



TOP-Energy[®] ANALYSIS AND OPTIMIZATION OF INDUSTRIAL ENERGY SYSTEMS

SOFTWARE

TOP-Energy[®] is a computer-aided tool that supports the examination of energy systems in the most flexible and consistent way. Variants are comfortably developed and compared. Savings and energy costs are uncovered with respect to the conversion of primary energy carriers.

The focus lies on the analysis, evaluation and optimization of crosssectional technologies. The component library contains energy system component templates such as CHP, chillers or heat storage and is being constantly expanded.

MODULES

eNtry: Initial Analysis

The application eNtry provides a form-based initial analysis of an existing energy system in a company. As a result, the user gets a DIN EN 16247 compliant energy audit report.

eSim: System Simulation

By using the application eSim energy systems are designed on a working surface and then simulated. The data values can be deposited both constant and time-dependent.

eta: Time Series Editor

Time-dependent data values, such as seasonal fluctuating demands, are integrated in the simulation by using the Engineering Time Series Editor - eta. It includes methods for analyzing, processing and manipulation of time series.

FIELD OF APPLICATION

TOP-Energy[®] is particularly suitable for, engineering offices, plant engineers, public utilities, consulting and contracting companies and energy managers of industrial enterprises. Computationally intensive methods of analysis are provided.

The software is also used in universities for research and educational purposes and in particular for the modeling of components.

eVariant & eValuate: Creation and Comparison of Variants

The applications eVariant & eValuate are used for an economic evaluation and comparison of the various energy systems. Also, an ecological analysis of the variants for CO₂ emissions and primary energy consumption takes place.

eSensitivity: Sensitivity Analysis

The application eSensitivity serves an investigation of the dependence on key figures, based on changes in input variables and constraints. E.g. the energy costs are varied to calculate the impact on the payback period.



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