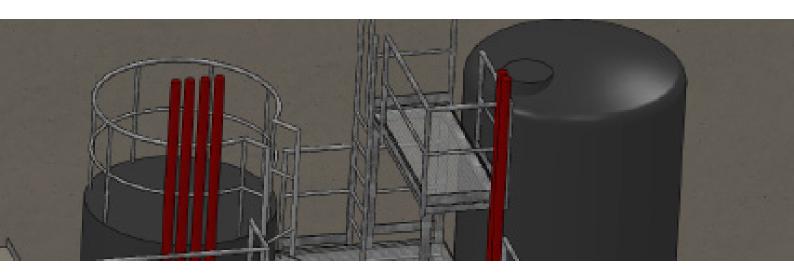


## ENGINEERING | PROCESS TECHNOLOGY | ENERGIES AND MEDIUM



## **Waste Water Treatment**

Project: Revamping waste water plant.

Addition of a process step Fenton

process.

Micro pollutant oxidation.

Realization: Handover documentation: Sept. 2013

Duration: 2 months for on site installation (total 12

months)

## Scope of project:

- · Design: red marks on PID's, part list
- Detail Engineering: isometric and platform construction drawings (2D/3D)
- Functional specification of process and control sequences
- Electrical hardware: 82 I/O's
- Automation HW: PLC ET200M, FCs, instrumentation and pilot valves
- Software: PLC, upgrade visualization InTouch
- Pre-fabrication of steel platform
- Erection on site:
  - Tank with agitator
  - 3x Dosing racks (H<sub>2</sub>O<sub>2</sub>, FeCl<sub>2</sub> and HCl)
  - UV-Reactor
  - 4x centrifugal pumps (10-40 m³/h)
  - Valves > 80 pieces
  - Instruments: 3x Cond, 3x pH, 6x Flow, 4x Pressure, 1x H<sub>2</sub>O<sub>2</sub>
- Piping: PP, PVC, 1.4404 (250 m)
- I/O Check, commissioning and start up without break down of production

