

OTTELIA – SMART WASTEWATER TREATMENT FOR ABATEMENT SYSTEMS

Efficient particle removal from semiconductor process wastewater



OTTELIA is an innovative solution for removing silicon dioxide particles (SiO_2) from process wastewater – particularly in wet cleaning and etching processes of semiconductor manufacturing.

The system reliably eliminates even the finest particles from wastewater, creating the basis for safe recirculation of the treated water for reuse in abatement systems.

OTTELIA combines compact design, high separation efficiency, and individual scalability – for maximum efficiency and resource conservation.

Proven Technology

In a multi-stage treatment process, particles $>15\ \mu\text{m}$ are first removed efficiently in a lamella clarifier. A fine filtration system then eliminates remaining smaller particles. The treated water can be directly reused in the abatement process – ensuring a sustainable water loop in production.

Collected solids are safely transferred into the sludge tank for proper disposal.

Scalable. Pre-assembled. Ready to Operate.

The tank volume of **OTTELIA** can be flexibly adapted to different water loads – ensuring maximum process safety for various applications.

The system is pre-assembled, quality-tested, and delivered as a plug-and-play unit from the DAS site. On-site installation is quick, reliable, and cost-efficient.

Your benefits at a glance – Why choose OTTELIA?

- › Adaptable to different flow rates and particle sizes
- › Compact plug-and-play unit
- › High system efficiency enables direct water reuse
- › Guaranteed process reliability
- › Integrated control and measurement technology
- › Reduced freshwater consumption and wastewater volume
- › Contribution to sustainable water management in semiconductor production

DAS-SYSTEM OVERVIEW

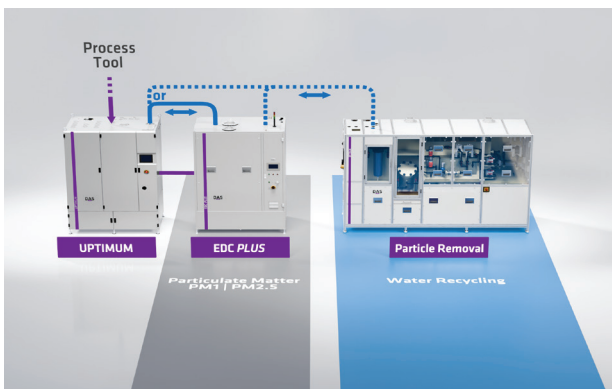
OTTELIA is based on an intelligent combination of sedimentation and filtration, tailored to the respective wastewater composition. Depending on particle size and process parameters, the following components are applied:

- › Mixing and equalization tank
- › Lamella clarifier with clarified water overflow for effective solids sedimentation
- › Sludge tank & wastewater tank
- › Pumps and precise measurement technology
- › Control cabinet & network switch for integration into the control system
- › Flexible, redundant filter solutions, such as:
 - › Cartridge filters
 - › Candle filters
 - › Bag filters
 - › Membrane filters
- › Optional: Polymer dosing

Flexible Integration & Strong in Water Reuse

OTTELIA can be flexibly integrated – both downstream of DAS EE waste gas treatment systems such as **UPTIMUM/EDC PLUS** and downstream of abatement systems from other manufacturers. Fine SiO_2 particles are reliably removed, enabling near-complete reuse of abatement wastewater.

The result is a significantly reduced demand for freshwater and lower operating costs, while supporting the achievement of corporate ESG targets through sustainable water management.



OTTELIA completes **point-of-use wastewater treatment** in the subfab.



Ready to elevate your wastewater management to the next level?

Then talk to us – together we will develop the ideal solution tailored to your specific process requirements.

DAS Environmental Expert GmbH
Goppelner Str. 44, 01219 Dresden
Germany

Telefon: +49 351 40494-300
E-Mail: sales-water@das-ee.com

www.das-ee.com