flexibility
- ▶ Compact construction
- ▶ Low operating costs

Advantages of Submerged Fixed Bed Systems

- ▶ Smaller footprint and less expensive to construct than activated sludge systems. The SFB aeration tank is smaller because there is more biomass in the SFB reactor. Without sludge recycle, the final clarifier of the SFB systems is also smaller.
- ▶ Better suited for treating difficult to degrade organics because the organics are immobilized in the biofilm and broken down by specialized bacteria.
- ▶ Lower sludge production and better settling sludge
- ▶ Higher oxygen transfer efficiency
- ▶ Simplicity of use and installation
- ▶ Resistant to shock loadings and biomass wash out

**Contact us today to review your project
application and find out how we can
be of service to you.**

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