*Energy
Technology*

*Energy in all its forms: Understand the
system with SimulationX!*
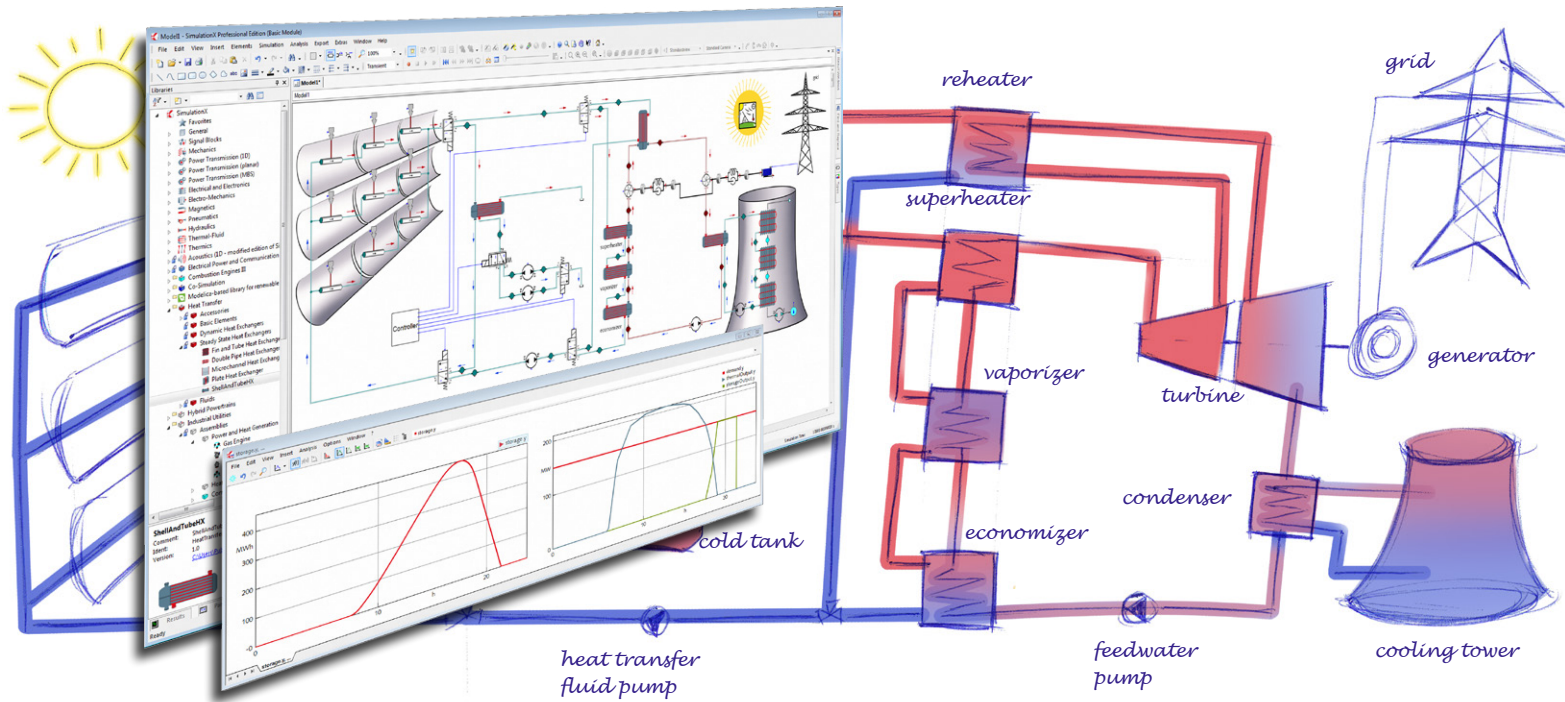

Be it vibrations in the powertrain of turbines,
efficient heating and cooling circuits, energy
storage units or virtual power stations: With
SimulationX you evaluate new ideas and op-
timize proven solutions – thermal, electrical,
mechanical, fluid.

Dynamic analyses of technical multiphysics systems with
SimulationX and the quality support from experts for physical
simulation: Understand the behavior of individual components
within the system and optimize your product with respect to real
load scenarios that may vary over time. ITI offers software and
engineering expertise to provide you with flexibility and security.

reheater · grid · superheater · vaporizer · turbine · generator · condenser · economizer · cold tank · feedwater pump · heat transfer fluid pump · cooling tower

Safety and efficiency through simulation

SimulationX is an intuitive 1D to 3D software platform for physical modeling, simulation and analysis of mechatronic systems. Engineers all over the world trust in this solution for the design and virtual testing of electrical, mechanical, thermal, fluid and combined systems in particular.

Analyze the dynamic behavior of heating, cooling, air drying and waste heat recovery systems. Compare the properties of different variations of complex systems e.g. for charging and discharging of mechanical, thermal, fluid and chemical energy storage. Perform reliability and safety analyses for multi-domain systems. Design controller algorithms for cogeneration systems or the generation, storage and consumption of renewable energies. All on one software platform.

· **Simulation of components and systems** Large selection of basic and advanced component libraries, extensive collection of examples
· **Multi-domain simulation |** Multidisciplinary modeling of energy cycles and mechatronic systems
· **Intuitive user interface and result visualization** Graphically interactive modeling, graphical and table-based result analysis
· **Optimization |** Identification of weak points and losses throughout the entire system and maximization of the overall efficiency effect
· **Dependability studies |** Fault Tree Analysis (FTA) and Failure Mode and Effect Analysis (FMEA) on the basis of the physical model structure
· **Support |** Modeling and simulation support from experienced engineers and software developers

All over the world, suppliers, manufacturers and engineering partners use SimulationX for designing and optimizing energy systems.

e.g. ABB Automation, Aker Solutions, Eaton Industries, EDF, E.ON Energy Research Center (RWTH Aachen), Fuji Electric, GE Jenbacher, Mitsubishi Electric, NEC, Robert Bosch, Siemens, SKF, Vaillant, VEOLIA, Voith Hydro

„SimulationX allows us to simulate the behavior of our circuit breakers under various load scenarios quickly and reliably."

Dr. Hartwig Stammberger
Head of Digital Prototyping & Tools
Eaton Industries GmbH

For your local representative please visit:

www.simulationx.com/global