Fact Sheet

Powerful Software to Increase Flexibility and Optimize Unit Operation

SR::EPOS is a powerful, intelligent solution for a targeted look at the power plant process. The continuous monitoring and assessment of the process quality enables you to make the unit operation flexible and optimize it both from a technical and economic point of view.

The operation of power plants is not an easy task. In addition to mastering the complex technology, there are further requirements like e.g. higher climate protection goals and an increasing competition in power generation due to renewable energies.
An expert system is necessary to gain control of these and many more challenges with the available resources (i.e. qualified experts and time). SR::EPOS allows to comprehend the various determining factors for an economically more efficient power plant operation in order to systematically take measures for optimization.

Based on the data from the process control system, SR::EPOS enables the

- result-oriented condensation of all information relevant in terms of the efficiency
- transparent representation and assessment of the process condition of the plant and of individual components respectively
- systematic identification of process weak spots, creeping changes, and malfunctions
- reliable identification of potentials for optimization in the process quality
- fast economic assessment of changes in the mode of operation and maintenance measures relevant to the efficiency
- better planning of maintenance measures

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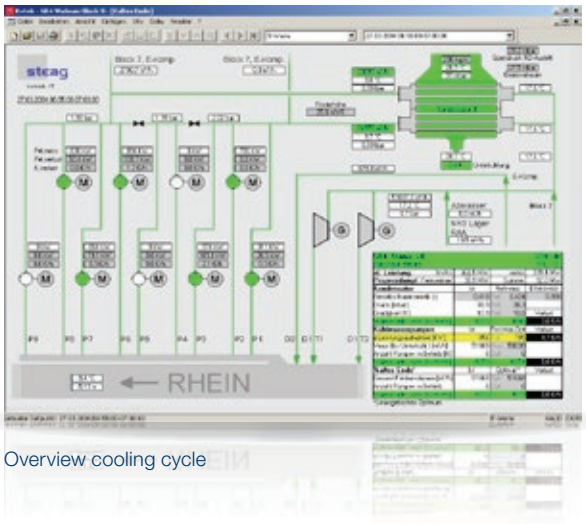
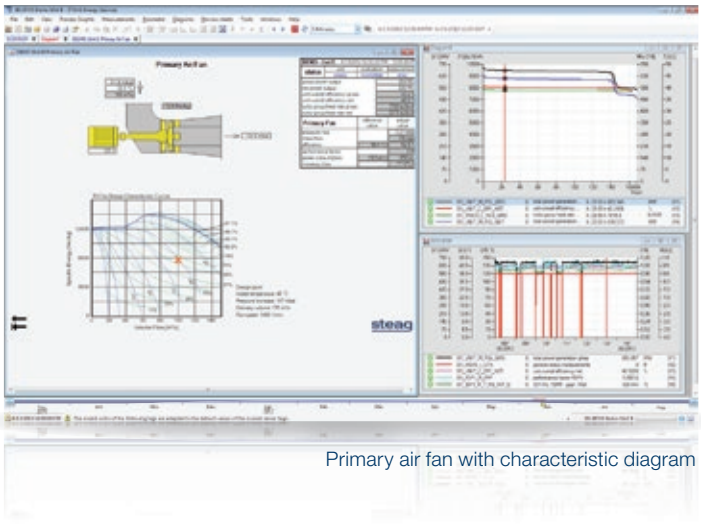


Overview cooling cycle



Primary air fan with characteristic diagram

SR::EPOS is based on the thermodynamic cycle calculation program EBSILON® *Professional*. This calculation kernel allows to precisely assess the current plant condition by comparing results of a process simulation on the basis of in-service measurements with those of an EBSILON reference model in short intervals.

The intelligent system design of SR::EPOS allows you to achieve your goal in just a few steps:

- Condensation of current measured data and plausibility check
- Reconciliation on the basis of 5-minute averages
- Quality check of the reconciliation according to VDI 2048
- Compilation of implausible measured values
- Determination of the actual condition of components and processes
- Determination of the reference values and comparison with the actual values
- Identification of abnormalities
- Display of losses (technical and economic)
- Visualization and documentation

Unlock potentials for an economically efficient power plant operation and benefit from

- a reduction of the operating costs
- a more flexible mode of operation by adjusting the unit operation
- an increase in the efficiency also in the part-load range
- optimal modes of operation from an economic and environmental point of view
- an early detection of creeping changes
- a result-oriented deduction of potentials for optimizing the process quality

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