

PHOSPHATE PRECIPITATION



WITH PRECISE PHOSPHATE PRECIPITATION TO PROTECT OUR WATERWAYS

Effective Reduction of Phosphorus Through Targeted Addition of Precipitants

Phosphorus compounds in wastewater promote algae growth and lead to overfertilization (eutrophication) of water bodies. Even small amounts can significantly disrupt the ecological balance, as other nutrients are usually present in sufficient quantities. To protect water quality, the European Water Framework Directive (WFD), the German Water Resources Act (WHG), and the Wastewater Ordinance define clear limits for phosphate inputs. Operators are therefore required to ensure effective phosphorus removal and maintain stable effluent values. The targeted addition of coagulants is crucial for reliably meeting these requirements.

Challenges in Phosphate Precipitation

- Unstable effluent parameters and an increased risk of exceeding regulatory limits.
- Inaccurate dosing, which negatively impacts precipitation efficiency.
- Increased chemical consumption and rising operating costs.
- Increased sludge volumes due to overdosing.
- Greater monitoring and control requirements during operation.

The sera solution

- **Modular Design:** Fully customizable dosing systems for a variety of requirements and applications.
- **Reliable operation:** Robust design for indoor and outdoor use – engineered for stable continuous operation.
- **Everything from a single source:** System and control technology, piping, and installation, including tank placement.
- **Safe design:** AwSV-compliant design with optional monitoring for maximum operational and system safety.
- **High-quality materials:** Piping made of PVC-U or PP – tailored to the medium and environment.



sera's precise flocculant dosing ensures reliable phosphorus removal, effectively protects water bodies from eutrophication, and ensures stable, legally compliant effluent values – efficiently, safely, and sustainably.

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