



Dormagen combined cycle plant

## Optimization of the CHP plant Dormagen

The combined-cycle power plant generates electrical energy and process steam for the Chemical Park Dormagen. The plant consists of two gas turbines, each with one heat recovery steam generator and a steam turbine with process steam extraction from three pressure stages as well as a multiple-cell cooling tower. For optimizing the plant, among other things, for the cooling water optimization, STEAG Energy Services (SES) used the process quality monitoring (SR::EPOS) including the software for design and simulation (EBSILON®*Professional*), data reconciliation acc. to VDI2048 (SR::Validate), VTU Gas Turbine Library, and SR::Suite. Among other things, a valve leakage in the process steam system as well as an air ingress in the condenser were revealed during the project execution. Furthermore, suspicious measuring points like e.g. condenser pressure were identified in the execution phase.

### Project Facts

Installed capacity	560 MW
Installed IT solution	SR::EPOS, EBSILON® <i>Professional</i> , SR::Validate
Customer	RWE AG
Execution of SES services	2012