

# Process Technology for Waste Water Treatment, Sludge Treatment and Gas Utilization



OSWALD SCHULZE  
Umwelttechnik GmbH

The enlargement of the **WWTP Duisburg-Vierlinden** with a size of 30.500 PE for the removal of hazardous trace substances was funded by the federal state North-Rhein-Westfalia. As a general contractor **OSWALD SCHULZE** was responsible for the erection of a plant for Ozone dosing into the effluent of the final clarifiers with a nominal flow of 400 m<sup>3</sup>/h.

**OSWALD SCHULZE** Umwelttechnik GmbH carried out the complete design, erection/installation and commissioning of all civil, mechanical, instrumentation and electrical works for the following treatment units:



- Erection of a pumping station with V = 34 m<sup>3</sup>
- Erection of Ozone dosing with V = 2 x 100 m<sup>3</sup>
- Erection of an equipment building
- Installation of a pumping station with submerged pumps 4 x 120 m<sup>3</sup>/h + 3 x 30 m<sup>3</sup>/h
- 2 Ozone generators with a capacity of 10 kg/h each
- Cooling system for the ozone generators
- Installation of ozone dosing tanks with ozone dosing system, residual ozone elimination , fluidized bed reactor for posttreatment
- Gas tight cover with aluminum
- Complete piping system
- Oxygen tank
- Complete instrumentation
- Complete electrical installation with PLC system



**WWTP Duisburg-Vierlinden**  
**Ozone Treatment**

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**Beratung, Projektierung, Lieferung, Montage und Inbetriebnahme von  
verfahrenstechnischen Anlagen zur Abwasser- und Schlammbehandlung und  
Gasverwertung**

**Project Consulting, Design, Engineering, Erection and Commissioning of Wastewater,  
Sludge Treatment and Gas Utilization Plants**

- Schlammbehandlung anaerob und aerob
- Schlammdesintegration
- Schlammwäscherung
- BHKW-Anlagen
- Gasspeicherung
- Mechanische Abwasserreinigung
- Biologische Abwasserreinigung
- Anaerobe Industrieabwasserbehandlung
- Bioabfallvergärung
- Pilotanlagen
- Ersatzteillieferung
- Aerobic and Anaerobic Sludge Treatment
- Sludge Digestion / Destruction
- Sludge Dewatering
- Biogas Cogeneration Plants
- Gas Storage
- Mechanical Wastewater Treatment
- Biological Wastewater Treatment
- Anaerobic Industrial Wastewater Treatment
- Biosolids Digestion
- Pilot Plants
- Spare Parts

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