



## Water and Wastewater Treatment: Tough Environments for Bearings

Water and wastewater treatment facilities are tough on bearings. From submerged environments, harsh liquids, and difficult to reach locations, the following metal and plastic bearing problems arise: swelling, creeping, corrosion, lubrication loss, and galling. These scenarios lead to constant maintenance.

## Advantages of Graphalloy

GRAPHALLOY pillow block, flange block assemblies, inserts, and bushings have the following advantages:

- ◇ **Self-lubricating:** Requires no grease or oil. Eliminates downtime.
- ◇ **Corrosion-Resistant:** Resists attack in most liquids including sulfuric acid, hydrochloric acid, chlorine water, and caustics.
- ◇ **Submerged:** Operates in submerged conditions and hostile liquids. Will not swell.
- ◇ **Direct replacement inserts** for industry standard pillow and flange block assemblies.
- ◇ **Custom bushing sizes** to fit your equipment
- ◇ **Non-Galling:** Will not seize the shaft when running against rotating metal components



## Where to Use Graphalloy

- |                |                      |
|----------------|----------------------|
| ◇ Mixers       | ◇ Filtration Systems |
| ◇ Pumps        | ◇ Clarifiers         |
| ◇ Flocculators | ◇ Rotary Screens     |
| ◇ Aerators     | ◇ And more!          |



## Flocculators (Potable Water Process)

Paddle wheels stir the incoming river water to keep the solids suspended until the water is sent to the clarifier. The paddles are mounted on long horizontal shafts through pillow block bearing assemblies. Bearings are fully submerged. Standard pillow block bearings (cast iron pillow blocks with roller bearings) are replaced with self-lubricating Graphalloy.



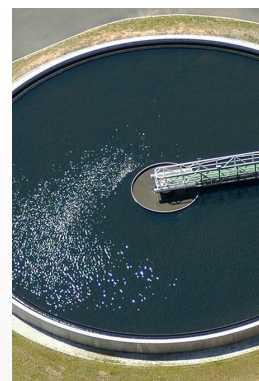
## Flocculators

Smaller scale (6 paddles total) but similar application as above. Graphalloy inserts replaced greased roller bearings.



## Primary Clarifiers/Final Clarifiers/Clarifier Agitators

Clarifiers are settling tanks built with mechanical means for continuous removal of solids being deposited by sedimentation. Graphalloy is used in bottom bearing and various pillow-block assemblies.



## Waste Treatment Aerator: Condominium's Wastewater Treatment Plant

Waste Treatment Aerator: Babbitt-grade Graphalloy bushings installed in custom housings. Graphalloy lasted over 30+ years before replacement.

